GREEN AUDIT REPORT, 2023

Berhampore College

Berhampore, Murshidabad, West Bengal

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भारतीय वनस्पति सर्वेक्षण
BOTANICAL SURVEY OF INDIA

Botanical Survey of India, Kolkata

(Ministry of Environment, Forest and Climate Change, Govt. of India)

LiFE Lifestyle For Environment

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SUMMARY

The Green audit, also referred to an 'environmental audit' is the process of systematic identification, quantification, recording, reporting and analysis of components related to the environmental and eco-friendly approached of any establishments. Its main objective is to analyse and promote eco-friendly practices in the campuses with an aim to conserve biodiversity.

The rapid urbanization and economic and industrial development at local, regional, national and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutions which will lead for sustainable development. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory (Criteria # 7) that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures. Green Audit or Environment Audit focuses on the Carbon Footprint reduction measures being implemented by the College Management.

In accordance with the Green Campus Evaluation Plan, as suggested by the Internal Quality Assessment Cell (IQAC) of the college, Berhampore College, Berhampore, Murshidabad, West Bengal planned for conducting a green audit of the college during March, 2023 for the academic year 2022-23. Botanical Survey of India, as a pioneer institution in the field of Plant Taxonomy and Floristic Survey, under the Ministry of Environment, Forest and Climate Change, Government of India, conducted a field survey and collected field data on floristic diversity of the campus along with other aspects as prescribed for the Green Audit. During physical verification, it was observed although, this college is a degree level college for imparting quality education in Arts and Commerce streams only, and presently does not have infrastructure for the science streams, particularly for the Biological sciences (Botany and Zoology), however the Internal Quality Assessment Cell (IQAC) of the college has maintained and promoted many eco-friendly initiative in its campus in well organised manner, in spite of very limited resources. Therefore, if resources available, the college may be promoted for providing courses in Biological sciences also which will help the college to implement the environmental and eco-friendly approached more effectively. The information and

baseline data provided by the Internal Quality Assessment Cell (IQAC) of the college were reviewed and noted as background of this study.

The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology included: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Plantation, Waste Management, Energy efficient measures and mapping of Biodiversity. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment.

The main findings of the green audit of this college show that, in general, all the departments and students are aware about the need for eco-friendly measures and environmental protection at a general level. It was also observed that a number of best practices such as maintaining botanic garden, planting trees in the campus, water conservation and proper maintenance of waste etc. are followed in the campus. However, on detailed review, it was observed that, as the college resources such as area, manpower, buildings etc. are limited, many of the practices followed in the college are still in nascent stage and needs further nurture.

The dedication of the management and the college authority, particularly the Internal Quality Assessment Cell (IQAC) of the college is well reflected by observing the maintenance of its eco friendly buildings and campus, and also high standards in curricular and co-curricular spheres of the institution, with its limited resources. It offers an ideal vision of education and responsive to the challenges of an emerging India in a globalized world, by bringing in a positive difference in the socio economic-educational status of the state and the nation.

INTRODUCTION

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyse environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO2 from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

GENERAL PROFILE OF THE COLLEGE

BERHAMPORE COLLEGE (so re-named in 1975) was established (2nd August, 1963) initially as Raja Krishnath College of Commerce to cater Commerce Education. In 1971, realising the increasing demands of diversified education, the then college introduced Humanities with necessary approval from the University of Calcutta and the Government of West Bengal. At first only pass subjects of Humanities were approved. From then on Berhampore College started functioning as a full fledged college for Arts and Commerce. But the College would not have been set up at all had there been no concerted efforts of the renowned Educationists like Dr. Ram Chandra Pal (the then Principal of Krishnath College), Late Promatha Nath Sengupta and other eminent personalities of Berhampore. Initially classes were held in the premises of Krishnath College in the evening. But thanks to all out efforts of all, the college was shifted to its present site in 1970. Eventually, Honours in Bengali, English, Philosophy, History, Political Science, Economics, Mathematics Geography and Sanskrit were approved by the affiliating University. Film Studies (self financing) and Statistics (self financing) as Pass subjects are being taught at the Degree level. At present nearly 5,000 students are being provided with the scope for higher education at this Seat of Learning. The college authority always keeps a vigilant look into the all round growth and development of its students. To realise its dream, the college authority has setup a multi-gym with financial assistance from the Ministry of Youth Affairs, Govt. of India. Moreover the N.S.S. Wing of the college is engaged in various co-curricular activities which instil in the students a sense of responsibility and feeling for others. Along with these ,the college authority in collaboration with the students' union, organises debates , seminars, symposia, sports and other cultural functions for the all round development of the students. The NAAC peer team had highly appreciated the over-all performances of the college and accredited the college with the status “B” in 2007.

Vision

To evolve skilled and value based resource professional, to provide opportunities to the students without any discrimination, to find space for the exponential growth of personality and character and to face the challenges of tomorrow successfully through quality education.

Mission

In the quest towards achievements of its vision, the Berhampore College is committed to provide higher education to the students in its vicinity giving equal opportunities to all; endowing the student community with academic, social, scientific and spiritual values and enabling them to have an insight into the spirit of transparent governance and public. We are well aware of our responsibility towards our students and do our very best to provide a friendly and growth-oriented ambiance for them. Our sincerest efforts are oriented towards ensuring excellent standards that would secure them leadership roles in tomorrow's challenging world. The vision behind the establishment of the college is to spread the light of knowledge and wisdom to kindle the ardour of faith. The faculty does justice to these goals by shaping a new generation of men and women who are:

1. Academically accomplished
2. Emotionally balanced
3. Morally upright
4. Socially responsible
5. Ecologically sensitive
6. Professionally dedicated.

INTERNAL QUALITY ASSESSMENT CELL (IQAC)

The INTERNAL QUALITY ASSESSMENT CELL (IQAC) of the college is one of the important part of the college management and helps in maintenance of the quality culture in the campus. As a regular activity, the IQAC of the college has felt the necessity of introducing the concept of Green Audit in the campus with the following objectives:

1. To frame and proclaim a Green Policy of the college.
2. To build awareness and consciousness amongst the stakeholders about the several concerns and threats of the environment within the college and around.
3. To set certain 'green standards' which the college will ever try to compliances.
4. To get the opinion of the experts for promoting eco friendly activities by a certified third-party auditor.

GREEN AUDITING

The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are main three pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO2 emission, energy and water use, while creating atmosphere where students can learn and be healthy.

OBJECTIVES:

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are:

- To map the Geographical Location of the college
- To document the floral and faunal diversity of the college
- To record the meteorological parameter of Berhampore where college is situated
- To document the ambient environmental condition of weather, air, water and noise of the college
- To document the waste disposal system
- To estimate the Energy requirements of the college.

METHODOLOGY:

The purpose of the green audit of Berhampore College is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.

FINDINGS ON BIODIVERSITY OF THE CAMPUS

Berhampore College, which was established in the year 1963, has an eco-friendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Its land use is such that about 42% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.

The important findings of the present field survey of this college campus show that though the area of the campus is very limited, however it supports significant diversity of flora and fauna. The campus has 94 species of plants (Table 1), 22 species of Birds (Table 2), 20 species of Butterflies (Table 3). Most of the plants are native except few exotic ornamental plants. Many of the plant species are economically important with medicinal values. However, presently, there is no biology department (Botany / Zoology), therefore there is no any name plates for the plants and also the plants available in the gardens are not arranged / planted systematically, which need to be improved. Considering the importance of biodiversity, proper maintenance and cataloguing of biodiversity of the campus will be of significant use for the students and faculty members. The important finding of BSI team is given in tables. Further, the team has also suggested few plants for inclusion in the campus gardens (table 4).

Table 1. Plant species recorded at Berhampore college campus

Sr. No.	Family	Scientific Name	Bengali Name	Common Name
1	Acanthaceae	*Andrographis paniculata* (Burm.f.) Nees	কালমেঘ	Green chirayta
2	Acanthaceae	*Barleria cristata* L.	ঝিন্টি	
3	Acanthaceae	*Barleria lupulina* Lindl.	কণ্ট বিসল্যকরনী	
4	Anacardiaceae	*Mangifera indica* L.	আম	Mango
5	Annonaceae	*Monoon longifolium* (Sonn.) B.Xue & R.M.K.Saunders	রেইনট্রী ফুল	Monoon Longifolium
6	Apocynaceae	*Tabernaemontana divaricata* (L.) R.Br. ex Roem. & Schult.		Crape saemine
7	Apocynaceae	*Vallaris solanacea* (Roth ex Roem. & Schult.) Kuntze	রামসর	

8	Apocynaceae	*Cascabela thevetia* (L.) Lippold	কলকে ফুল	Thevetia Peruviana
9	Araceae	*Caladium bicolor* (Aiton) Vent.		Caladium (Heart of jesus)
10	Arecaceae	*Dypsis lutescens* (H.Wendl.) Beentje & J.Dransf.		Arica Pum tree
11	Arecaceae	*Rhapis excelsa* (Thunb.) Henry		
12	Asparagaceae	*Cordyline fruticosa* (L.) A.Chev.		Cordyline Plant
13	Asparagaceae	*Dracaena angustifolia* (Medik.) Roxb.		Ti
14	Asteraceae	*Artemisia vulgaris* L.		Mugwort
15	Asteraceae	*Tagetes erecta* L.	গাঁদা ফুল	Marry Gold
16	Balsaminaceae	*Impatiens balsamina* L.		Balsam
17	Bignoniaceae	*Campsis radicans* L.		Trumpet Vine
18	Caesalpiniaceae	*Bauhinia acuminata* L.		
19	Caesalpiniaceae	*Peltophorum pterocarpum* (DC.) Backer ex K.Heyne	কনকচূড়া	
20	Caesalpiniaceae	*Tamarindus indica* L.	আম্লীকা	Tamarnd Plants
21	Combretaceae	*Combretum indicum* (L.) DeFilipps	মধুমংজরী	Rangoon Creeper
22	Combretaceae	*Terminalia arjuna* (Roxb. ex DC.) Wight & Arn.		Arjun
23	Commelinaceae	*Tradescantia spathacea* Sw.		Moses-in-the-cradle
24	Commelinaceae	*Tradescantia zebrina* Bosse		Wondering-Jew
25	Crassulaceae	*Kalanchoe blossfeldiana* Poelln.		Florist Kalanchoe
26	Cupressaceae	*Thuja occidentalis* L.		Oriental arborvitae
27	Cyperaceae	*Bulbostylis barbata* (Rottb.) C.B.Clarke		
28	Cyperaceae	*Cyperus brevifolius* (Rottb.) Hassk.		
29	Cyperaceae	*Cyperus compressus* L.		
30	Cyperaceae	*Cyperus haspan* L.		
31	Cyperaceae	*Fimbristylis dichotoma* (L.) Vahl		
32	Dipterocarpaceae	*Shorea robusta* Gaertn.	সাল	Shala Tree
33	Euphorbiaceae	*Codiaeum variegatum* (L.) Rumph. ex A.Juss.		Garden Croton

34	Euphorbiaceae	*Codiaeum variegatum* (L.) Rumph. ex A.Juss.		Lemon Croton
35	Euphorbiaceae	*Euphorbia milii* Des Moul.		
36	Euphorbiaceae	*Jatropha curcas* L.		Barbados nut
37	Euphorbiaceae	*Jatropha integerrima* Jacq.		Peregrina
38	Euphorbiaceae	*Jatropha podagrica* Hook.		Buddha Belly Plant
39	Euphorbiaceae	*Acalypha hispida* Burm.f.		
40	Lamiaceae	*Mentha* × *piperita* L.		
41	Lamiaceae	*Mentha spicata* L.		
42	Lamiaceae	*Ocimum kilimandscharicum* Gürke		
43	Lamiaceae	*Ocimum tenuiflorum* L.	তুলসী	
44	Lamicaeae	*Salvia splendens* Sellow ex Nees		
45	Lecythidaceae	*Couroupita guianensis* Aubl.	নাগলিঙ্গম ফুল	
46	Lythraceae	*Cuphea hyssopifolia* Kunth		False Heather
47	Magnoliaceae	*Magnolia champaca* (L.) Baill. ex Pierre	চম্পা	Joy Perfume Tree
48	Malphighiaceae	*Hiptage benghalensis* (L.) Kurz	মাধবীলতা	Rangoon Creeper
49	Malvaceae	*Hibiscus rosa-sinensis* L.	জবা	Brided Hibiscus
50	Meliaceae	*Aglaia odorata* Lour.		Aglaia Odorata
51	Meliaceae	*Azadirachta indica* A.Juss.	নিম	Neeon Tree
52	Meliaceae	*Melia azedarach* L.	বাকরজম	Melie azedarach
53	Menispermaceae	*Tinospora cordifolia* (Willd.) Miers	গুলঞ্চ	Heart-leaved moonseed
54	Mimosaceae	*Acacia auriculiformis* A.Cunn. ex Benth.		Northern Black Wattle
55	Mimosaceae	*Albizia lebbeck* (L.) Benth.		Persian Silk Trees
56	Mimosaceae	*Leucaena leucocephala* (Lam.) de Wit	সুবাবুল	River Tamarnd
57	Mimosaceae	*Samanea saman* (Jacq.) Merr.	শিরীষ	
58	Moraceae	*Ficus benghalensis* L.	বট গাছ	Banyan Tree
59	Moraceae	*Ficus religiosa L.*	অশ্বত্থ	
60	Moraceae	*Ficus rumphii* Blume	গাইয়াস্বাত	Ficus rumphii
61	Myrtaceae	*Callistemon lanceolatus* (Sm.) Sweet	বোতল ব্রাশ	

62	Myrtaceae	*Psidium guajava* L.	পেয়ারা	Guava
63	Myrtaceae	*Syzygium jambos* (L.) Alston		Water Apple
64	Myrtaceae	*Syzygium malaccense* (L.) Merr. & L.M.Perry	মালাকা জামরুল	Rose Apple
65	Nyctaginaceae	*Bougainvillea spectabilis* Willd.	বাগান বিলাশ ফুল	Bougainvillea
66	Nyctaginaceae	*Mirabilis jalapa* L.	সন্ধ্যামালতী	Sandhya Malati
67	Poaceae	*Arthraxon hispidus* (Thunb.) Makino		
68	Poaceae	*Cymbopogon citratus* (DC.) Stapf	গংধবেনা	Lemon grass
69	Poaceae	*Cynodon dactylon* (L.) Pers.	দুর্বা	
70	Poaceae	*Dactyloctenium aristatum* Link		
71	Poaceae	*Urochloa distachyos* (L.) T.Q.Nguyen		
72	Rhamnaceae	*Zizyphus mauritiana* Lam.	বদরি	Jujube Chinese date
73	Rosaceae	*Rosa chinensis*		Red Rose
74	Rosaceae	*Rosa chinensis* Jacq.	গোলাপ ফুল	White Rose
75	Rubiaceae	*Arachnothryx leucophylla* (Kunth) Planch.		Panama Rose
76	Rubiaceae	*Gardenia jasminoides* J.Ellis	গংধৰাজ	Gardenia
77	Rubiaceae	*Ixora chinensis* Lam.		Chinese Ixora
78	Rubiaceae	*Ixora coccinea* L.		Chinese Ixoro
79	Rubiaceae	*Mitragyna parvifolia* (Roxb.) Korth.	ধারাকদম্ব	Kratom
80	Rubiaceae	*Neolamarckia cadamba* (Roxb.) Bosser	কদম	Burflower Tree, Kadam
81	Rutaceae	*Aegle marmelos* (L.) Corrêa	বেল	Aegle marmelos
82	Rutaceae	*Citrus* × *limon* (L.) Osbeck	লেবুগাছ	Lemon Plants
83	Rutaceae	*Citrus limon* (L.) Burm. f	লেবু	Lemon
84	Rutaceae	*Citrus maxima* (Burm.) Merr.	বাতাবি লেবু	Pomelo Tree
85	Rutaceae	*Citrus maxima* (Burm.) Osbeck	বাতাবি লেবু	Pompelmous
86	Sapotaceae	*Mimusops elengi* L.		Sparich Cherry
87	Solanaceae	*Nicotiana plumbaginifolia* Viv		Tabacco Plant
88	Solanaceae	*Withania somnifera* (L.)	অশ্বগন্ধা	Withania

		Dunal		
89	Solanaceae	*Cestrum nocturnum* L.	হাসনুহানা	Night Blooming Jasmine
90	Strelitziaceae	*Ravenala madagascariensis* Sonn.	পান্থপাদপ	Traveler's Palm
91	Strelitziaceae	*Strelitzia reginae* Banks		Bird of Paradise
92	Verbenaceae	*Duranta repens* L.		
93	Verbenaceae	*Vitex negundo* L.	নিসিন্দা	
94	Zamiaceae	*Zamia furfuracea* L.f. ex Aiton		Cardboard Cycad

Table 2. Birds of Berhampore college campus (Orders, families, common names, scientific names).

Sr. No.	Order	Family	Common Name	Scientific Name
1	Passeriformes	Dicruridae	Black Drongo	*Dicrurus macrocercus*
2		Corvidae	House Crow	*Corvus splendens*
3			Jungle Crow	*Corvus macrorhynchos*
4			Rufous Indian Treepie	*Dendrocitta vagabunda*
5		Muscicapidae	Indian Robin	*Saxicolodies fulicatus*
6		Pycnonotidae	Red-Vented Bulbul	*Pycnonotus cafer*
7			Common Myna	*Acridotheres tristis*
8			Jungle Myna	*Acridotheres fuscus*
9		Passeridae	House Sparrow	*Passer domesticus*
10		Sylviidae	Jungle Babbler	*Turdoides striatus*
11		Oriolidae	Eurasian Golden Oriole	*Oriolus oriolus*
12			Black Hooded Oriole	*Oriolus xanthornus*
13	Ciconiiformes	Cuculidae	Asian Koel(♂♀)	*Eudynamys scolopaceus*
14	Coraciformes	Halcyonidae	White-Breasted Kingfisher	*Halcyon smyrnensis*
15	Columbiformes	Columbidae	Spotted Dove	*Streptopelia chinensis*
16	Psittaciformes	Psittacidae	Rose ringed Parakeet	*Psittacula krameri*
17			Plum-headed Parakeet	*Psittacula cyanocephala*
18	Strigiformes	Tytonidae	Barn Owl	*Tyto alba*
19		Strigidae	Spotted Owlet	*Athene brama*
20	Accipitriformes	Accipitridae	Black/Pariah Kite	*Milvus migrans*
21	Piciformes	Megalaimidae	Copper smith Barbet	*Megalamia haemacephala*
22		Picidae	Lesser Golden-back Woodpecker	*Dinopium benghalense*

Table 3. List of Butterflies found in Berhampore college campus

Sr. No.	Family	Sub-family	Species name	Common Name
1	Papilionidae	Papilioninae	*Graphium doson* (C.& R. Felder)	Common Jay
2			*Graphium agamemnon* (Linnaeus)	Tailed Jay
3			*Chilasa clytia* (Linnaeus)	Common Mime
4			*Papilio polytes* Linnaeus	Common Mormon
5			*Papilio demoleus* Linnaeus	Lime Butterfly
6			*Atrophaneura aristolochiae* (Fabricius)	Common Rose
7	Pieridae	Coliadinae	*Eurema hecabe* (Linnaeus)	Common Grass Yellow
8			*Catopsilia pomona* (Fabricius)	Common Emigrant
9			*Catopsilia pyranthe* (Linnaeus)	Mottled Emigrant
10		Pierinae	*Pareronia valeria* (Cramer)	Common Wanderer
11	Lycaenidae	Theclinae	*Rathinda amor* (Fabricius)	Monkey Puzzle
12		Polyommatinae	*Castalius rosimon* (Fabricius)	Common Pierrot
13			*Tarucus nara* (Kollar)	Rounded Pierrot
14			*Zizeeria karsandra* (Moore)	Dark Grass Blue
15			*Pseudozizeeria maha* (Kollar)	Pale Grass Blue
16			*Zizula hylax* (Fabricius)	Tiny Grass Blue
17			*Euchrysops cnejus* (Fabricius)	Gram Blue
18			*Chilades pandava* (Horsfield)	Plains Cupid
19			*Chilades lajus* (Stoll)	Lime Blue
20	Hesperiidae	Hesperiinae	*Borbo cinnara* (Wallace)	Rice Swift Rare

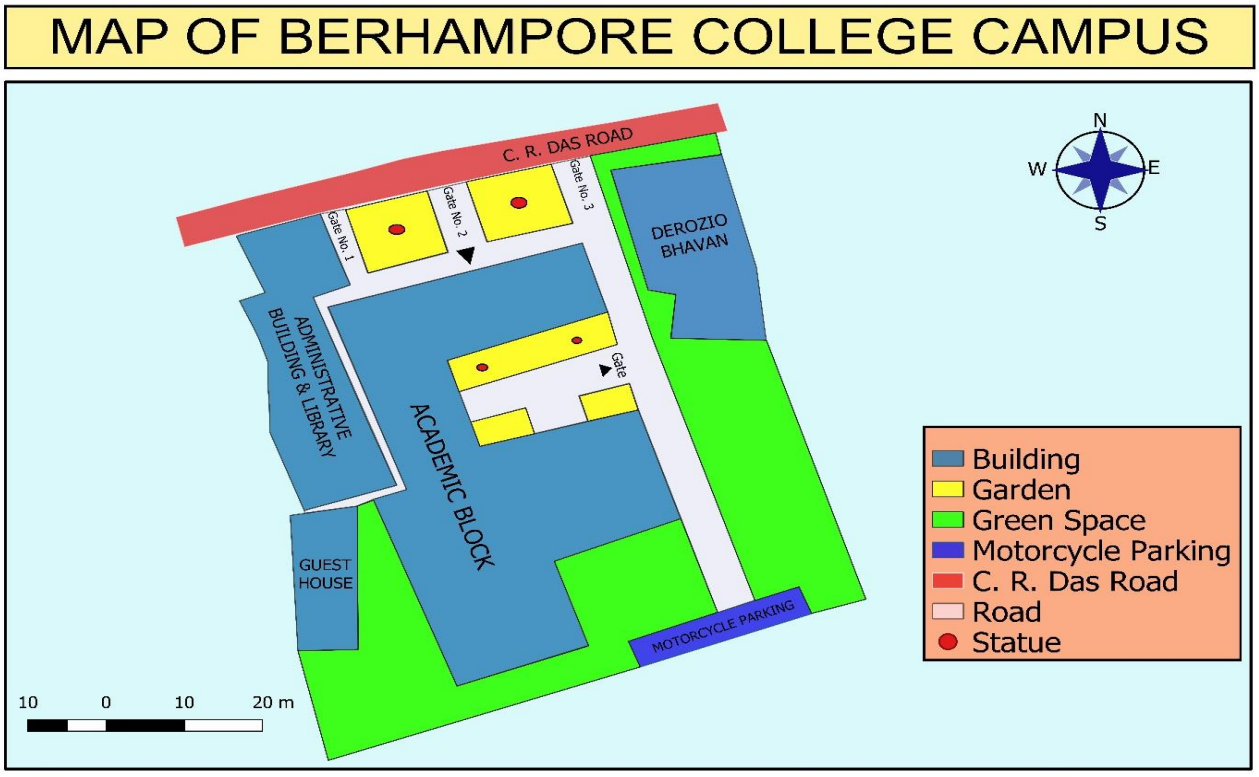
Table 4. Suggested Medicinal Plant for College Garden.

Sr. No.	Name of the medicinal plants	Uses
1	*Centella asiatica*	Diarrhoea, dysentery, healing property
2	*Rauvolfia serpentina*	Hypertension, high blood pressure.
3	*Adhatoda vasica*	Bronchial disease, cough,
4	*Holarrhena antidysentrica*	Dysentery, diarrhoea, fever, diabetes, malaria.
5	*Carcuma longa*	Liver disease, digestive disorder, atherosclerosis, female disease, cancer
6	*Vitex negundo*	Skin disease, Eczema, ringworm, liver disorder spleen enlargement.
7	*Saraca asoca*	Dysmenorrhoea, Depression, leucorrhoea
8	*Hemidesmus indicus*	Skin disease, oligospermia, anorexia, gastritis, menorrhagia
9	*Terminalia bellirica*	Throat& eye disease, indigestion, cold & cough
10	*Lawsonia inermis*	Skin disease, anti hemorrhagic, leprosy
11	*Terminalia chebula*	Laxative, digestive, purgative, healing property.
12	*Nyctanthes arbortristis*	Sciatica arthritis, fever, dry cough ringworm,
13	*Moringa oleifera*	Breast cancer, used in malnutrition, diabete
14	*Vinca rosea*	Diabetes, malaria, leucomia
15	*Clerodendrum indicun*	Allergy, asthma, fever

INFRASTRUCTURE OF THE COLLEGE

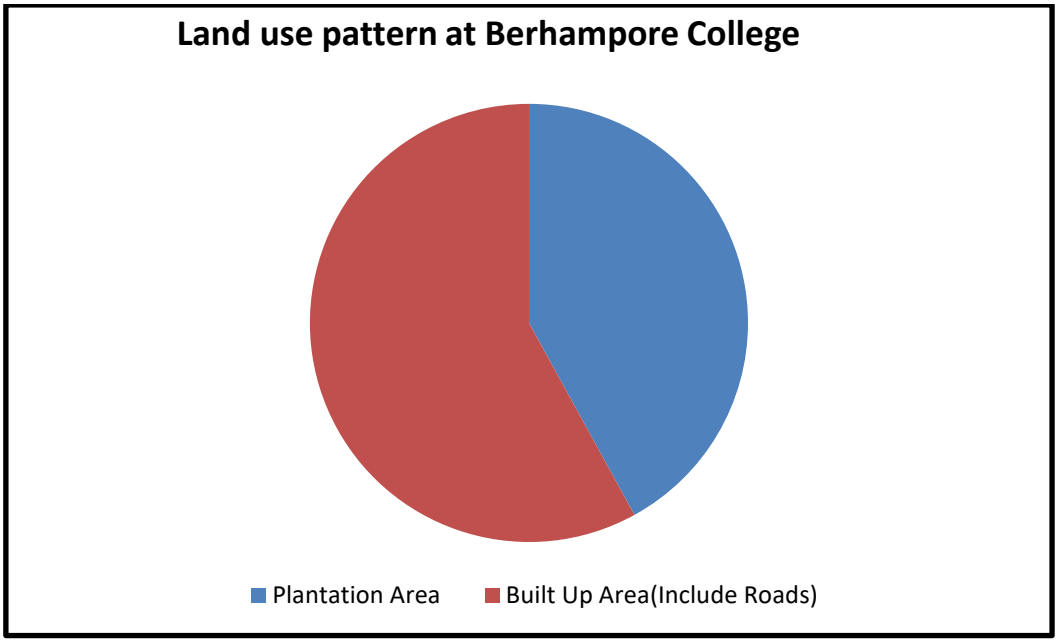
GEOGRAPHICAL LOCATION:

The college has a 5000 square feet campus in the heart of the City Berhampore. The Location of the college is in 24° 05.502´N and 088° 15.434´E coordinate. Green colour in Map is representing green area.



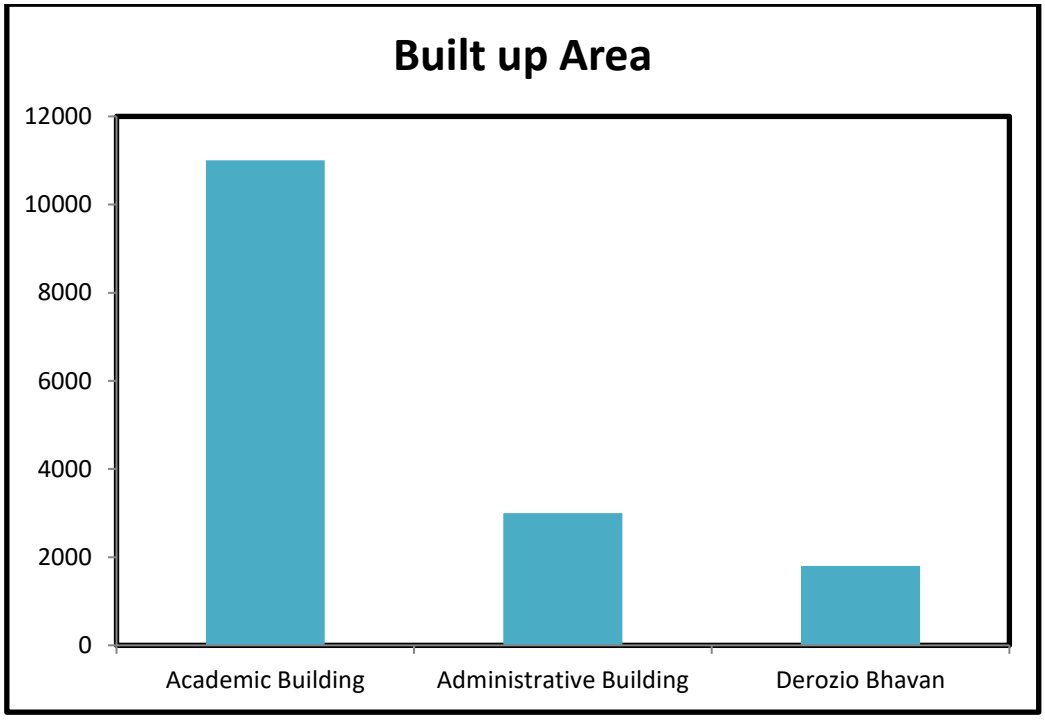
Land Use Data

Categories of Land Use	Area(m^2)
Plantation Area	2100 ft^2
Built Up Area(Include Roads)	2900 ft^2
Total Area	5000 ft^2



Area occupied by various buildings:-

SL No	Name of Building	Number of Floors	Area(m^2)
1	Academic Building	3	11000 ft^2
2	Administrative Building	4	3000 ft^2
3	Derozio Bhavan	4	1800 ft^2



WEATHER DATA OF BERHAMPORE CITY AND BERHAMPORE COLLEGE

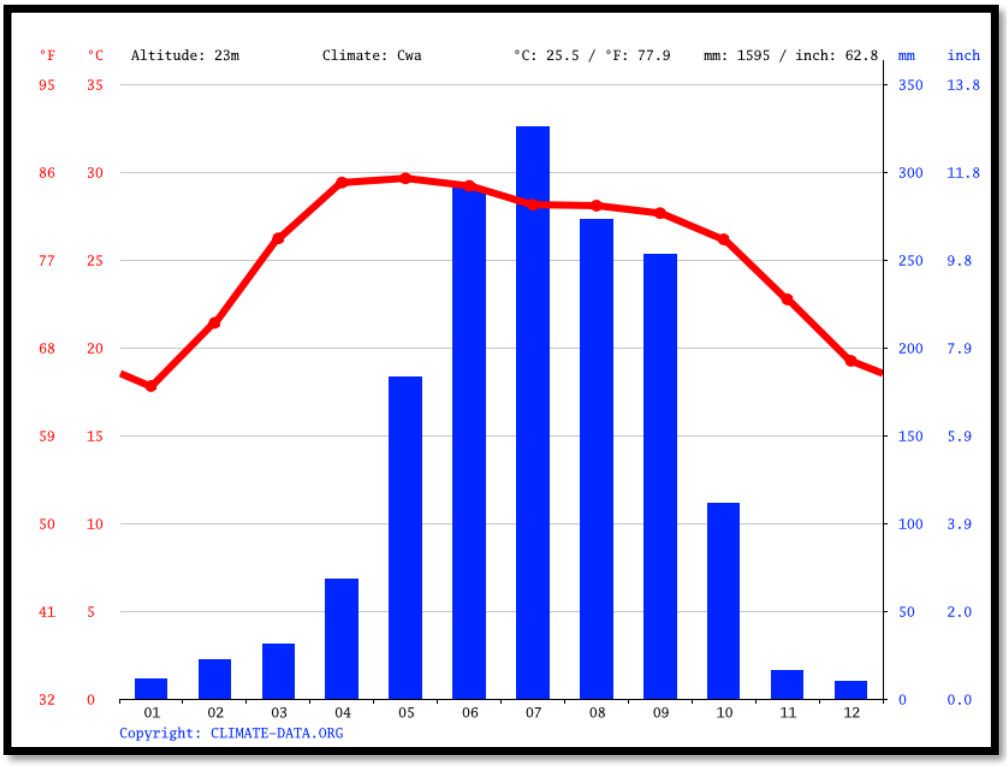
Berhampore are in the middle and the summers are that easy to define. The best time to visit is March, October, November. The month with the highest relative humidity is September (84.86 %). The month with the lowest relative humidity is March (50.29 %).The month with the highest number of rainy days is July (27.77 days). The month with the lowest number of rainy days is December (1.07 days). Berhampore's climate is classified as warm and temperate. The summers here have a good deal of rainfall, while the winters have very little. The climate here is classified as Cwa by the Köppen-Geiger system. The average annual temperature in Berhampore is 25.5 °C | 77.9 °F. The rainfall here is around 1595 mm | 62.8 inch per year.

WEATHER BY MONTH // WEATHER AVERAGES BERHAMPORE

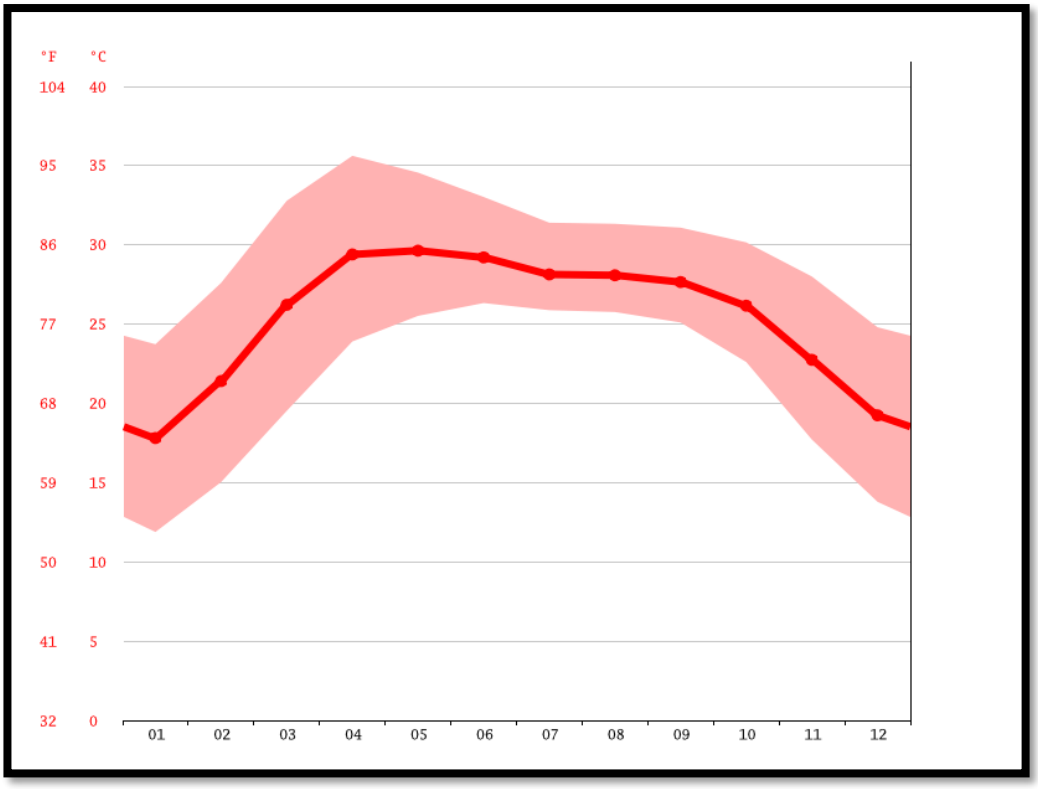
	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	17.8 °C (64.1) °F	21.4 °C (70.5) °F	26.2 °C (79.2) °F	29.4 °C (84.9) °F	29.6 °C (85.3) °F	29.2 °C (84.6) °F	28.1 °C (82.6) °F	28.1 °C (82.6) °F	27.7 °C (81.8) °F	26.2 °C (79.1) °F	22.7 °C (72.9) °F	19.2 °C (66.6) °F
Min. Temperature °C (°F)	11.9 °C (53.4) °F	15 °C (59.1) °F	19.5 °C (67.1) °F	23.9 °C (75) °F	25.5 °C (77.9) °F	26.3 °C (79.4) °F	25.9 °C (78.6) °F	25.8 °C (78.4) °F	25.1 °C (77.2) °F	22.6 °C (72.7) °F	17.7 °C (63.9) °F	13.8 °C (56.8) °F
Max. Temperature °C (°F)	23.7 °C (74.7) °F	27.6 °C (81.7) °F	32.8 °C (91) °F	35.6 °C (96.1) °F	34.6 °C (94.2) °F	33 °C (91.4) °F	31.4 °C (88.5) °F	31.3 °C (88.4) °F	31.1 °C (88) °F	30.2 °C (86.3) °F	28 °C (82.4) °F	24.8 °C (76.7) °F
Precipitation / Rainfall mm (in)	11 (0)	22 (0)	31 (1)	68 (2)	183 (7)	291 (11)	326 (12)	273 (10)	253 (9)	111 (4)	16 (0)	10 (0)
Humidity(%)	67%	60%	50%	57%	71%	80%	85%	85%	85%	80%	69%	67%
Rainy days (d)	2	2	3	7	13	17	21	20	17	8	1	1
avg. Sun hours (hours)	8.9	9.6	10.1	9.4	8.3	8.1	7.7	7.7	7.6	8.5	8.9	8.5

SOURCE-CLIMATE-DATA.ORG

CLIMATE GRAPH // WEATHER BY MONTH BERHAMPORE



AVERAGE TEMPERATURE BERHAMPORE



Quality Assessment of soil at Berhampore College:

SOIL PROPERTIES	VALUE
pH	8.5 (Strongly Alkaline)
Nitrate Nitrogen	45 Lbs/acre (High)
Ammoniacal Nitrogen	13Lbs/acre (Low)
Potassium	250 to 350 lbs/acre (High)
Phosphate	20 to 50lbs/acre (Medium)

Source- Lab Report, Department of Geography, Berhampore College

NOISE LEVEL TEST

Highest	72 dB
Average	66 dB
Lowest	52 dB

Expenditure on Green Initiatives during the Last Five Years:

Financial Year	Tree Plantation (Amount in Rs)	Purchase of LED's	Total
2018-19	26,120	8,222	34,342
2017-18	24,240	93,257	117,497
2016-17	21,630	12,110	33,740
2015-16	18,550	13,980	32,530
2014-15	16,460	15,200	31,660

SUGGESTIONS AND RECOMMENDATIONS

During Green Audit, based on the observation and availability of the resources, BSI team, recommends the following suggestions and recommendations, to draw the kind attention of the college authority.

1. The Medicinal (Herbal) Garden in the campus need to be upgraded, with planation of few more plants (as suggested in table 4).
2. All plants available in the campus need to be labelled with a number plate, mentioning its botanical name, local name and its importance, if any, to increase awareness among the students and local people.
3. The empty space along the college boundary wall should be planted systematically.
4. Regular outreach activities and programmes to be organised in the campus for increasing awareness among the students towards eco-friendly initiatives and biodiversity conservation.
5. Attention is required for proper waste management by making students and staff aware about the use of different types of bins. Number of garbage bins should be increased and proper disposal of wastes especially the laboratory waste by engaging registered, professional waste disposal agency can be done. The bio-degradable wastes can be used for generating bio-compost / vermi-compost that can be reused for gardening.
6. The energy saving bulbs and electric appliances, if left out at few places, should be used to reduce the energy consumption.
7. Periodic review and Green auditing of the campus for maintaining the improving the environmental health of the campus as well as students and faculties

ACKNOWLEDGEMENT

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PHOTOGRAPHS OF THE CAMPUS

Photo 1: Main Entrance of College Campus (close up view)

Photo 2: Main Entrance of College Campus

Photo 3: Panoramic view of College Gardens

Photo 4: Plants in the College garden.

Photo 5: Plants in the College garden.

Photo 6 - 7: Plantation drives by the NSS unit in the College garden.


Photo 8-9: Some common plants in the College campus.

Photo 10: View of College ground

Glimpse of visit of experts from Botanical Survey of India, Kolkata

Figure 11: Group photo showing BSI team with the Principal and other College officials.

Figure 12: BSI team during inspection in the college campus.

Figure 13: BSI team during inspection in the college campus.

Figure 14: BSI team during inspection in the college campus.

Figure 15: BSI team during inspection in the college garden.

Figure 16: BSI team interacting with college teachers and students during inspection.

Figure 17: Group photos with students and teachers of Berhampore College.

Figure 18: Group photos with students and teachers of Berhampore College.