

OFFICE OF THE PRINCIPAL KHAGARIJAN COLLEGE

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> > Date: -

Ref.No :-From, Dr. Ramesh Nath, M.Sc, B.Ed, Ph.D Principal & Secretary

> Supporting Document for Self Study Report: 2023

**Criterion VII Metric No: 7.3.1** 

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Principal Khagarijan College Principal Khagarijan College Nagaon (Assam)

## Clean and Green Campus Policy Document



#### ABOUT COLLEGE:

Khagarijan College is one of the premier institutions of Assam. Nestled amidst sylvan surroundings, it is in Nagaon Town. Our College adopted the old and ancient name of Nagaon, 'Khagarijan,' 'Khagari,' a type of reed, and 'Jaan', a small tributary, jointly formed the word 'Khagarijan'. It is from the old name of Nowgong that the name of this institution originated. Our college prestigiously displays this name. These reeds or 'Khagari' can still be seen growing on the banks of the Potakolong, a wetland and a water channel formed out of the confluence of the Kolong and Kapili Rivers, right behind the College.

#### VISION:

The vision of the Khagarijan College is to spread and promote higher education for the sustainable development of the nation.

#### MISSION:

To set a high standard of excellence in the preservation and creation of knowledge through Teaching-Learning and experiment and to serve as an effective instrument of development in the path of education, progress and total awakening. Besides, we shall go always a little with "BETTER EVERY DAY" spirit.

#### OBJECTIVES

The main objective of this policy is to raise environmental awareness among students and staff and promote sustainable practices in the institution. The Environmental Studies Committee, Campus Management Committee, NSS Cell, Green Audit Committee, Disaster Management Committee, and the Academic Departments shall be responsible for implementing and monitoring the Green Campus Policy.

- To adopt and maintain greenery in premises to ensure a teaching-learning-friendly environment.
- To sensitize the students and the staff to minimize the use of polluting products and use environment-friendly products and services.
- To instil the importance of cleanliness for a healthy environment.
- To Create awareness about environmental issues by organizing Events, Rallies, Awareness Campaigns, Cleanliness Drives, Seminars, Workshops, Tree Plantation Drives, Rangoli Competitions, Essay Competitions, Excursions, Study Tours, Guest Lectures, Talks, etc.

#### MAJOR GREEN CAMPUS INITIATIVES:

- Installation of Solar Power Station
- Waste-water Management.
- Plastic-Free Campus

- Tree Plantation for green campus initiatives
- Cleanliness Drive
- Landscaping and gardens
- Use of LEDs
- Digital Library/ E-Learning Centre
- Participation in extension activities for the plantation
- Establishment of Green-Club
- Conduction of Internal/External Green and Environment Audits conducted
- Restricted entry of automobiles
- Solid Waste Management
- Display Boards to Promote Environmental Sensibility on College Campus
- Observance of Days to Protect and Nurture Environment
- Dedicated Section for Environment Consciousness in a Creative Wall Magazine
- Pedestrian-friendly pathways
- Pedestrian-friendly pathways are properly marked with suitable logos/signs.
- Medication plants and more fruit plants and trees have been planted to clean theatmosphere.

#### **EFFECTIVE ACTIONS:**

- Conservation of water is carried out in the college by having a rainwater harvesting tank.
- Conservation of energy is done by using solar energy.
- Landscaping and green cover on the campus are maintained properly.
- Restricted entry of vehicles is adapted to improve the green system of the college.
- Gradual decrease in the usage of plastic.
- Two types of colored waste bins are provided at the campus for the collection of biodegradable and non-biodegradable waste.
- All the classrooms and conference halls have been replaced with LED Bulbs as a part of energy conservation.
- Installation of QR Scan code in the trees present at the campus.
- Maintaining the Kitchen Garden at the campus of the institution to enable green and sustainable environment.

Principal Khagarijan College Nagaon : Assam



## Policy Document on Environment and Energy Usage



## Khagarijan College, Nagaon, Assam

The environment and the Energy usage policy of the Khagarijan College, Nagaon, Assam is mainly based on the usage of energy in a systematic way so as to minimize the environmental impact. The environment and energy policy of the college implies to explore the possibilities of renewable energy resources to reduce the financial burden of the institutions and to sustain the environment balance coping with energy crisis.

The growing demand for energy and its crisis at the same time has bound everyone to think alternatively about energy consumption and its usages. Hence, the energy and environmental policy document of the college in a binding for its stakeholders and to the various activities undertaken by the institution. By doing so, the institution will oblige to save the energy consumption and simultaneously contribute to the environment by reducing the level of impact as part of its commitment. For the awareness about energy consumption and savings, the college will organise demonstration/workshop/seminar etc. for its stakeholders. The Youth Club and Green Club, comprises by the students, aimed to create awareness about the environmental preservation.

## **Policy Guidelines**

- To count Co2 emission level generated by the activities of the institution.
- To measure the energy usage level and its impact on the surrounding areas.
- To balance the air pollution by maintaining a Green campus initiatives.
- To install the solar plant as part of the energy saving policy.
- To install the LED bulb in the entire campus of the college to reduce the energy usage.
- To adopt a systematic waste management policy/mechanism
- To adopt plantation programme for reducing Co2 emission level.
- To install rain water harvesting unit

- To adopt a policy environment friendly vehicles for reducing emission laver.3
- To ensure the availability of the resources to improve the energy savings policy.
- To monitor the emerging environmental and energy issues by generating knowledge among its stakeholders.
- To mobilise its stakeholders to engage in the institution initiatives.
- The institution will strive to practice ecological responsibility focused on the preservation of its natural grasslands and landscape.
- The college will conduct Energy and environmental audit to assess the usage of electricity by different assets of the institution.
- To develop a policy for segregation of the electronic waste and dispose the same to the proper government agencies.
- The institution will completely ban on single use plastics within the campus.

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Principal Khagarijan College Nagaon : Assam

# **GREEN AUDIT REPORT** Session: 2021-2022

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Prepared By: INTERNAL QUALITY ASSURANCE CELL KHAGARIJAN COLLEGE, NAGAON, ASSAM



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#### ACKNOWLEDGEMENTS

The Internal Audit Evaluation Committee offers due gratitude to the Principal of Khagarijan College for assigning this important task of Green Audit upon the selected group of individuals.

Special thanks are due to:

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- Khagarijan College Management Committee
- Principal of the Khagarijan College Dr. Ramesh Nath
- Vice-Principal of the Khagarijan College Dr. Jonaram Nath
- IQAC Co-ordinator of Khagarijan College Dr.Rameswar Kurmi
- External Green Audit Evaluator Dr.Sanjeeb Kumar Nath, Associate Professor, Dept of Botany, Dhing College, Nagaon, Assam
- 🏶 Dr.Afifa Kausar, Assistant Professor, Department of Zoology, ADP College, Nagaon
- Faculty members, Khagarijan College
- Office Staff, Khagarijan College
- Students, Khagarijan College

We also offer due credit and heartfelt gratitude to all who helped us carry out this vital exercise and gave all necessary inputs. We are also thankful to all the members who were actively involved while collecting the data, conducting field measurements, tabulating the data, and analysing the same.

#### BACKDROP

As per the directive of the National Assessment and Accreditation Council, New Delhi (NAAC), it has been given mandatory that an annual Green Audit has to be done in all Higher Education Institutes and a report of the same has to be submitted as a part of NAAC appraisal. This also seeks to fulfill the motive of the country's Higher Educational Institutions, engaging the young minds and faculty to deliberate and contribute towards the reduction of global warming.

Thereby, as a part of the preparation for the NAAC assessment, following the NAAC Circular on Green Audit; the College Authority have ventured to conduct the same with an external inspection by **Dr. Sanjeeb Kumar Nath**, **HoD and Associate Professor**, **Dept of Botany**, Dhing College, Nagon, Assam and **Dr. Afifa Kausar**, **Assistant Professor**, **Dept of Zoology**, **ADP College**, **Nagaon**, **Assam**.

This audit focuses on the entire campus premise, waste management, energy management, and water management; deliberating on strategies and initiatives taken up by the College Authority. The structure and details of the appraisal are explained below.

#### CONCEPT

The growth of technology as well as various scientific practices also brings to the foretrant environmental concerns which take an important place in the juncture between advancement and environment-friendly stakes. Environmental audits or Green audits are often understood as a type of survey, assessment, or review of the environment, as well as health, safety, and other aspects related to it. With the growing greenwashing, it becomes important for a thorough survey to be done to understand the intricate linkage of an institute with its surrounding green campus as well as the impact it has on the environment. Since there is no universal definition of Green Audit, the approach by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989) is taken as a standard to be adhered to.

#### The ICC defines environmental auditing as:

"a management tool comprising a systematic, documented periodic and objective evaluation of how well environmental organization, management and equipment are performing, with the aim of helping safeguard the environment by:

(i) facilitating management control of environmental practices and

(ii)assessing compliance with company policies which would include meeting regulatory requirements."

As such the outcome of this audit should be supplemented with concrete evidence of the measures, strategies and initiatives of the institution.

#### INTRODUCTION

The work of education is divided between the teacher and the environment.

#### Maria Montessori

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Educational institutions are the grassroots foundation of a successful nation. But a nation can sustain its success only if it has a feasible ecological balance. Thereby, the environment and its concerns are an irreplaceable part of a nation and hence also an educational institute. This sudden turn towards highlighting environmental issues has kickstarted the beginning of various underhanded initiatives like greenwashing which only shows how important the element of the environment has become in today's scenario. As such Educational Institutions are encouraged to maintain their surrounding environment for the growth of a sustainable campus ecosystem. Various initiatives like rainwater harvesting and usage, waste recycling activities, energy conservation tactics, etc are implemented and 1972 institution authorities in collaboration with the students.

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Thereby Green Auditing can be a check and survey mechanism to determine the status of agon, here institution's engagement with the environment and its policies. It is an official examination that determines the affect of the institution on the environment. It is a useful tool to determine the impact and alterations that the environment has faced due to the institution and offers a comprehensive outlook regarding the strategies that the institution has initiated regarding diversity of flora and fauna, water usage as well as energy management. This audit also creates an awareness regarding health consciousness, environmental awareness and promotion of ethics and values.

Green auditing further aids in building up financial savings through various ways of reduction in resource use, promoting responsibility and leadership qualities in students as they contribute to the growth of a Green Campus, as well as providing a platform for student, teacher and staff engagement apart from academic or administrative work. Further, regular planning activities helps an institution to set an example for the community and engage in further community development ventures too; increasing and encouraging community interaction for the betterment of the surrounding ecosystem. As such this evaluation is an important aspect of the holistic growth of an institution of impact, with sustainable goals in mind.

#### **OVERVIEW OF KHAGARIJAN COLLEGE**

Khagarijan College is one of the premier institutions of higher education in Nagaon district, Assam; a splendid temple of learning in sylvan surroundings. The College was established in September 1972. The word "Khagarijan" prestigiously displays the original name of Nagaon. The '*Putakollongjan*' flows behind the college, branching off from the river *Kollong. 'Jan*' is a type of rivulet. '*Khagari*' refers to a type of long reed that grows along the banks of rivers. The two words '*Jan*' and '*Khagari*' joined together give the ancient name of Nagaon, '*Khagarijan*', which has been kept alive by this institution. By adopting the name, Khagarijan, the college has succeeded in rejuvenating the ancient roots and heritage of Nagaon town. The college is affiliated with Gauhati University and registered under 2(F) and 12(B) of the University Grants Commission Act, 1956.

Since its inception, the college has been a beacon by guarding the cause of education and moral upliftment of the students. The pursuit of knowledge has all along been the avowed objective of the institution and it has justified its existence despite a lot of obstacles standing in its way. Apart from

the dissemination of knowledge, the college aims to generate new values; relevant to the new 197, generation of society.

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The College, with a dedicated teaching and administrative staff, makes an assiduous effort to prepare the students for a good career; to face the stark realities of life, and help them build up character and personality to become responsible citizens of the country. It is a matter of pride that innumerable students have come to the college and left the campus after receiving their desired degrees, and they have made their marks in different levels of social, political, and academic life.

#### VISION

The vision of Khagarijan College is to spread and promote higher education for the sustainable development of the nation.

#### MISSION

To set a high standard of excellence in the preservation and creation of knowledge through Teaching-Learning and experiment and to serve as an effective instrument of development in the path of education, progress, and total awakening. Besides, we shall go always a little with a "BETTER EVERY DAY" spirit.

#### The Khagarijan College endeavour to achieve its vision by:

- High standard of excellence in the preservation and creation of knowledge through teachinglearning and experiment and to serve as an effective instrument of development in the path of educational, progress and total awakening.
- The college tries to impart education of the higher-standard through value based and holistic approach and integrity of traditional and innovative practices.
- To create a platform for exploring creative potential and nurturing the spirit of entrepreneurship and critical thinking.
- Try to inculcate a strong belief in hard work and motivating for gender equality, human rights and ecology in order to make the student's socially responsible citizens.
- To achieve the potentiality for integration of multidisciplinary and trans-disciplinary approach for fulfilment of Mission Statement.

#### DETAILS OF PHYSICAL INFRASTRUCTURE

The College has two streams' Arts and Commerce and has separate classrooms for the same. The College has a full-fledged Central Library, Computer Laboratory and Class Room, Separate Classrooms for General Courses and Major Courses, Smart Classrooms, Seminar Hall, etc. for the smooth conduction of the classes.

- There are 3 academic blocks for the smooth conduction of classes.
- The third building is recently constructed under RUSA Grant. Further construction is under process in Phase II.
- There are separate spaces allotted as Teachers' Common Room, Boys' Common Room, Alumni Association, IQAC, Health Centre, College Canteen, etc. inside the campus.
- Infrastructure for a full-fledged Indoor Stadium and Gym is available on the campus.

As a Girls' Hostel, a one-storied building is available on the campus with all the Recessary 1972 facilities. Also, a Sports Hostel is available within the new second sec facilities. Also, a Sports Hostel is available within the premise to host sportspersons in case of any sports event. geon (Assam)

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- A Basket Ball Court is available for use inside the college campus.
- A separate building for PG Assamese Department is available which hosts PG Classes and the Assamese Department Office. Beyond this, there is an Assam Type block for Department offices.

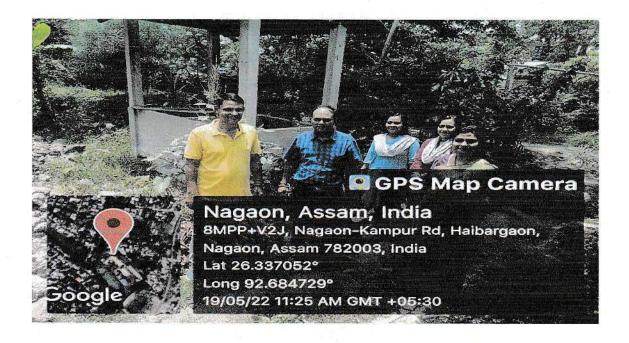
#### Total Campus Area: 3.245 Acre Land

Total Built Up AT+RCC Areas: 3032.073 Sq. Meter as shown below 0

SI. No.	Name	Total Sq. Meter
1	Sports' Hostel	* 224.68
2	Girls' Hostel	353.86
3	Indoor Stadium	346.21
4	New Building	593.5
5	Department Office Block.	519.97
6	Office	450.93
7	PG Building, Assamese	143.47
8	Library	97.22
9	Boys' Common Room	72.41
10	Canteen	98.21
11	Quarters	54.27
12	Toilet	77.28
	Total Built-Up Area	3032.73 Sq. Meter

#### Administrative Block

- Principal Room: 1
- Room for Vice Principal: 1
- Office Room: 1



#### AUDIT OBJECTIVES

The objective of this Audit is to assess the institution with respect to its surrounding backdrop. This audit is initiated to figure out the environment-friendly initiatives by the institution, to mark the ecofriendly steps taken to maintain a suitable green campus; focusing on sustainable development in the environmental concern.

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#### The objectives are detailed below:

- To record the geographical status and document the land use pattern.
- To record the diversity of flora and fauna of the campus.
- To reflect upon the waste management system of the campus.
- To observe and record the drinking water supply of the campus.
- To record and analyze the environment-friendly activities of the College.

#### METHODOLOGY

A team of two external experts visited the College on **19/05/2022** as per the appointment given by the Principal, Dr. Ramesh Nath, Khagarijan College, Nagaon. The expert team inspected all the geographical statuses and document the land use pattern, diversities of flora and fauna of the campus, the waste management system of the campus, the drinking water supply of the campus, and the environment-friendly activities of the college.

We, Dr.Sanjeeb Kumar Nath, HoD and Associate Professor, Dept of Botany, Dhing College, and Dr.Afifa Kausar, Assistant Professor, Dept of Botany, ADP College evaluated the geographical statuses and suggested remedies based on the findings. On this basis, we, Dr.Sanjeeb Kumar Nath and Dr.Afifa Kausar have made the following observations: -

#### EXTERNAL EVALUATOR

- 1. Dr.Sanjeeb Kumar Nath, HoD and Associate Professor, Dept of Botany, Dhing College
- 2. Dr. AfifaKausar, Assistant Professor, Dept of Botany, ADP College

#### INSTITUTIONAL GREEN AUDIT COMMITTEE

- 1. Principal: Dr. Ramesh Nath
- 2. Member: Dr.Rameswar Kurmi
- 3. Member: Mrs. Rupali Talukdar
- 4. Member: Ms. Jharna Morang

- 5. Member: Ms. BichitraPegu
- 6. Member: Ms. Maitreyee Dutta
- 7. Member: Md. Mohazir Ahmed, Secretary, Green Club, Khagarijan College

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#### **EXECUTIVE SUMMARY**

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Green audit refers to the status of the organization/institution/others with respect to its environment, adhering to the environmental laws and regulations in a specific time frame and space. This acts as a benchmark that can be seen as a reference for further development of the institutionenvironment ecosystem. As such there is a need for a mechanism to continue the audit regularly; avoiding which would result in this benchmark becoming outdated and of no further use, depicting a wrong image of the ecosystem equation.

Khagarijan College focuses on building an environmental consciousness in each student as well as the faculty members and other staff. As such, a lot of importance is placed on completing the Green Audit of the campus to figure out the present status which can act as a benchmark for future planning. The College has thus taken up this assessment to contribute towards environmental protection and awareness. The criteria for assessment are flora and fauna diversity, biodiversity conservation, water conservation and management, waste minimization, and its management, compliance to the environmental legislative that is set by NAAC and other authorities, and finally the initiatives taken up by the institution to contribute towards an environment-friendly atmosphere. The audit report is based on personal observation and analysis of data gathered through various survey-based tools.

#### GREEN AUDIT REPORT

The *Biota* of campus is extremely crucial for an environmentally friendly development of an organization. The *biota* not only makes the surroundings healthier but also adds to the aesthetic natural beauty of the vicinity. The Khagarijan College campus plays a host to many numbers of plants and animal species, mainly birds and insects in the latter group.

Total open area = 3.245 Acre Land

Total built-upon area = 3032.073 Sq. Meter

Total plant species - 108

Total animal species - 9

The total Garden area inside the college = 1200.31 sq. meter



#### **Plantation Drives**

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The college has taken up the initiative to frequently organize plantation programs several times a year. Various units of the college like the NSS Unit, Village Adoption Committee, Women Forum, Students' Association, and other cells make it a mandatory slot in the itinerary of activities within an academic session. Plantation drives are carried out both within the campus and outside, often extending to remote areas too. From plants yielding fruits to medicinal species, a variety is planted with proper planning and assured prompt mandatory care for them to grow at a proper pace. These initiatives aid in the growth of the green surroundings as well as add to the diversity in the biota of the college campus.

#### **Biota diversity of College Campus**

The college campus is adjacent to the KolongRiver. As such there is an intensive growth of a variety of plant species. A total of 108 plant species can be found within the campus, growing prolifically, and multiplying in quantities. 9 avian species are a common sight for the people within the campus which adds to the beauty of the green cover.

SI.	Scientific Name of the Plant	Local Name	Family	Uses
No				
1	Ageratum conyzoides	Gondhoa- bon	Asteraceae	Medicinal plant
2	Aloe barbadensis Mill	Sal Kuwori	Xanthorrhoeaceae	Medicinal plant /Cosmetic use
3	Alternanthera sessilis R.Br. ex DC.	Mati-kanduri	Amaranthaceae	Herbal and ornamental plant
4	Amaranthus spinosus	Hatikhutura	Amaranthaceae	Food Plant
5	Amaranthus viridis	Khutura khak	Amaranthaceae	vegetable
6	Bryphymmum pinnatum	Dupar Bon	Crassulaceae	Popular house plar
7	Cassia sophera	Medelua	Fabaceae	Weed
8	Cassia tora	Soru- medelua	Fabaceae	Wild edible plants of Assam
9	Centella asiatica Urban.	Manimuni	Apiaceae	As a medicinal plant
10	Chenopodium album	Jilmil-sak	Chenopodiaceae	Edible Sak

#### Herbs in the College Campus

11	Citrus limon	Nemu Tenga	Rutaceae	Foods and drives
	Clerodendrum viscosum	Glory Tree	Lamiaceae	Traditional Uses (155 and
.2	Kuntz.			(UDDen and Carlos and C
13 (	Cynodon dactylon Pers	Dubori Bon	Poaceae	Medicinal use
4 0	Cyperus pilosus Vahl.	Murphula	Cyperaceae	Weeds
5 (	Cyperus rotundus	Keyabon	Cyperaceae	Weeds
.6 <sup>[</sup>	Dioscorea alata	Kath-aloo	Dioscoreaceae	Edible tubers
7 E	Eclipta prostrata	Bhringaraj	Asteraceae	Medicinal
L8 <sup>E</sup>	Euphorbia hirta	Gakhiroti bon	Euphorbiaceae	Weeds
9	Fimbristylis aestivalis (Retz.) Vahl.	Keyabon	Cyperaceae	Weeds
20 H	Heliotropium indicum	Bioni	Boraginaceae	Medicinal
1 (	Ocimum sanctum	Tulshi	Lamiaceae	Medicinal
22	Imperata cylindrica Raeuschel.	Ulu-kher	Poaceae	Thatch grass
23	Leucus plukenetii (Roth) Spreng.	Doron	Lamiaceae	Medicinal
24 /	Mikania micrantha Kunth.	Japani lota	Asteraceae	Medicinal
25 (	Ocimum basilicum	Ram-tulasi	Lamiaceae	Medicinal
26	Oxalis corniculata	Changoi- tenga	Oxalidaceae	Medicinal
27 #	Paederia foetida	Bhebeli-lata	Rubiaceae	Medicinal
28	Panicum auritum Presl ex Nees.	Balansa	Poaceae	Grass
29 F	Polygonum hydropiper	bihalagani	Polygonaceae	Medicinal
80 5	Scoparia dulcis	Modhu- mehari	Plantaginaceae	Medicinal
31 5	Solanum nigrum	Pokmou	Solanaceae	Medicinal
2	Spilanthes paniculata Wall. ex DC.	Bhringaraj	Asteraceae	Medicinal
33	Tabasco pepper	Bhüt jolokia	Solanaceae	Food and a spice
34 7	Tephrosia purpurea Pers.	Bon Neel	Fabaceae	Folk medicine

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35	Tridax procumbens	Putoli bon	Asteraceae	Traditional * medicine
36	Spilanthes paniculata Wall. ex DC.	Parbati Bon	Asteraceae	medicine Traditional medicine
37	Polygonum microcephalum	Modhu- Xuleng	Polygonaceae	Edible Plant
38	Asparagus racemosus	Satomul	Asparagaceae	Medicinal Plant
39	Withania somnifera	Aswagandha	Solanaceae	Medicinal Plant
40	Cheilocostus speciosus	Jom Lakhuti	Costaceae	Medicinal Plant
41	Glycyrrhiza glabra	Jesthamadhu	Fabaceae	Medicinal Plant
42	Saraca asoca	Ashoka	Fabaceae	Medicinal Plant
43	Catharanthus roseus	Nayantara	Apocynaceae	Ornamental Plant

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#### Shrubs in the College Campus

SI. No	Scientific Name of the Plant	Local Name	Family	Uses
1	Coleus scutellarioides	Coleus	Lamiaceae	Ornamental Plant
2	Tabernaemontana divaricate	Kathana-phul	Apocynaceae	Flower
3	Duranta erecta	Duronta- kanta	Verbenaceae	Medicinal Plant
4	Clitoria ternatea	Aparajita	Fabaceae	Ornamental and Medicinal
5	Rose balsam	Keruphul	Balsaminaceae	Ornamental
6	Epipremnum aureum	Money Plant	Araceae	Ornamental
7	Hibiscus rosa-sinensis	Joba Phul	Malvaceae	Ornamental and Medicinal
8	Bougainvilea sp.	Kagaj-phul	Nyctaginaceae	Ornamental
9	Dahlia spp.	Dahlia	Asteraceae	Ornamental
10	Rosa chinensis	Golap	Rosaceae	Ornamental
11	Photinia sp.	Photinia sp.	Rosaceae	Ornamental
12	Duranta erecta	Jeora-goch	Verbenaceae	Hedge shrub
13	Soleno stemon	Patbahar	Lamiaceae	Ornamental
14	Gardenia jesminoides	Gondharaj Togor	Rubiaceae	Ornamental
15	Dieffenbachia seguine	Tora Kachu	Araceae	Ornamental
16	Chrysanthemum indicum	Indramalati	Asteraceae	Ornamental
17	Dracaena trifasciata	Snake Plant	Asparagaceae	Ornamental

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	Chromolaena odorata	Jarmani bon	Asteraceae	Weeds
18	Chromolaena baorata	Jarmani Don	Asteraceae	weeds
19	Clerodendrum viscosum Vent.	Bhat-phul	Lamiaceae	Medicinal (Assam)
20	Mimosa pudica	Lajuki-lata	Mimosaceae	Weeds
21	Ricinus communis	Ara Goch	Euphorbiaceae	pharmaceutical and industrial uses
22	Cajanus cajan	Arahar	Fabaceae	Food Plant
23	Dracaena draco	Dracon	Asparagaceae	Ornamental

ne Principal

#### Trees in the College Campus

SI.	Scientific Name of the Plant	Local Name	Family	Uses
No				
1	Artocarpus heterophyllus Lam.	Kothal	Moraceae	Fruit and Timber
2	Azadirachta indica Juss.	Neeem	Meliaceae	Medicinal
3	Bombax ceiba	Palash	Malvaceae	Timber and Ornamental
4	Litchi chinensis Sonn.	Lichu	Sapindaceae	Fruit
5	Mangifera indica	Mango	Anacardiaceae	Fruit and Timber
6	Mesua ferrea	Nahar	Calophyllaceae	Timber and Ornamental
7	Murraya koenigii	Narashimha	Rutaceae	Medicinal and food
8	Psidium guajava	Madhuri	Myrtaceae	Fruit
9	Santalum album	Chandan	Santalaceae	Traditional Oil used
10	Tectona grandis	Chegun	Lamiaceae	Timber
11	Cascabela thevetia	Halodhia- korobi	Apocynaceae	Ornamental and Medicinal
12	Collistemon sp.	Indian Puff	Myrtaceae	Ornamental
13	Wodyetia bifurcata	Fox tail Palm	Arecaceae	Ornamental
14	Chrysalidocarpus lutescens	Mumai Tamul	Arecaceae	Ornamental
15	Psidium guajava	Guava	Myrtaceae	Fruit
16	Carica Papaya	Amita	Caricaceae	Fruit
17	Punica granatum	Dalim	Lythraceae	Friut
18	Cascabela thevetia	Karabi	Apocynaceae	Medicinal and Ornamental
19	Sabal Palm	Tokou	Arecaceae	Ornamental and Fruit

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20	Nyctanthesarbor-tristis	Sewali	Oleaceae	Medicinal
21	Saraca asoca	Ashok Tree	Fabiaceae	Flowering Base Assam
22	Pinus sylvestris	Pine	Pinaceae	Ornamental and Timber
23	Ficus benjamina	Bor Nahori	Moraceae	Ornamental
24	Phyllanthus emblica	Amlakhi	Phyllanthaceae	Medicinal
25	Cycas revoluta	Moniraj Phul	Cycadaceae	Ornamental
26	Murraya paniculata	Kamini Kanchan	Rutaceae	Flowering
27	Neolamarckia cadamba	Kodom	Rubiaceae	Timber
28	Bombax ceiba	Simalu	Malvaceae	Timber
29	Ficus lamponga	Dimaru	Moraceae	Fruit and Timber
30	Samanea saman	Rain Tree	Fabaceae	Timber
31	Punica granatum	Dalim	Lythraceae	Fruit
32	Syzygium cumini	Kola Jamu	Myrtaceae	Fruit and Timber
33	Zizyphus Jujuba	Bogori	Rhamnaceae	Fruit
34	Dypsis lutescens	Areca	Arecaceae	Ornamental
35	Mimusops elengi	Bakul	Sapotaceae	Timber
36	Xanthostemon chrysanthus	golden penda	Myrtaceae	Ornamental
37	Terminalia chebula	Silikha	Combretaceae	Medicinal and Timber
38	Ficus religiosa	Aanhot	Moraceae	Timber
39	Ficus rumphi	Jori	Moraceae	Timber
40	Ficus hispida L	Dimoru	Moraceae	Timber

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	English name	Scientific name
List of avian species available	1. Barn Owl	Tyto alba
in the College campus	2. House Crow	Corvus splendens
	3. HouseSparrow	Passer domesticus
	4. Koel	Alcedo hercules
	5. Little Cormorant	Phalacrocorax niger
	6. Pigeon	Columba livia
	7. Red-vented Bulbul	Pycnonotuscafer
	8. Rose RingedParakeet	Cerylelugubris
	9. Tree Sparrow	Passer montanus
	10. Cattle egret	Bubulus ibis
	11. Spotted Dove	Spilopelia chinensis
	12. Small Indian Kite	Milvus migrans
	13. Indian Pond Heron	Ardeola grayii
	14. House sparrow	Passer domesticus
	15. Koel	Eudynamys scolopaceus
	16. Common Kingfisher	Alcedo attihis
	17. Common Myna	Acridothres tristis
	18. Indian Woodpacker	Malanerpes superciliaris
	19. Red Vented Bulbul	Pycnonotus cafer

	English name	Scientific name
List of reptile species available	1. King Cobra	Ophiophagus hannah
in the College campus	2. Checkered Keelback	Xenochrophis piscator
	3. Indian Rat Snake	Ptyas mucosa
	4. Garden Lizard	Calotes versicolor
	5. House Lizard	Hemidactylus frenatus
	6. Water Snake	Enhydris enhydris
	7. Ornate Flying Snake	Chrysopalea ornata

	English name	Scientific name
List of insect species available	1. Dragonfly	Sympetrum flaveolum 🗧 Estd. 1972
in the College campus	2. Butterfly	Lepidoptra sp
	3. Mosquito	Culicidae sp.
	4. Tree Cricket	Oecanthinae sp.
	5. Winged Ant	Alates sp.
	6. Centipede	Chilopoda sp.
	7. Earthworm	Lumbrincina sp.
	8. Bullet Ant	Paraponeraclavata
	9. Honey bee	Apis indica
	10. Cockroach	Periplanta americana
	11. Wasp	Rapalidia marginata
	12. House fly	Musca domestica
	13. Grasshopper	Poekilocercus pictus
	14. Fruit Fly	Drosophila melanogaster

			English name	Scientific name
List of	rodent	species	1. Rat	Rattus rattus
available	in the	College	2. Pocket Mouse	Chaetodipus intermedius
campus			3. Squirrel	Funambulus palmarum

	English name	Scientific name	
List of amphibian specie	1. Frog	Rana tigrina	
available in the College	2. Toad	Bufo melanostictus	
campus	3. Indian Bull frog	Haplobatracus tigernius	
	4. Leaf Frog	Hylaran tytlari	

#### WASTE MANAGEMENT

Waste disposal is an integral part of any institution to maintain the balance with the ecosystem. The constant of the constant

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The biodegradable wastes are separated and deposited into the Vermicompost Plant, inside the college campus, which then turns the waste into manure so as to maintain a sustainable balance in the campus ecosystem. The manure generated is used to provide nutrition to various plants inside the college campus.

A Drainage Machine is also available in the college which aids in draining unwanted water specifically during floods which causes water logging of muddy waters in various places inside the college campus. The water is drained to the Kolong River in the backyard of the college. Furthermore, proper drainage and plumbing systems are also available in the washrooms and canteen.

#### CONCLUSION

Extensive consultation has been involved in this audit with campus dwellers, students, and interactions with involved personnel as well as the community at large, based on various Environmental aspects and Environment Development Goals. Almost 60% of the College Campus is used for landscaping, keeping in mind the need of a green Campus. The audit has also highlighted

several markers and observations necessary for potentialities of improvement in making the campus even more Environments friendly.

The Audit team has given objective recommendations and has appreciated the well maintained environmentally friendly campus. The recommendations are duly sent to the authorities for further action to be taken on them.

Dr. Rames

Coordinator IQAC Khagarijan College

Coordinator IQAC Khagarijan College Dr. sanjeeb Kumar Nath

Associate Professor Deptt. of Botany Dhing College

HoD Deptt. of Botany Dhing College Nagaon, Assam

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Dr. Ramesh Nath Principal Khagarijan College

Principal Khagarijan College Nagaon (Assam)

> Dr. Afifa Kausar Assistant Professor Deptt. of Botany ADP College

Assistant Professor Deptt of Zology A.D P. College Nagaon, Assam-

Principa/ Estd. 197; Expert Ream Wrsil-Estd. 1972 aren sudet Date: 18/05/2022 n (Assam The hincen sudit committee, khagarijan Callege, vægaon, Dosam has underfaken the initrative for freen audet for the Suspion 2021-2022. 18/05/2022, the external Team. on HOD, Department of Botany, Sking College Shong q Dr. Abita Kauses, Assistanthoberson, Department of 200logy, ODP, College, Nagaon Assam has conducted veritication. on the bollowing para--metirs bor completing Green dudit-1. Geographical Location. 2. Floral of Faunal Diversity of the crupus. 3. Meteorogical Parameter of the campus. 4. Energy Consumption Racess. 5. Daste Management System 6. Ambient Disposal System 7. Awareness Q Training og Justacha -billy for Students-Imprature 1. Dr. Soujee & Kumar Nath, HOD, Separtman of Botany, Oking College, Shing, Nagaon Khagarijan College AL . Konagarijan College

oal Khag Estd. 1972 Estd. 1972 Nagaon, Ast Dr. Afita Kauses Assistant properson; Department of 2001084, ADP College, angaon. Institutional Members's Chruce Audit Committee 1. Principal Houtha 2. Ms. Maitneyce Dutta -3. Ms. Rupeli Talukdas - Alabertin 4. Ms. Bichitna Pequi - Rpeq 5. Ms. Thanka Moorang - of 6. Dr. Ramerdar Karmi-7. Ald Mohavior Ahmed, Subschary, huren Club Khagarijan College. Expert Remarks ou Parameters: 1. Green & Emirorment audélof Khagosjan College along with external and internal auditors have performed with honesty, princhality and included all the datas as fav as porrible to give and forzaw Khagarijan College CPC Principal rianc anCollege Nagaon

the Principal std. 1972 Estd. 1972 (Assam) a green and eminmented for sentainable Sevelopment which 19 10 is the need of the how 2. The green and invironment audit of Khagarijan College has been performed with utmost sincerity to promote a green campus and indegenous medicinal plant repository. Principal Khagarijan College Nagaon (Aseam) Principal Khagarijan College Nagaon : Assam 1

# ENERGY AUDIT

2021-2022





## Prepared by

## **Internal Quality Assurance Cell**

KHAGARIJAN COLLEGE, NAGAON: ASSAM

## ENERGY AUDIT 2021-2022

## Khagarijan College

Nagaon, Assam



## **Certified by:**

Jarjante Barnen.

Dr Jayanta Barman, Assistant Professor Dept of Physics ADP College, Nagaon, Assam

Dr. Jayanta Barman Coordinator Bio-Tech HUB A.D.P. Callegs, Nagaon

Debabrata Debnath HOD & Associate Professor Dept of Physics, Dhing College Head of the Depacement Head of the Depacement Physics, Dhing College Physics, Nagaon

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2} Introduction

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## **ACKNOWLEDGEMENTS**



The Internal Energy Audit Evaluation Committee offers due gratitude to the Principal of Khagarijan College for assigning this important task of Energy Audit upon the selected group of individuals. The committee expresses due gratitude to:

- □ Khagarijan College Management Committee
- □ Principal of the Khagarijan College Dr. Ramesh Nath
- □ Vice-Principal of the Khagarijan College Dr. Jonaram Nath
- □ IQAC Co-Ordinator of Khagarijan College Dr. Rameswar Kurmi
- □ External Energy Audit Evaluator
- □ Faculty members of Khagarijan College
- □ Office Staff members of Khagarijan College

We also offer due credit and heartfelt gratitude to all who helped us carry out this vital exercise and gave all necessary inputs. We are also thankful to all the members who were actively involved while collecting the data, conducting field measurements, tabulating the data and analyzing the same.

Principal Khagarijan College Nagaon (Assam)

### **INTRODUCTION**

Energy is one of the very essential aspects and basic requirements that influence survival. In the contemporary scenario it has become such a resource that can dictate matters of development and growth in almost all sectors. At present it is a vital factor that balances the goal for sustainable lifestyle along with kickstarting the long road to further development. However, the unbalanced and uncertain use or more like over consumption of energy gravely impacts not only the sustainability of the resource but also affects the environment with detrimental consequences.

As defined by Energy Conservation Act, 2001, Energy auditing refers to "the verification, monitoring and analysis of the use of energy including submission of technical reports containing recommendations for improving energy efficiency with cost benefit analysis". Energy Auditing aims to understand the usage and calculate the same with reference to necessary guidelines. It becomes an important process to gauge the range of energy consumption by an organization with respect to its discrete functions. This is done by reading the energy input with its use.

The aim of this report is to contribute to the larger picture of energy consumption by analyzing the usage of the institution and throwing light on the scopes of conservation by carefully calibrating the consumption to a stable level. This report is our mite in contributing to the larger picture of effective energy management and conservation. Thereby energy auditing is a continuous process so as to contribute to the betterment of the future in a sustainable manner.

## **OVERVIEW OF KHAGARIJAN COLLEGE**

Khagarijan College is one of the premier institutions of higher education in Nagaon district, Assam; a splendid temple of learning in sylvan surroundings. The college was established in September 1972. The word "Khagarijan" prestigiously displays the original name of Nagaon. The 'Putakollongjan' flows behind the college, branching off from the river Kollong. 'Jan' is a type of rivulet. 'Khagari' refers to a type of long reed that grows along the banks of rivers. The two words 'Jan' and 'Khagari' joined together give the ancient name of Nagaon, 'Khagarijan', which has been kept alive by this institution. By adopting

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the name, Khagarijan, the college has succeeded in rejuvenating the ancient roots and heritage of Nagaon town. The college is affiliated to Gauhati University and registered under 2(F) and 12(B) of University Grants Commission Act, 1956.

Since its inception, the college has been a beacon by guarding the cause of education and moral upliftment of the students. Pursuit of knowledge, has all along been the avowed objective of the institution and it has justified its existence despite a lot of obstacles standing in its way. Apart from dissemination of knowledge, the college aims to generate new values; relevant for the new generation of society.

The College, with a dedicated teaching and administrative staff makes an assiduous effort to prepare the students for a good career; to face the stark realities of life and help them build up character and personality to become responsible citizens of the country. It is a matter of pride that innumerable students have come to the college and left the campus after receiving their desired degrees, and they have made their marks in different levels of social, political and academic life.

## **OBJECTIVES**

Energy Audit aims at analyzing the consumption of energy and its usage. As per the Energy Audit Manual of the Energy Management Centre, Government of Assam, the primary objective of energy audit is to determine "ways to reduce energy consumption per unit of product output or to lower operation costs".

The specific objectives are:

- To identify the inefficient or inadequate management of energy usage in the campus.
- > To improve upon the identified areas so as to better manage energy conservation

To identify other scopes in the campus to bring forth innovative measures for energy<sub>1972</sub> conservation.

To assess the overall performance of the college regarding energy consumption and any usage.

## **METHODOLOGY**

The task of this audit undertaken by Khagarijan College is to identify the energy usage pattern and figure out areas with scope for improvement so as to recommend an action plan for proper management of the same.

The energy audit was conducted during summer and winter season, so as to review the data of energy usage and identify conservation opportunity. The methodology keeps track of the following:

1) Inventory of various electrical load

2) Study of the APDCL bills to work out the average cost of power.

3) Identification of various energy conservation measures and opportunities.

4) Review of Awareness programmes if any for optimum use of electricity as well as its saving.

5) Review of implemented non-conventional energy installation and applications in college campus as well as its quantification.

The Method used for Energy Audit is a Preliminary Audit. A Preliminary audit uses existing data to scrutinize the existing energy consumption patterns extensively and identify the areas for improvement.

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## SYSTEMS STUDIED DURING ENERGY AUDIT Estd. 1972

- Lighting fixtures in the campus have been physically verified and recorded (Assam)
- The implemented usage of non-conventional energy installation and applications in college have been reviewed.
- Electricity bills from APDCL are verified and analyzed to work out the cost of power.
- Awareness programmes regarding proper usage of electricity and energy conservation if any are reviewed as an important initiative of the college towards the goal of sustainable energy use.
- Any innovative strategy or method used for catering to energy conservation have been reviewed and analyzed to understand the efforts of the college.

## **ENERGY AUDIT TEAM**

#### **Internal Energy Audit Committee**

- 1. Chairman: Dr Ramesh Nath, Principal, Khagarijan College, Nagaon, Assam
- 2. Convenor: Ms. Rupali Talukdar, Assistant Professor, Dept of Economics
- Members: Ms. Bichitra Pegu, Assistant Professor, Dept of Education Ms. Jharna Morang, Assistant Professor, Dept of Political Science Ms. Maitreyee Dutta, Assistant Professor, Dept of English

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#### **External Audit Evaluators**

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 Debabrata Debnath, HOD and Associate Professor, Dept of Physics, Dhing College Dhing, Nagaon Estd. 1972

 Mridul Kumar Bora, Junior Engineer, PWD, Nagaon Electrical Subdivision Nagaon

## **DATA COLLECTION**

For the purpose of this audit, audit groups for specific areas were formed. Data was collected through

- Inspection and observation
- Identification of energy consumption
- Calculations and analysis
- Validation

#### Data analysis

The gathered data was then quantified and separated according to the following criteria:

- Energy consumption by end use
- Estimated energy use block-wise
- Consumption equipment-wis

#### Energy Audit Process and Schedule

Date: 18/06/2022

TIME	PROGRAMME
10:00 AM	Welcome and briefing by Principal and others
10:30 AM	Visit to the departments by the members
11:00 AM	Visit to academic building, administrative building, and physical verification of other infrastructure
12:30 PM	Interaction with Management and other staff of the college
2:00 PM	Tabulation of Data

# Energy Audit Process and Schedule Date: 25/06/2022

TIME	PROGRAMME		
10:00 AM	Welcome and briefing by Principal and others		
10:30 AM	Visit to the departments by the members		
11:00 AM	Visit to academic building, administrative building, and physical verification of other infrastructure		
12:30 PM	Interaction with Management and other staff of the college		
2:00 PM	Tabulation of Data		

After the two-day verification, the Energy Audit Report was submitted to the College Authority

## **DATA ANALYSIS**

## Table 1: Estimated energy consumption in KWH during summer

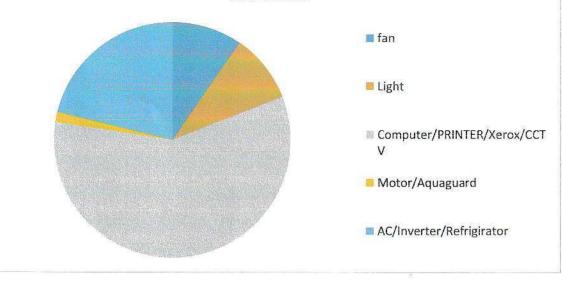
Items	Number	Power in W/item	TIME consumed (In hours)	Days	TOTAL Power consumption in KWH
Tube light	97+10 used	20	4	24	19.2
LED	194+131 used	12	2	24	75.45
Ceiling Fan	150+71 used	60	3	24	306
Exhaust Fan	8	35	0.5	24	3.36

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AC	4	1000	4	24	384 6 Estd. 1972
Freeze	4	250	0.5	24	12 Masaon (Lesam)
Computer	30+38 used	200	2	24	364.80
Printer	9	30	0.5	24	3.24
Xerox machine	3	2000	0.5	24	72
TV	2	40	1	* 24	1.92
Aqua guard	8	100	0.5	24	9.6
Inverter	8	1500	1	24	288
Water Motor	4	746	0.5	24	35.808
CCTV	40	50	24	30	1440
100 W LED	7	100	10	30	210
	<u> </u>	Total			3225.378

Estimated Energy Consumption during Summer



#### Fig 1: Energy consumption use (summer)

Table 2: Estimated energy consumption in KWH during winter

Items	Number	Power in W/item	TIME consumed (In hours)	Days	TOTAL Power consumption in KWH
Tube light	97+10 used	20	4	24	19.2
LED	194+131 used	12	2	24	75.45
Ceiling Fan	150+71 used	60		24	0
Exhaust Fan	8	35	0.5	24	3.36
AC	4	1000		24	0
Freeze	4	250	0.5	24	12
Computer	30+38 used	200	2	24	364.80
Printer	9	30	0.5	24	3.24
Xerox machine	3	2000	0.5	24	72
TV	2	40	1	24	1.92
Aquaguard	8	100	0.5	24	9.6
Inverter	8	1500	1	24	288
Water Motor	4	746	0.5	24	35.808
CCTV	40	50	24	30	1440
100 W LED	7	100	10	30	210
		Total		1	2535.378

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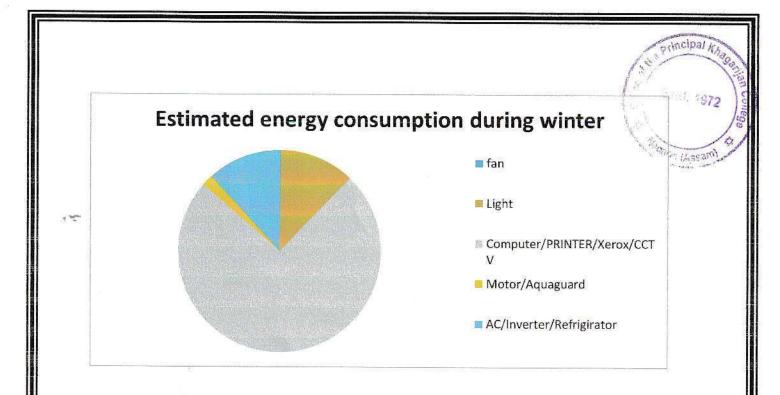


Fig 2: Energy consumption by and use (winter)

# FINDINGS AND RECOMMENDATION OF THE AUDIT

to replace old electrical cables with newer atives. nts and staffs should be encouraged constantly to nergy judiciously. Posters and pamphlets should be buted and notices about saving energy should be d in notice boards throughout the campus. ent bulbs and CFLs should be replaced with LEDs.
nergy judiciously. Posters and pamphlets should be buted and notices about saving energy should be d in notice boards throughout the campus.
ent bulbs and CFLs should be replaced with LEDs.
ets and equipment should be repaired and/or red with latest ones to save energy(with five-star).
ive regulators should be replaced by electronic tors.
ops must be replaced by laptops to save energy.
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Khagarijan College

# **POSITIVE INITIATIVES OF THE COLLEGE**

- 1. It is commendable that the college organizes initiatives to aware faculty members and the students regarding energy conservation. Awareness Programme on Rising Energy Demand: Deforestation and Climate Change was conducted by IQAC, Khagarijan College on 03/01/22 to spread awareness about the dangers of rising energy demands. Hands on Training session regarding "Energy Saving" has been conducted by IQAC, Khagarijan College, Nagaon, Assam on 28/05/2022 in collaboration with Nagaon Solar House where proper management of energy usage and measures to reduce energy wastage were demonstrated by the Resource Person initiating a wave of discussion and awareness regarding the same.
- 2. The college has taken a step towards going green by using two solar lights to illuminate the grounds.

# AREAS OF IMPROVEMENT

#### Areas of Attention

Based on the physical observation and the analysis of data collected, certain areas have been identified as areas of attention.

- 1. Old wiring cables in many parts of the campus leading to loss of energy.
- 2. Use of large numbers of indicators on boards.
- 3. Proper lighting facilities in classrooms.
- 4. Increase awareness among students and bearers.

#### **Scopes for Saving Energy**

This study could identify the following scopes for saving energy in the campus:

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- Updating of technologies in laboratory equipment.
- Replacing old electrical cables.
- Replacing tube lights with LEDs.
- Ensuring even lighting facilities in all class rooms.
- Turning off electrical equipment when not in use.
- False ceilings in classroom for maintaining optimum room temperature
- Using computers and electronic equipment in power saving mode.
- Establishment of solar panels.

#### Immediate areas of improvement

Based on the study, the following areas were identified as those requiring immediate improvement:

- 1. Replacing tubes with LEDs
- 2. Repairing and updating laboratory equipment
- 3. Encouraging students and staff to switch off electrical instrument.

# CONCLUSION

The Energy Audit of Khagarijan College has been successfully concluded after thorough examination of all the aspects specified in the Objective of this Audit. Various scope for improvement like replacing old wirings, filament bulbs and tubes have been proposed as recommendation by the committee. Furthermore, a master switch can be installed at a prominent place which can be directly supervised by the HOD/supervising staff so as to help avoid power wastage in closed rooms. Also, a well-prepared electrical wiring plan for the campus, would help to identify unused points and conduct re-wiring.

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points and conduct re-wiring. Beyond the sessions organized to spread awareness regarding energy conservation, further training /lecture sessions for both students and staff should be included for better comprehension. If everyone ensures switching off lights, fans and electrical instrument that are not in use, roughly 10% of energy saving is possible. An Instruction cum Request Sign board can be displayed near each switchboard, to influence and guide the user thus arresting misuse and wastage of power. While the college has begun to use solar energy, there is much scope for improvement and increase in solar energy usage.

Dr Rameswar Kurmi Coordinator, IQAC Khagarijan College

Coordinator IQAC Khagarijan College

Dr Jayanta Barman, Assistant Professor Dept of Physics ADP College, Nagaon, Assam

> Dr. Jayanta Barnan Coordinator Pio-Tech HUB A.D.P. College, Nagoon

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# Strategic Planning and Deployment

# Preface

Strategic Planning is most essential component to accomplish Vision and Mission for tracking progress of any organisation that directly impacts an institutions success, creating top-down approach to tracking key performance indicators. In the like way, for HEIs, strategic Planning is very essential for achieving its vision and mission and to transform its human potentials human resources within a specific time-frame. It's a continuous effort with specific focus on accomplishing the institutional goals. Hence, the preparation of Strategic Planning and Deployment Policy is the most essential part of success. SPDP is based on analysis, obstacles and opportunities and leads the direction through which the institution can achieve its goals and objectives.

The SPDP of the Khagarijan College, focus on the involvement of its all stakeholders in its continued success as a co-education institution located in the urban areas of Nagaon Town. Focus has been given to identify the policy deployment in line with the achievement of desired outcomes and objectives.

#### VISION

The vision of the Khagarijan College is to spread and promote higher education for the sustainable development of the nation.

#### MISSION

To set a high standard of excellence in the preservation and creation of knowledge through Teaching-Learning and experiment and to serve as an effective instrument of development in the path of education, progress and total awakening. Besides, we shall go always a little with "BETTER EVERY DAY" spirit.

The Khagarijan College endeavor to achieve its vision by:

- High standard of excellence in the preservation and creation of knowledge through teaching-learning and experiment and to serve as an effective instrument of development in the path of educational, progress and total awakening.
- The college tries to impart education of the higher-standard through value based and holistic approach and integrity of traditional and innovative practices.
- To create a platform for exploring creative potential and nurturing the spirit of entrepreneurship and critical thinking.



Try to inculcate a strong belief in hard work and motivating for gender equality, human rights and ecology in order to make the student's socially responsible citizens.

• To achieve the potentiality for integration of multidisciplinary and transdisciplinary approach for fulfillment of Mission Statement.

#### **QUALITY POLICY**

- To facilitate the quality in Teaching-Learning system for a divergent group of learners this will provide support base for lifelong learning and skill strategy.
- To inculcate value, support and Excellency in teaching learning.
- To fulfil the needs & Expectations of the stakeholders.
- To provide opportunity for progress of higher education for securing employment with the qualifications acquired at the college.
- To provide academic support infrastructure and environment that is conducive for high standard of teaching learning process.
- To obtain the commitment of all the stakeholders to channelize a collective responsibility.

#### **CORE VALUES**

#### • Integrity

The college follows a policy of shared decision making strategy and imbibe values of the institution through dedication of works. The institution conducts all its activities in ethical manner in fair, honest and truthful manner.

#### • Inclusiveness

The college create an atmosphere where all stakeholders are valued for their respective cultures, experiences knowledge levels and capabilities. It has a student strength which comprises different cultural values and norms. Hence, the college try to provide an environment that is culturally inclusiveness and responsive to all its stakeholders. Keep aside the categorisation, the college provide an atmosphere to all its stakeholders of different culture, social background and gender be it the students or other support staff. The college organise various co-curricular activities and observes days and Events of renowned personality and festivals for inclusiveness all strata of society.

• Objectives:



We shall go always a little with "BETTER EVERY DAY" spirit. In conscientious to this quote, the college lays down the following prime objectives:

- The college try to provide quality education and support to its stakeholders.
- Try to generate leadership quality among the students
- > Try to provide skill and values through mentoring the students.
- > Try to train the students with decision making ability
- To empower them for employability through proper guidance and training
- Promote holistic development by participating in cultural, sports, extension and community based NSS activities.

### **Strategic Goal**

For proper implementation of the vision and Mission and core values of the college, the strategic goals are as follows:

#### a. Internal Quality Assurance Cell

- In every Academic year, the Internal Quality Assurance Cell is reconstituted as per the latest guidelines of NAAC.
- Planning of Action Plan
- Formation of Academic Committees
- Formation of Statutory and Legal Cells
- Plan for professional development of Teaching and Non-Teaching Staffs
- Periodic Quality Check
- Organising Internal & External Audit
- Conduction of Academic and Administrative Audit.
- Channelizing the Best Practices
- Preparation of Annual Reports and Submission to NAAC and AISHE

#### b. Teaching Learning Parameters:

- IQAC and Academic Committee Meetings
- Preparation of Academic calendar
- Central Class Routine preparation
- Induction programme on PO PSO & CO
- Categorisation of Advance & Slow Learners.
- Departmental Meetings
- Collection & analysis of Feedback
- Continuous Internal Evaluation
- Mentor-Mentee system
- Development of learning materials.

# Leadership

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- Decentralised responsibility for academic, Administrative and Student related matters.
- Define duties and accountability
- Responsibilities of Functional Bodies.
- Student Association

# d. Good Governance

- Articulation of vision & mission in key positions of the college
- Publication of Academic calendar
- Setting of institutional Action Plan & strategic goals
- Leadership development through decentralization and participative management.
- Proper functioning of the Committees and Cells
- Monitoring of the Quality management System.
- Assessment of Faculty Performance Appraisal
- Conduction of fair Admission procedure
- Conduction of Internal/External/Green/Gender Audits.
- Implementation of E-Governance in Administration, Admission, Payment, Communication and Finance.

## e. Students Participation

- Induction to the first year students
- Career counselling
- Budget allocation for student development programmes and activities.
- Organization of Establishment day, Cultural Events, Sports, Teachers' day etc.
- Organization of Student Associations' Election properly
- · Financial assistance to the needy students.
- · Participation in curricular/extra-curricular activities.
- Participation in extension activities through NSS and departmental initiatives.
- Support for applying scholarship through NSP and other avenues.
- Participation in Institutional, Inter-college and university level, state level competitions.

## f. Faculty Development & Welfare strategy

- Recruitment of Full Time/ Contractual faculty & Support Staffs
- Performance Appraisal System
- Teaching and Non-Teaching training programme
- Code of conduct, service rules & leave rules
- Welfare policy
- Leave for attending seminar/workshop/conferences for advancement

career



Support Policy for research and consultancy.

#### Financial management

- Budget allocation and maintenance of expenditure
- Conducting audits'
- Approval of Finance Committee on expenditure
- Financial supports for visits/training/faculty exchange etc.

#### **Research & Innovation**

- Encouraging the students for research oriented activity.
- Fund generation for research projects.
- Strategy for applying Government/Non-Government sponsored funds
- Collaboration with different stakeholders and Academic Institution
- Established a Publication Cell for publishing an ISSN Serial

#### **Physical Support facilities:**

- · Focus on building development and infrastructure renovation.
- Focus on enhancing Smart Class/ICT enable classroom
- Laboratory up gradation
- ICT Updates
- Safety and Security Measures
- Plantation for Green campus initiatives
- Library up gradation.

#### STANDARD OPERATING SYSTEM

The standard Operating System for Executive component has a institutional flowchart for execution of Powers and functions step by step involving all the stakeholders:

#### • Meetings and Discussion:

Before the beginning of each academic session, the Head of the Institution and the Internal Quality Assurance Cell, discussed in detail about the needs and requirement of the institution. The IQAC along with the Academic Committee members and other Academic Sub-Committees checks the completion of the Academic calendar, Central Class Routines whether it is adequate or not. In the meeting organised by the HoI, the HoDs or respective departments place their needs and their planning for the academic session.

#### • Overview:

The HoI and the IQAC conducts statistical survey regarding the new admission, Faculty Position to meet up the students' requirements,



availability of books in Central and Departmental Library and a lists are prepared for follow up action.

#### Improvement Strategy:

IQAC and the Academic Committee Members ensure the preparation of the academic calendar, fixing of the dates for co-curricular activities, CIE and revision of the courses.

Mentor-Mentees undertake counselling programme and accordingly the learning strategies are adopted for inclusiveness all categories of students.

#### • Implementation:

The meetings of IQAC and other Academic Sub-Committees are held and review periodically the progress of the works planned in the beginning of the academic session. Besides, new agenda and programmes are fixed for implementation to fulfil the vision and mission of the college.

#### STRATEGY IMPLEMENTATION AND MONITORING

After formulation of the strategic development plan is followed by its implementation and monitoring. The prepared plan, at the time of implementation is measured and accordingly mid-time policy is formulated. The Head of the Institution along with Internal Quality assurance cell and other Academic Sub-Committees are the main pillar for the implementation of the Strategic Plan and its deployment.

# **Institutional Level:**

SI.No.	Departments	Implementing Authority
1	Governance & Administration	Governing Body of the College
2	Academic Planning	IQAC & Academic Committee
3	Admission	Admission Committee (Supervised by Principal & IQAC
4	Infrastructure	GB, Principal & Construction Committee
5	Student Progression	IQAC, Mentoring Cell, Head of the Department
6	Statutory Complains	Principal & Internal Complain Committee
7	Student Activities	Teacher In-Charges
8	Departmental Activities	Principal & IQAC
9	Placement	Faculty members
10	Quality Policy	Internal Quality Assurance cell

Principal Konagarijan College

and	22 College		
Estd. 19	19	Training	Principal & the IQAC
100	011135592	Library Development	Library Maintenance Committee
Nagad	13	Campus Management	Campus management Committee
	14	Website	Website Development and Maintenance Committee
	15	Appointment	Governing Body and Principal
	16	Finance	GB, Principal & Finance Committee

## SWOC

#### Strength

- Congenial atmosphere for Teaching-learning.
- · Good-natured relationship among its stakeholders.
- Congenial atmosphere for plural and multicultural community.
- Student friendly Teaching-Learning system.
- Accessibility of open and distance education through KKHOSU for UG and PG aspiring students.
- Accessibility of skill base professional courses viz., Beautician cum Hairstylist, Web Developer, Diploma in Computer Application, Creative Writing, Functional English, Personality Development and e-Commerce and Banking Practice etc.
- Transparent admission process for all communities and areas.
- Facilities to cope up with Divyanjan.
- Facilities for ICT enable teaching-learning process.
- Eco-friendly and Gender friendly atmosphere.
- Collection and analysis of students and other stakeholder's feedback and action taken provisions for improvement of services.
- Wi-Fi enable campus.
- CCTV surveillance in the college campus.
- Memorandum of Understanding with various stakeholders for achieving multidisciplinary approach.
- NSS unit with very active & dynamic role.
- The College has a ragging free campus with less number of student grievances.
- A well furnished Central & Departmental Library.
- Digital Library Portal for Electronic Learning materials.
- Blended mode of Teaching-Learning System



- Variety of Subject combination for UG programme.
- Scope for Remedial and Bridge Course for slow learning students.
- Automated Library with Text Books, Reference Books, Journals, rare Books, sufficient reading space for Students and Faculty & N-List Subscription.
- Participative management by incorporating its stakeholders.

#### Weakness

- Less number of Teaching and Non-Teaching staff & absence of permanent Librarian.
- Most of the students are coming from socially and economically poor background hence sometime increased drop-out rates.
- Insufficient boarding facilities for boys' and girls' students
- Less number of externally funded research project undertaken by the faculty members.
- Poor performance of students in competitive examination conducted by Central and State Government.
- Less number of external funding for infrastructural development.
- Financial problem to open self-finance courses as the students coming from BPL & EWS of the society & insufficient permanent faculty position.
- Poor enrollment of the students from outside the state.
- Limited academic adaptability as the College has to strictly follow the syllabus prepared by the affiliating University

#### Opportunity

- A total of 3.25 acres of huge land area may be used for starting new programmes.
- To establish boys' hostel.
- To promote ICT enable Teaching-Learning.
- To start new programmes such as Science, B.Ed etc.
- To mobilize its vast Alumni for institutional development.
- To undertake extension activity in its neighborhood area.
- Scope for opening shops, ATM and other related avenues for the need of the students.
- Scope for conducting national and international seminar/conferences.
- Scope for opening new skill-based and industry based courses.
- Scope for opening more specific add on/certificate course
- Scope for opening commercial avenues for resource generation.
- Scope for opening more PG Programmes



- Scope for setting up of Tribal Study Centre and Cultural Museum.
- Exposure to industrial training and internship for its stakeholders
- Obstacle in generation research grant by the institution.
- Enhancement of skill development courses
- To create more residential facilities for staff & students.
- To open new courses such as BSc., B.Ed etc.
- Enough open space for new construction
- Scope for opening commercial avenues for resource generation.
- Scope for opening more PG Programmes
- Scope for setting up of Tribal Study Centre and Cultural Museum

#### Challenges

- The College cannot restrict entry-level marks for admission in UG Programmes and hence unable to fulfill the reservation criteria.
- > To get proper placement of the pass out students.
- > To reduce the drop-out level due to poor economic condition of the stakeholders.
- > Challenge to catering the needs of the students with poor learning level.
- > Catering the student diversity due to less number of Faculty position.
- > To have proper tie-up with international academia.
- To spend the huge amount of money for payment of full timer and part time faculty members.
- > Maintaining proper records for student progression and placement data.
- To record the data of student scholarship due Government policy of direct credit transfer to the students account and non-intimation to the college authority.
- > To provide fund for research oriented activities.

#### **Monitoring Strategy**

The Strategic Plan and its Deployment progress are monitored by the Principal, Internal Quality Assurance cell and the other Academic Sub-Committees from time to time. The Departmental Convenros and the Coordinators of the Committees and Cells are met in the Staff and HoD meetings organised by the Principal of the college. The Quality aspects of the college are solely monitor by the IQAC internally by collecting feedback on curriculum delivery and enrichment. The findings of the review are documented and the same are informed to the Principal and from the principal to the GB of the college and accordingly actions are taken.



## **BEST PRACTICES**

GREEN CAMPUS & CLEANLINESS and ANTI-TOBACCO DRIVE

# Vision

The vision of the Khagarijan College is to spread and promote higher education for the sustainable development of the nation.

# Mission

To set a high standard of excellence, in the preservation and creation of knowledge, through teaching-learning interactions and experimental techniques; and to serve as an effective instrument of development in the path of education, progress and total awakening. Besides this, the motto is to always go a little further with a "better every day" spirit.

# **GREEN CAMPUS & CLEANLINESS**

**Institutional Members for Green Audit Committee (Year: 2021-22)** 

- 1. Dr. Ramesh Nath, Principal, Khagarijan College
- 2. Dr.Rameswar Kurmi, Coordinator, IQAC, Khagarijan College
- 3. Ms. Maitreyee Dutta, Assistant Professor, Department of English
- 4. Ms. Rupali Talukdar, Assistant Professor, Department of Economics
- 5. Ms. BichitraPegu, Assistant Professor, Department of Education
- 6. Ms. Jharna Morang, Assistant Professor, Department of Political Science
- 7. Md. Mohazir Ahmed, Secretary Green Club, Khagarijan College.

#### Institutional Members for Energy Audit Committee (Year: 2021-22)

- 1. Dr. Ramesh Nath, Principal, Khagarijan College
- 2. Dr.Rameswar Kurmi, Coordinator, IQAC, Khagarijan College
- 3. Ms. Maitreyee Dutta, Assistant Professor, Department of English
- 4. Ms. Rupali Talukdar, Assistant Professor, Department of Economics

5. Ms. BichitraPegu, Assistant Professor, Department of Education

6. Ms. Jharna Morang, Assistant Professor, Department of Political Science

#### **Green Campus Maintenance Cost**

office ( E-mail khagan ef. No rom, Dr. Ramesh Nath, M.Sc., B.Ed., P	Chotahalbar, Nagaon (Assam), Pin-7 Estd 1972 03672) 230085. Mobile 98644 03390. 86387 2 jancollege1@gmail.com, Websile www.khagarijanci	6781
ef. No rom, Dr. Ramesh Nath, M.Sc., B.Ed., P	jancollege1@gmail.com, Website www.khagarijanci	sliege co in
rom. Dr. Ramesh Nath, M.Sc., B.Ed., P.		
r. Ramesh Nath, M.Sc., B.Ed., P.		Date :
Dr. Ramesh Nath, M.Sc., B.Ed., P.		
	h.D.	
incipal & Secretary		
GREEN CAM	PUS MAINTENANCE COST w.e.f. 01/	04/2017 to 30/06/2022
Date	Particulars	
16/11/2017 13/3/2018	Muster Roll	Amount (In Rupees) 3600
21/11/2018	Labour Payment	3600
24/4/2019	Muster Roll	2800
7/12/2019	Muster Roll Labour	3500
18/5/2020	Muster Roll	4200
8/7/2020 8/9/2020	Muster Roll	4800
4/11/2020	Hazira	2000
23/11/2020	Muster Roll	10000
5/12/2020	Muster Roll Hazira	\$200
12/1/2021	Hazira	4000
12/1/2021	Hazira	400 3200
24/3/2021	Muster Roll	2000
13/4/2021	Sariful Mali	400
18/6/2021	Muster Roll	4500
18/6/2022	Gardener Muster Roll	400
16/7/2021	Gardener	8100
16/7/2022 18/4/2021	Muster Roll	400
24/3/2021	Gardener	400
8/2/2021	Muster Roll Muster Roll	7200
23/11/2020	Nurserary	2400
27/2/2020	Sariful Mali	1020
29/7/2021	Sariful Mali	400
4/8/2021 2/9/2021	Gardener	400
5/10/2021	Gardener Gardener	400
2/11/2021	Gardener	400
15/11/2021	Muster Roll	400
1/12/2021	Gardener	3200 400
<u>5/1/2022</u> 20/1/2022	Gardener	400
10/12/2021	Labour	5000
7/2/2022	Gardener	5130
1/2/2022	Labour	400
19/2/2022	Flower	2050
19/2/2023	Labour	2250
3/3/2022	Gardener	400
5/4/2022	Gardener	4200
27/4/2022	Muster Roll	400
6/5/2022	Gardener	2700
26/5/2022	Muster Roll	5850
8/6/2022 8/6/2022	Gardener	400
	Muster Roll	5400

(Dr. Ramesh Nath) Principal Khagarijan College Naganijan College Nagaon (Assam)



Figure 1. Photographs of the Campus





**Figure 2. Photographs of the Campus** 



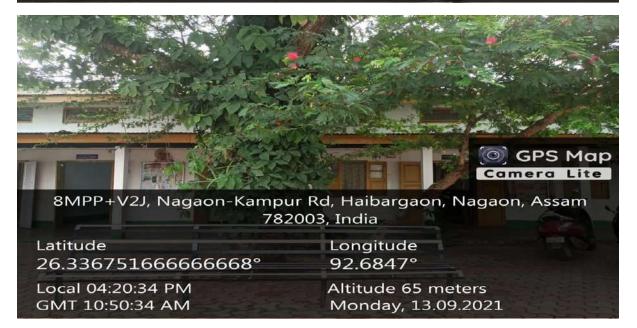
Figure 3. Photographs of Campus Cleaning



8MPP+V2J, Nagaon-Kampur Rd, Haibargaon, Nagaon, Assam 782003, India

Latitude 26.33658666666667° Longitude 92.68497°

Local 03:50:08 PM GMT 10:20:08 AM Altitude 65 meters Monday, 15.11.2021



**Figure 4. Photographs of the Green campus** 



Figure 5. Blue and Green Dustbins at different locations



Figure 6. QR Scan Code of the trees on the campus



Figure 7. QR Scan code of trees on the campus



Figure 8. Pedestrian Areas of the campus



Figure 9. Signage of Plastic free campus

#### PROGRAMMES PROMOTING CLEAN AND GREEN CAMPUS



























On the Occasion of World Environment Day



# NATIONAL WEBINAR



# ENVIRONMENTAL PROBLEM FROM NATIONAL TO GLOBAL

Organized by

IQAC, Khagarijan College, Nagaon, Assam

In collaboration with

University of Science and Technology Meghalaya (USTM)

Resource	Person
----------	--------

Dr. Ramesh Nath Principal Khagarijan College Dr. Anindita Bhattacharyya Associate Professor Department of Earth Science USTM Umme Salma Nodal Teacher, Environmental Studies HoD, Department of Economics Khagarijan College

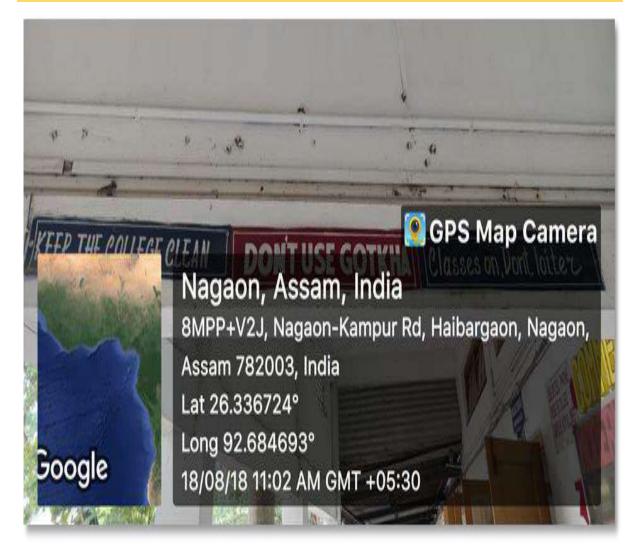
Online Mode Platform : Google Meet

Registration Link https://forms.gle/z1nVzLmcFEpTREok9 Date : 5th June 2022 Time : 11. A.M

#### **Anti-Tobacco Drive**

# Coordinator of Anti-Drug and Tobacco Cell Mr. Mainul Hoque Akanda, HoD, Department of Political Science, Khagarijan College

## **Anti-Drug Campaign in the College Campus**



Awareness Programme on Tobacco Burden and Cancer Control



Figure 10: Awareness Programme

NSS Unit Khagarijan College in collaboration with District Tobacco Control cell and Assam Cancer Care Foundation (A joint Initiative of Govt. of Assam and TATA Trusts) organized a Sensitization cum Training of NSS Volunteers of Khagarijan College on 01.02.2021 on "Use of Tobacco and its ill Effects" under the supervision of the NSS Programme Officer, Mr Mainul Hoque Akanda.



#### Awareness Programme on Anti-Drug and Tobacco Control

Figure 11: Awareness Programme on Anti-Drug and Tobacco Control

An awareness programme was organized jointly by Anti-Drug and Tobacco Cell, Khagarijan College and Village Defence Party Chakitup, Nagaon, on 13/03/2021 at 11 pm, in the seminar hall, Khagarijan College. About 50 members including Guest Faculty members and students participated in the programme.



Awareness Programme on Road Safety and Drug Addiction

An Awareness Campaign was conducted inside the college premises by Ayesha Nistha Society and District road Safety Committee, Nagaon, Assam, in collaboration with IQAC, Khagarijan College, Nagaon, Assam on 20<sup>th</sup> May, 2022 from 11 AM onwards. This campaign aimed at 'Sadak Suraksha-Jeevan Raksha' so as to aware the students regarding road safety measures and the necessary safeguards one should take care to maintain it.

Principal Khagarijan College Nagaon (Assam)