

GREEN AUDIT REPORT, 2023



CHHAMARIA ANCHALIK COLLEGE

CHHAMARIA, DIST: KAMRUP, ASSAM

PIN: 781136

GREEN AUDIT-CHHAMARIA ANCHALIK COLLEGE

CERTIFICATE

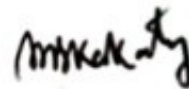
The Green Audit Report of Chhamaria Anchalik College was prepared by reviewing the documents provided by the college for the said purpose. Apart from that, to prepare the report, some information was also gathered interacting with the Principal, IQAC Coordinator, faculty members and with the students of the college as well as visiting the college campus in the month of February, 2023.

The Green Audit Report presents green initiatives undertaken by the college as well as some suggestions and recommendations given to be adopted by the college to improve it as an environment friendly institute.

We are thankful to the college authority for providing necessary data and information in making the report.



(Dr. S.A. Iman Choudhury)
Coordinator, Green Audit Team
Dimoria College, Assam



Mr. Manab Borkakati
Member, Green Audit Team
Dimoria College, Assam

Counter signed By:



(P.K. Dev Nath)
Principal
Chhamaria Anchalik College
Assam



(Jamal Uddin Ahmed)
IQAC, Coordinator
Chhamaria Anchalik College
Assam

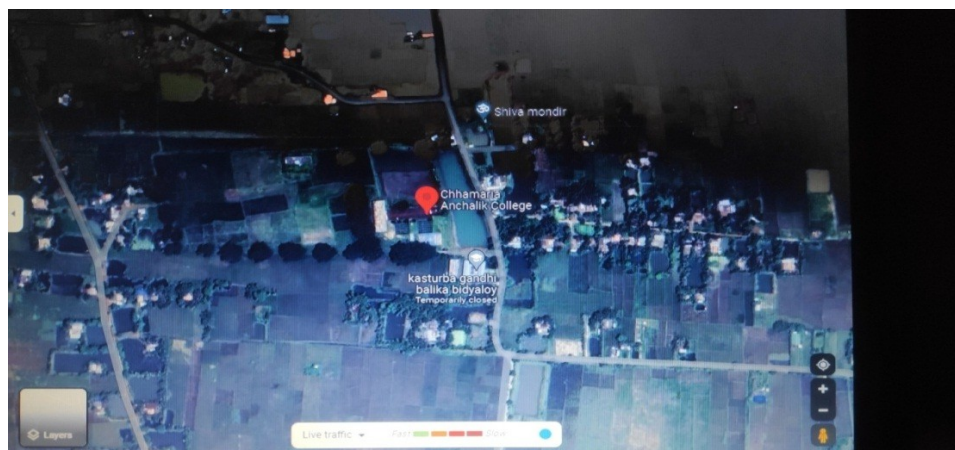
CONTENTS:

Sl. No.	Topics	Page No.
1	A Brief description of the College	1
2	What is Green Audit	2
3	Objectives of Green Audit	2
4	Policy of the college to main Green Environment	2
5	Preparation of Audit Report	3
6	Methodology of Green audit	3
7	Biodiversity of the College i) Flora of the campus ii) Fauna of the campus	3
8	Water Management	7
9	Waste Management	9
10	Energy Conservation	10
11	Sound Pollution	12
12	Air pollution	13
13	Recommendations	16

A BRIEF DESCRIPTION ABOUT THE COLLEGE

The Chhamaria Anchalik College is situated at Chhamaria, Boko, under District, Kamrup, Assam, Pin: 781136. The college lies in the beneath of the scenic beauty, far away from din and bustle. The College was established on 12th August, 1994 with a carriage of its weight age activated from some intellectual pioneers of the time. The first class started in B.A first year in Arts stream. In its initial period, classes were held in the Chhamaria High School in the early morning. In the year, 1997 the college activities were shifted to its own building. The College is being established for the all round development for the backward community students. The College has been playing a pivotal role since its inception in 1994, a long walk of 24 years, doing development adequate infrastructural facilities. There are several associations in the college to promote the special talents of the students under the guidance of teachers.

The College is permanently affiliated to Gauhati University and under 2(f) and 12(B) of UGC. There are total nine departments at present and all the departments excluding English have major courses. The number of students at present in under graduate level is around 450. The total number of faculty members and non teaching staffs are 25 and 10 respectively. The total campus area is spread on 30 Bighas of land. There are sufficient numbers of class room to accommodate the students. Besides these, the construction of one Women's Hostel is almost completed.



What is Green Audit?

Green refers to the environment, and the audit process helps in developing a sustainable ecosystem. So, Green Audit is a step-by-step reviewing process that helps in the systematic identification, quantification, analysis, and reporting of the critical aspects that matter in the environmental assessment of a site. It analyzes and determines the ideal environmental practices inside the concerned sites. In short, it is impactful for developing an eco-friendly ambiance.

OBJECTIVES OF GREEN AUDIT:

The primary objectives of Green Audit are to make environment sustainability of a particular site or within and outside of a campus etc.

The Audit also helps and suggests how to develop a sustainable ecosystem in a campus.

It also helps to reduce the possibilities of health hazards and threats within the campus for students.

There are several parameters to assess the environment of the campus, which includes-Flora and fauna, Water quality, Waste Management, Water bodies, sound pollution, energy system, health and hygiene etc.

It helps the particular institution to set and promote enhanced learning ecosystem and obtain a good grade.

Policy of the College to maintain Green Environment:

The College as a whole always believes to maintain a healthy environment in and around the campus along with the other development activities of the college. The College maintains its own policy for that purpose. The College has taken number of initiatives to maintain the environment of the College. The students, faculty members as well as College authority look after the campus by planting trees, maintaining two ponds which contains varieties of fishes and other aquatic animals.

Preparation of Audit Report:

The College administration of Chhamaria Anchalik College is very much interested to conduct A Green Audit of their campus. In this regard, the College authority approached the Green Audit team of Dimoria College to prepare the report. Accordingly the Green Audit team of Dimoria College agreed to conduct the audit of Chhamaria Anchalik College in the month of February, 2023. After this, the Audit team of Dimoria College visited the College and interacted with the students, faculty members, IQAC coordinator and Principal's to collect the information and necessary updates for preparing audit.

Methodology of Green Audit:

The audit team visited the College and determined their own methodology such as physical inspection of various sites of the college, preparation of questionnaire to collect information, observation and reviewing of the documents, interviewing with IQAC coordinator and Principal for confirmation of certain data and other necessary information of the college. The main area covers for the preparation of audit are:

1. Biodiversity of the College
2. Water Management
3. Waste Management
4. Energy Conservation
5. Sound Pollution
6. Air Pollution
7. Green Initiatives

Biodiversity of the College:

Chhamaria Anchalik College is situated in a rural area and around 75 K.M away from Guwahati, where farming and agriculture are practiced in and around the campus. The surrounding of the campus is paddy field area. The campus biodiversity is an example of how they have assimilated the local practices and culture in

preserving local biodiversity within the campus. The college authorities are trying to preserve the local flora and fauna by planting number of valuable plants and aquatic animals in their ponds. Two ponds one front side and other backside of the college contains different varieties of local as well as exotic species of fishes, crabs, frogs, snakes and other aquatic animals and planktons. These are ideal for academic practices and learning while practicing.

Flora of the Campus:

Sl.No.	Name of the plants	Total Nos.
1.	<i>Polyalthia longifolia</i>	75
2	<i>Swietenia macrophylla</i>	21
3	<i>Mesua assamica</i>	6
4.	<i>Azadirachta indica</i>	2
5	<i>Terminalia arjuna</i>	6
6	<i>Phyllanthus emblica</i>	3
7	<i>Samanea saman</i>	22
8	<i>Psidium guajava</i>	2
9	<i>Araucaria columnaris</i>	6
10	<i>Haemanthus sanguineus</i>	1
11	<i>Mimusops elengi</i>	18
12	<i>Cocos nucifera</i>	2
13	<i>Aquilaria agallocha</i>	3
14	<i>Tectona grandis</i>	4
15	<i>Delonix regia</i>	1
16	<i>Alanthus excelsa</i>	4
17	<i>Michelia baillonii</i>	6
18	<i>Zizyphus jujuba</i>	3
19	<i>Cassia fistula</i>	3
20	<i>Butea monosperma</i>	2
21	<i>Rose rubiginosa</i>	9
22	<i>Ocimum sanctum</i>	25
23	<i>Cissus quadrangularis</i>	2



Ocimum sanctum



Cissus quadrangularis



Araucaria columnaris



Terminalia arjuna



Azadirachta indica



Polyalthia longifolia

Fauna of the campus:

Sl No.	Name of the species(animals)
1	<i>Labeo rohita</i>
2	<i>Catla catla</i>
3	<i>Hypophthalmichthys molitrix</i>
4	<i>Cyprinus carpio</i>
5	<i>Ctenopharyngodon idella</i>
6	<i>Labeo bata</i>
7	<i>Pampus chinensis</i>
8	<i>Puntius punito</i>
9	<i>Heteropneustes fossilis</i>
10	<i>Channa punctata</i>
11	<i>Devario assamensis</i>
12	<i>Brachidanio rario</i>
13	<i>Chitala chitala</i>
14	<i>Clarius batrachus</i>
15	<i>Anguilla rostrata/ Myrichthys ocellatus</i>
16	<i>Brachyura</i>
18	<i>Euphylictis hexadactylus</i>
19	<i>Amphiesma stolatum</i>
20	<i>Xenochrophis piscator</i>
21	<i>Ptyas mucosa</i>
22	<i>Acridotheres tristis</i>
23	<i>Phalacrocorax niger Vieillot</i>
24	<i>Egretta garzetta</i>
25	<i>Milyus migrans</i>
26	<i>Athene brama</i>
27	<i>Passer domesticus</i>



***Halcyon smyrnensis* bird is seen in the pond.**

WATER MANAGEMENT

Water is a basic necessity and no living creature can live without water. Although water is available freely in nature but clean or potable water is not available freely for human consumption. There is always scarcity of clean water. So, to avoid this water management is very much essential. Water management is the activity of planning, developing, distribution and managing the optimum use of water. The polluted water and wastage of water creates crisis of water. Due to drinking of unclean water many diseases occurs not only in humans but also in animals. Because of this it is very much important to conserve and maintain the water quality of the campus for better health of the students, teaching, non teaching staff of the college as well as the visitors. The college authority uses the pond water to supply in the .The concerned auditor tried to find out the methods for determining the type of drinking water, source of water, uses of water etc.

Management of water and its uses:

Sl.No.	Sources of Water	Quantity
1	Water supply	Nil
2	Boring	1
3	Pond	2
4	Water reserve tank	2



Front side pond of the College

Uses of water in the campus :(Per day)

Sl.No.	Different categories of persons used water	No.of people used
1	Students	500
2	Teaching staff	25
3	Non teaching staff	10
4	Visitors	10-15



Drinking water facility for the students and staffs

The approximately 550 number of persons uses boring water daily, but sometimes it may increase while construction workers are engaged in construction activities of the college. The boring water after storing in water tank usually filtered through aqua guard for students, staff members and visitors also for drinking purposes. The pond water is mainly used to irrigate the plants and other construction activities. The rain water is drained by storm water drain and released to Nallha inside the boundary of the college at low terrain.

WASTE MANAGEMENT:

Waste management involves the processes of waste collection, transportation, processing, as well as waste recycling or disposal. Sustainable waste management systems include advanced management strategies to minimize environmental challenges and protect resources. Campuses produce a large amount of waste, which might be solid, liquid, or E-waste. If garbage isn't adequately handled, it can lead to overcrowding in landfills and pollution in the environment. Separating, reducing, reusing, recycling and composting are good options for managing college waste.

The College wastes of Chhamaria Anchalik College contains: solid waste, canteen waste or kitchen waste, paper waste, plastic waste, toiletry waste, plant debris waste etc.

The College authority tries to maintain the wastes in different ways. They usually deposit the plant debris and other kitchen wastes in the composting pits. The daily solid wastes are put in the dustbins placed in different places of the College. Being an academic institution, waste paper is one of the main solid wastes generated in the premises. College has taken steps to minimize and avoid paper usage. The College administration also tries to reuse the one side used printed paper for internal communication. The very few E-wastes sometimes come out from the College usually kept in one place for proper recycling. So, Separation of waste is essential as the amount of waste being generated today causes immense problem.

ENERGY CONSERVATION:

Energy Conservation is the generalized term used for the prevention of wasting energy. So, we can say energy conservation is the practice of reducing the consumption of energy by living organisms. Energy conservation is necessary because it reduces the cost of consumption and to preserve the limited existing resources of energy. Energy can be conserved by using energy-efficient devices and other methods to consume energy and reduce the use of energy when there is no requirement. For example, when we reduce the use of electricity when not in use, then the cost per unit of energy also reduces. By using less electricity at our college and using more energy-efficient appliances, we can reduce our electricity bills. That is how the conservation of electricity works. Energy conservation helps in reducing the use of natural resources of energy like fossil fuels. Energy conservation reduces the waste which is released into the environment. It reduces unwanted carbon emissions into the atmosphere. For example, the burning of fossil fuels in Diesel Generator in the College campus produces energy, and in this process, a lot of harmful gases are emitted into the air. It causes air pollution. Burning less amount of fuel reduces the unwanted contamination of the air. So, energy conservation helps in improving the quality of life.

It has been observed that the authority of Chhamaria Anchalik College has already replaced the common flame bulbs with tube lights and LED bulbs at the office as well as at class rooms. This way the college is trying to reduce the electricity bill. The College runs Diesel Generator when there is power cut. At present it may not cause air pollution inside the campus because the College campus is almost open from all sides. The college authority is also alert to turn off the fans, bulbs and all other electric gadgets when they are not required to be used. The College uses the LPG for their canteen /kitchen purposes.



SOUND POLLUTION:

Noise is playing an ever increasing role in our lives and seems a regret-table, but ultimately avoidable corollary of current technology. The disturbance caused in the environment by loud and harsh sounds from different sound sources that may result in different health hazards is called noise pollution. Noise pollution is commonly generated inside many institutional campuses which come from inside or outside vehicles of the campus, Generators, as well as construction activities.

It has been noticed that the vehicles coming to the Chhamaria Anchalik College campus parks at a distance from the college buildings, which does not create so much of noise pollution to the college environment. The College also runs the Generator during power cut and the sound creates by it is tolerable and not hampering to the surrounding environment. It is observed that acoustication is not done on DG Set for noise pollution reduction. Overall the campus is almost free from noise pollution since the College is far away from the national highway or town.



AIR POLLUTION:

Air pollution is one of the biggest threats for the environment and affects everyone: humans, animals, crops, cities, colleges, universities, forests, aquatic ecosystems etc. Air pollution refers to the release of pollutants into the air—pollutants which are detrimental to human health and the planet as a whole.

It has been observed that number of vehicles belong to faculties, non teaching staff and visitors comes to the college campus and these vehicles exhausts gases, running Generator during power cut may affect the environment of the college. Because the exhausted gases are not monitored, tested and analyzed to know the pollution load. Though the college involved in the activities for the conservation of environment but the audit team could not find any display board.

The class rooms, library and offices have required number of doors, windows and ventilation for proper aeration. The buildings are designed in such a way that the class rooms, library and office rooms receive ample of light.



A view of class room



A view of Library



A view of College Verandah



Principal's Chamber

RECOMMENDATIONS:

1. The College should establish a horticultural as well as medicinal garden in the campus.
2. The college can take initiative for more plantations of economically important timber plants.
3. Two to three cold drinking water machines should install in the campus for students.
4. The boundary wall of the campus is required.
5. More cleanness is required in both the ponds to main the proper aquatic ecosystem.
6. The vehicles should be parked in proper parking area.
7. For energy savings, the entire college should have LED bulb and fix the small size display board in every class rooms mentioning switch off the fan and light when there is no class.
8. To keep the dry waste and wet wastes a proper concrete chamber should construct.
9. It is necessary to organize more environmental awareness program among the students.
10. Bio-waste: Composting system to be adopted.
11. Proper drainage system for sewage water is very much important.
12. More environmental awareness program should organize.