

GREEN AUDIT REPORT, 2022-23

BINANDI CHANDRA MEDHI COLLEGE, RAMDIA

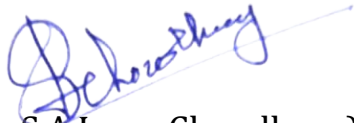


P.O: RAMDIA, DIST: KAMRUP, ASSAM, PIN: 781102

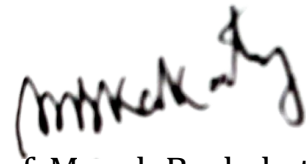
CERTIFICATE

This is to certify that the Green Audit Team of Dimoria College has prepared this report on the basis of Primary data collected by visiting different areas of the college and secondary data collected from different stake holders of the college for the entire process. The team visited the College and taken many photographs of the sites and interacted with the Principal, IQAC coordinator and staff of the College. The report has been compiled by taking all reasonable care and based on information gathered.

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



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A BRIEF HISTORY OF THE COLLEGE:

Binandi Ch. Medhi College, Ramdia (formerly known as Ramdia College) situated at Ramdia, an institution for higher education was established on August 13, 1992. The College is located in the western part of Sri Sri Hayagriba Madhab Dewalaya, and Poa Mecca, Hajo of Assam, which is about 30 K.M from Gauhati University. The College is located at Majorkuri village in Ramdia Mouza under Hajo revenue circle of Kamrup District, Assam

A group of dedicated persons covering the greater area of Ramdia, Bangalpara, Tokradia, Khetrihardia, Barhardia, Sobancha, Dampur etc. with their relentless and untiring effort has established this institution to provide quality higher education. Later on, the college was renamed as Binandi Chandra Medhi College, Ramdia in the name of the donor's Dr. jyoti Prasad Medhi's father as a gesture of gratitude.

Originally, the college started in "Ramdia Puthibharal Aru Samuhik Sanskritik Kendra" from 13/08/92. The college also obtained permission for concurrence on 29-12-1999 and obtained the Govt. concurrence up to part II level on 27-09-2004 and provincialised in 2013, according to the Assam Govt's Venture Institution provincialisation Act 2011. The college got permanent affiliation from G.U. on 18/12/09 and registered under Society Act XXI of 1860 on 12/03/2012. The College is included under 2 (f) And 12 (B) of UGC Act. 1956.

Till today the college gets financial support from No.1 Ramdia samabai samiti, Public donation, Theatrical performance, lottery and the financial assistance received from the Govt of Assam.

DEPARTMENTS, FACULTY MEMBERS AND NON TEACHING STAFFS:

There are total eight departments in the College which offers both H.S level and undergraduate courses. The names of the departments of the College are:

A) Assamese

b) Arabic

c) Economics

d) Education

e) English

f) History

g) Mathematics

h) Political Science

The College offers **Honours Courses in B.A** in the following subjects:

Assamese, Economics, Education, English, Political Science

Besides these, the college runs **Generic Elective subjects like-** Elective Assamese, Economics, Education, Political Science, Arabic, History and Mathematics.

There are total nineteen numbers of faculty members in the college to teach the above mentioned subjects. Besides Principal, there are total twelve numbers of office staff including Librarian.

WHAT IS GREEN AUDIT?

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. Green Audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of the inhabitants and the environment. The main aim of conducting Green Audit in a particular institute or College is not only to upgrade the environment condition of inside the campus of the institute but also to the surrounding environment of that organization. It is carried out by taking different parameters which includes: water Management, Waste Management, Energy management, Biodiversity etc. and the analysis of these parameters help to make the institute environment friendly.

OBJECTIVES OF GREEN AUDIT:

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of.
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost
- To suggest the best protocols for adding to sustainable development.
- To assess environmental performance.

- To promote environmental awareness.

BENEFITS OF GREEN AUDIT IN THE COLLEGE:

The Audit helps the universities or Colleges to take necessary steps or plan and polices and implements them for the campus.

The Audit assists in self assessment and the decision making process.

The Audit also develops environmental awareness amongst the stakeholders.

The Audit also helps to implement sustainable development wit efficient resource management.

It also reduces the cost in resource optimization.

ENVIRONMENT POLICY OF THE COLLEGE:

B.C.Medhi College, Ramdia always tries to protect and conserve the ecological system in and around the campus. The College takes different initiatives to protect its environment by organizing activities and tries to make the campus pollution free. The College works with all stakeholders and the local community to raise awareness. The College tries to continuously improve the efficient use of all resources like water, energy, papers etc. B.C.Medhi College takes its own responsibility to preserve the work carried out on the campus related to the environment.

PREPARATION OF AUDIT

The College Administration of B.C.Medhi College,Ramdia was very much interested to conduct Green Audit and keen in taking up the recommendations suggested by Audit Team. In consideration to this, the Principal of the College approached the Green Audit Team of Dimoria College which offering services of Green Audit of the institutions. As per request of the Principal of B.C.Medhi College, the Green Audit Team of Dimoria College agreed to conduct the audit. After this ,the Audit team visited the College campus and decided to set up different criteria, and prepared number of questionnaire that are required to prepare audit.

METHODOLOGY:

The purpose of the green audit of B.C.Medhi College,Ramdia is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The Green Audit team of Dimoria College visited the B.C.Medhi College, Ramdia on 27th of March; 2023.The team first met the Principal and IQAC coordinator to get a preliminary idea of the college. The team visited the different sites of the college to determine the parameters. The methods include the following parameters: Biodiversity of the campus, Water Management, waste Management, Energy Management, Air and Sound pollution etc. To fulfill this methodology ,a detailed questionnaire for each mentioned criteria was prepared based on physical inspection of the Campus, collection of data from different stakeholders, taking photographs of different

locations, photograph of flora and fauna of the campus and then observation and review of the documentation and data analysis.

The Green Audit team decided to take up the following criteria for preparation of green audit. The main criteria are as follows:

1. Biodiversity of the campus

(a) Flora of the campus

(b) Fauna of the campus

2. Water Management

3. Energy Management

4. Waste Management

5. Air Pollution

6. Noise Pollution

BIODIVERSITY OF THE CAMPUS:

B.C.Medhi College is situated in a rural area of Kamrup District of Assam where farming and agriculture are being practiced in and around the campus. The College is trying to maintain the campus biodiversity by planting different varieties of plants in and around the campus and they are also trying to imbibe the local practices and culture in preserving local biodiversity within the campus. The College campus biodiversity includes different species of plants animal and aquatic ecosystems. The campus has different species of trees in and around the campus and a small pond on backside of the college where contains different varieties of local as well as exotic

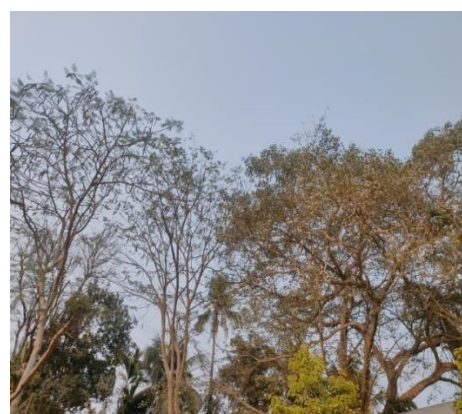
species of fishes, crabs, frogs, snakes and other aquatic animals and planktons. Plantation improves aesthetics and helps as a buffer in reducing noise level, maintaining temperature of the area. Thus the College authority is planning to grow different varieties of fruit bearing trees that may attract variety of insects, birds and thus increasing the biodiversity.

FLORA OF THE CAMPUS:

Sl.No.	Local Name	Scientific Name
1	Ahaot	<i>Ficus religiosa</i>
2	Ajar	<i>Lagerstroemia speciosa</i>
3	Radhachura	<i>Caesalpinia pulcherrima</i>
4	Krishnasura	<i>Delonix regia</i>
5	Debdaru	<i>Polyalthia longifolia</i>
6	Arjun	<i>Terminalia arjuna</i>
7	Dambaru	<i>Gardenia latifolia</i>
8	Pine	<i>Pinus roxburghii</i>
9	Bakul	<i>Mimusops elengi</i>
10	Neem	<i>Azadirachta indica</i>
11	Mohaneem	<i>Melia azedarach</i>
12	Mango	<i>Mangifera indica</i>
13	Jamu	<i>Syzgium cumini</i>
14	Kothal	<i>Artocarpus heterophyllus</i>
15	Narikol	<i>Cocos nucifera</i>
16	Tamul	<i>Areca catechu</i>
17	Silikha	<i>Terminalia chebula</i>
18	Aamlokhi	<i>Phyllanthus emblica</i>
19	Bogori	<i>Zizyphus mauritiana</i>
20	Jolphai	<i>Elaeocarpus serratus</i>
21	Kordoi	<i>Averrhoa carambola</i>
22	Modhuri	<i>Psidium guajava</i>
23	Pati Bet	<i>Schumannianthus dichotomus</i>
24	Simalu	<i>Bombax ceiba</i>

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25	Karabi	<i>Nerium indicum</i>
26	Joba	<i>Hibiscus rosa sinensis</i>
27	Sewali	<i>Nyctanthus arbor-tristis</i>
28	Kodom	<i>Hymenodictyon excelsum</i>
29	Baah	<i>Bambusa nutans</i>
30	Norohinga	<i>Murraya koenigii</i>
31	Bhedailota	<i>Hedyotis scandens</i>
32	Togor	<i>Tabernaemontana coronarea</i>





FAUNA OF THE CAMPUS: (Birds & Other animals)

Sl.No.	Local Name	Scientific Name
1	Panikawori	<i>Microcarbo niger</i>
2	Boga Bogoli	<i>Bubulcus ibis</i>
3	Konamuchari	<i>Ardeola grayii</i>
4	Siloni	<i>Milvus migrans</i>
5	Kopau	<i>Spilopelia chinensis</i>
6	Ghonchirika	<i>Passer domesticus</i>
7	Baduli	<i>Pteropus medius</i>
8	Pecha	<i>Tyto alba</i>
9	Paro	<i>Columba livia</i>

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10	Bhatou	<i>Psittaciformes spp.</i>
11	Hudu	<i>Bubo bubo</i>
12	Salika	<i>Acridotheres tristis</i>
13	Masruka	<i>Halcyon smyrnesis</i>
14	Dauk	<i>Amaurornis phoenicurus</i>
15	Kuli	<i>Cuculus micropterus</i>
16	Tuni	<i>Orthotomus sutorius</i>
17	Deohah	<i>Asaarconis scutulata</i>
18	Deuraz hah	<i>Anser anser</i>
19	Gahori	<i>Sus domesticus</i>
20	Neul	<i>Herpestes edwardsii</i>
21	Mati pheti	<i>Ramphotyphlops braminus</i>
22	Gowala saap	<i>Bungarus fasciatus</i>
23	Bandor	<i>Macaca mulatta</i>
24	Dhora saap	<i>Xenochrophis piscator</i>
25	Gum saap	<i>Ptyas korros</i>





Aquatic animals found in College Pond:

1	Puthi	<i>Systemus sarana</i>
2	Rohu	<i>Labeo rohita</i>
3	Borali	<i>Wallago attu</i>
4	Mua	<i>Amblypharyngodon mola</i>
5	Goroi	<i>Channa punctata</i>
6	Kuchia	<i>Anguillidae</i>
7	Bhangan	<i>Labeo bata</i>
8	Magoor	<i>Clarias batrachus</i>
9	Bhakua	<i>Labeo catla</i>
10	Chitol	<i>Chitala chitala</i>
11	Common carp	<i>Cyprinus carpio</i>
12	Kuri	<i>Labeo gonius</i>
13	Grasscarp	<i>Ctenopharyngodon idella</i>

14	Kawoi	<i>Anabas testudineus</i>
15	Kandholi	<i>Notopterus notopterus</i>
16	Kholihona	<i>Trichogaster fasciata</i>
17	Gadgadi	<i>Nandus nandus</i>
18	Singi	<i>Heteropneustes fossilis</i>
19	Singora	<i>Mystus vittatus</i>
20	Aari	<i>Sperata seenghala</i>
21	Borolia	<i>Aspidoparia morar</i>
22	Dorikona	<i>Esomus danricus</i>
23	Chonda	<i>Chanda nama</i>
24	Tura	<i>Macrornathus aral</i>
25	Bami	<i>Mastacembelus armatus</i>
26	Chengeli	<i>Channa orientalis</i>



RECOMMENDATIONS:

1. It is advisable to grow for more plantation specially fruit bearing plants inside the college campus.
2. The plant should be properly identified and scientific names of each plant are desirable with local names.
3. More awareness program related to plantation is necessary.
4. The backside pond of the College needs cleaning and proper maintenance is required for preservation of aquatic life.
5. The College should establish a horticultural as well as medicinal garden in the campus.

WATER MANAGEMENT:

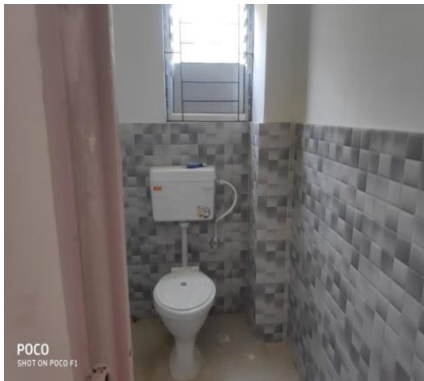
All plants and animals need water to survive. There can be no life on earth without water. So water is a basic necessity. There's a scarcity of water. To avoid this scarcity, water is saved and managed efficiently. Water management is the activity of planning, developing, distributing and managing the optimum use of water resources. Therefore, the audit team visited the different water sources of the college campus and noticed that for consumption of water main source is tube well water. The College also has one bore well in the campus which is sometime used for water withdrawal. The water after coming out of the tube well as well as bore well stored in the water tank which moves into different buildings. The college authority uses the aqua guard for drinking purposes. The water to irrigate the plants and other construction purposes usually collected from ponds but it has been noticed that sometimes tube well water is also used in construction work. The ponds of the College require proper maintenance as well as cleanness for aquatic animals. The 2870 to 3000 liters (approximately) of water is used per day by the college for different purposes. 150 L of water per day is lost through the leaking of pipes and through tube well. The water consumption in the summer season is significantly high compared to other months. The College authority can install rain water harvesting system to reduce the tube well as well as boring water. The College has two water tanks that are installed in two different blocks and for different purposes. The capacity one of them is 8000litres and another one is 15000litres.

Details of tube well and boring water consumption per day:

Type of activity	Water uses/ person / day/Avg(L)	No.of persons using water	Total water consumptions per day (L)
Drinking	1.0	570	570.00
Washing hands and face	2.0	350	700.00
Toilet Flash	10	80	800.00
Cooking in canteen(Avg)	200		200.00
Washing utensils(Avg)	300		300.00
Water losses during uses(Avg)	300		300.00
Total Consumption			2870.00



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RECOMMENDATIONS:

1. It is advisable to use the water judiciously and reduce the loss of water.
2. Rain water harvesting system is required in the college campus.

3. The backside pond of the College requires proper maintenance so that the water for construction and other activities of the college can be used.
4. 'Save Water' posters to be affixed in the classrooms, hand washing areas.
5. Repair water leaks and leaky toilets.

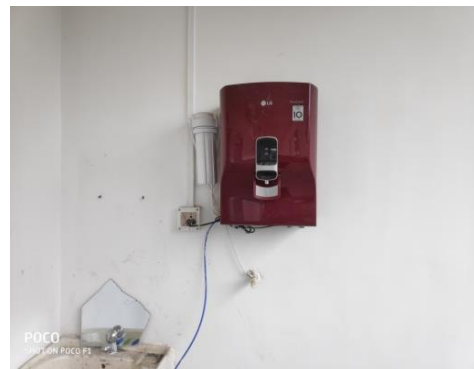
ENERGY MANAGEMENT:

Our world is already fraught with rising energy demands. But favorably, employing an energy management system in a building – that aims to make use of the energy sources efficiently. Energy management is the proactive, organized, and systematic coordination of procurement, conversion, distribution, and use of energy to meet the requirements, taking into account environmental and economic objectives. Therefore the main objectives of energy management are resource conservation, environment protection and cost savings. It has been observed that common electricity meter is provided for the entire college. The electricity bill for every month is not fixed and it varies time to time. But as per information received from office the latest college electricity bill (month of March, 23) is around Rs. 5000/-. But the consumption of electricity increases in summer seasons and electricity bill also increases. Currently the College is using both tube light as well as LED Bulb. Besides these, the College is also using gas (One to two Cylinders per month) for preparing food items in the canteen. The electricity consumption in the college campus is as follows:

Sl No.	Instruments used	Total numbers
1	Computer	15
2	Printer	03
3	Xerox machine	04
4	Ceiling fan	90
5	Tube lights	45
6	Aqua guard	02
7	Stand fan	02
8	Exhaust	04
9	Inverter	04
10	Water pump	02
11	Light used in the night (Tube + Bulb)	05
12	LED	40

It has been observed that the students, teachers as well as office staff switch of the lights, fans, computers, Xerox machine etc. when not in use. The College authority has taken initiative to replace the incandescent bulbs and tube lights with LED bulbs. The College also tries to run the water pump one time daily to minimize the consumption of electricity. The solar light present in front of the gate is dysfunctional.





RECOMMENDATIONS:

1. It is advisable to use solar light in the campus for night instead of tube lights or LED bulb to reduce the electricity cost.
2. It is advisable to put stickers on the switch board of the classroom displaying the switch off the light and fan when there is no class.
3. Gradual replacement of existing non LED based lights to LEDs can further bring down costs for lighting.

WASTE MANAGEMENT:

Waste management is important as it saves the environment from the toxic effects of inorganic and biodegradable element present in waste. Mismanagement of waste can cause water contamination, soil erosion and air contamination. Waste management refers to the activities conducted to manage waste from its collection to eventual disposal. So, waste management methods seek to reduce or eliminate the negative impacts that waste has on society. Waste management is an important element of environmental protection. Its purpose is to provide hygienic, efficient and economic solid waste storage, collection, transportation and treatment or disposal of waste without polluting the atmosphere, soil or water system. It is important to segregate the biodegradable wastes from non-biodegradable ones.

The waste water of the college is mainly released from washing, toilets, kitchen of the college. There are 7-8 bathrooms or washrooms are available in the college. Currently, waste water generated from canteen, washroom and other sources are deposited in the backside of the College which is connected to the roadside drainage system. It has been noticed that the College is maintaining drainage system to some extent inside the campus to release rain water stored in the campus.

The solid wastes generated from the college campus includes mainly, paper waste, kitchen waste, dry leaves of the plants. There are number of Plastic containers used as waste bins are provided in the office and many other locations of the college campus to collect the paper and other solid wastes. Being a College with non-residential facility, the quantity of wet (food wastes) waste generated in the premises is minimum. The organic kitchen wastes

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are deposited in the well made by NSS volunteers of the college which are sometimes used as fertilizer. The College being an academic institution, paper waste is one of the main solid wastes. It has been known that the college authority has taken steps to minimize the paper usage and also tries to reuse the one side used printed paper for internal communication.



RECOMMENDATIONS:

1. To keep the dry waste and wet wastes a proper concrete chamber should construct.
2. It is required to proper drainage system in the campus to release the waste water'

1. It is advisable to use environment friendly bamboo waste bean inside the campus instead of plastic beans.
2. Bio-waste: Composting system to be adopted.

AIR POLLUTION:

Air pollution is the contamination of air due to the presence of substances in the atmosphere that are harmful to the health of humans and other living beings, or cause damage to the climate or to materials. Air pollution occurs when dangerous particles, gases, and chemicals are released into the air. The rate of air pollution increases every day in the atmosphere. The combustion of fossil fuels, burning of biomass such as firewood, agricultural wastes and animal wastes are the principal source of air pollution. B.C.Medhi College, Ramdia is situated in rural area, and the College campus is almost free from air pollution. The surroundings of the college are covered mainly by paddy field, trees and marshy areas. The transportation of vehicles inside the college is minimum. Around 05 four wheelers and 20 two wheelers are coming to the college every day. It has been noticed that the vehicles are usually parked inside the college campus and that may release smokes and carbon emission. This may not be sufficient to pollute the air but it is advisable to park the vehicle outside or backside of the college campus that is little bit away from the main college buildings. The authority is planning to make the parking area in one corner of the college so that it will not hamper the environment of the campus. The College burns the dry leaves and some other wastes inside the campus once or twice in a month which may pollute air of the campus.



RECOMMENDATIONS:

1. The vehicles should be parked in proper parking area to reduce the air pollution.
2. It is advisable to burn the waste material like dry leaves little away from campus.
3. Encourage the use of bicycles and public transport system by the community, particularly the student community.

SOUND POLLUTION:

Noise pollution, or sound pollution, is the propagation of noise or sound with ranging impacts on the activity of human or animal life, most of which are harmful to a degree. The source of outdoor noise worldwide is mainly caused by machines, transport, and propagation systems. . It has been noticed that the very less number of vehicles coming to the college every day and these vehicles usually comes in the morning and left the college in the afternoon. So, there is less chance of making any sound pollution during college hours. There is no Disel Generator and any other electrical appliances to produce sounds. There is no chance of sound pollution from the vehicles plying in the road as the college is situated in the rural area. Though the College is situated beside the main road but the vehicles plying in the road is very less in number.



RECOMMENDATIONS:

- 1.** The vehicles should be parked in proper parking area to reduce the sound pollution.
- 2.** Encourage the use of bicycles and public transport system by the community, particularly the student community.