DURGAPUR WOMEN'S COLLEGE

DURGAPUR, PASCHIM BARDHAMAN, WEST BENGAL, INDIA



REPORT ON 'THE GREEN CAMPUS': UPKEEP OF FLORA, FAUNA AND OTHER NATURAL RESOURCES

Submitted

By Environmental Compliance Committee

INTRODUCTION:

'The Green Campus' aims to analyze environmental practices within and outside the college campus which will have an impact on the eco-friendly atmosphere. The purpose of this visit is to ensure that the practices followed in the campus adhere to the green policy adopted by the institution. It works on several facets of the Green Campus including water conservation, electricity conservation, tree plantation, mapping of biodiversity, etc. Considering the present environmental problems of pollution and excessive use of natural resources, the Honorable Prime Minister, Shri. Narendra Modi has declared the Mission of Swachch Bharat Abhiyan. Also, the University Grants Commission has made the "Green Campus, Clean Campus" mission mandatory for all higher educational institutes. With this in mind, the specific objectives of the visit are to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the departments comply with the applicable regulations, policies, and standards. It can make a tremendous impact on students' health and learning, college operational costs, and the environment.

NEED FOR GREEN CAMPUS:

Green campus is the practice of identifying and determining whether an institution's practices are eco-friendly and sustainable. Traditionally we are good and efficient users of natural resources, but over the period excess use of resources like energy and water have become habitual for everyone, especially in common areas. Now it is necessary to check whether our processes are consuming more than the required resources. Whether it is truly green and regulates all search practices and gives a way of natural resource utilization is what is being scrutinized. In the era of climate change and resource depletion, it is necessary to verify the processes and convert them into green and clean ones. It also increases overall consciousness among the people working in institutions towards an environment.

GOALS OF GREEN CAMPUS:

- The college has prepared a green campus with specific goals
- Identification and documentation of green practices followed by college
- Analyse and suggest solutions for problems identified
- Increase environmental awareness throughout the campus
- Environmental weeks motivate staff to optimize the sustainable use of available resources

OBJECTIVES OF GREEN:

- To examine the current practices that can impact on the environment such as resource utilization
- To identify and analyze significant environmental issues
- Set up goal vision and mission for green practices on campus
- Establish and implement environmental management in various departments
- Continuous assessment for betterment in performance of maintaining the greenery

BENEFITS OF GREEN TO EDUCATIONAL INSTITUTIONS:

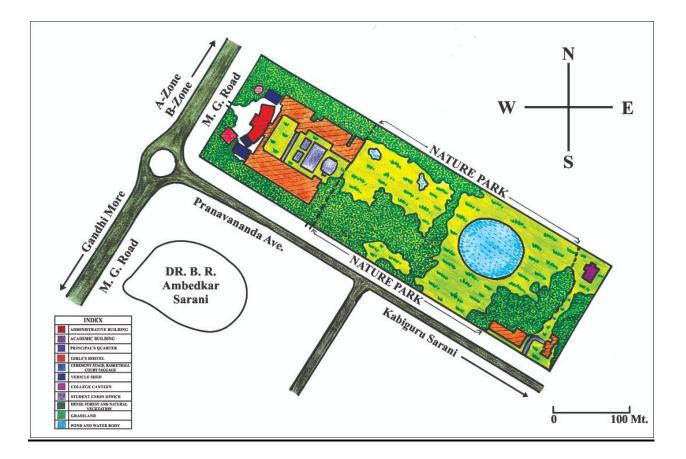
There are many advantages of going green to an educational institute-

- It would help to protect the environment around the campus
- Recognize the cost-saving methods through waste minimization and energy conservation
- Empower the organization to frame a better environment and performance
- It protects the good image of the institution through its clean and green campus
- Finally, it will help to build a positive impression through green initiatives through the upcoming NAAC visit

EXECUTIVE SUMMARY :

The economic development and rapid urbanization at the local, regional, and global levels have led to several environmental and ecological crises. On this background, it becomes essential to adopt the system of the green campus for the institute which will lead to sustainable development. Durgapur Women's College is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the trends. Being a premier institution of higher studies, the college has maintained 'The Green Campus' and a Nature Park named 'Bonobithi' whose activity promotes a message for environmental protection and sustainability. The West Bengal Pollution Control Board (WBPCB) is planning to install of Continuous Ambient Air Quality Monitoring Station as well as a Display Board in Durgapur city as a part of the National Clean Air Programme. This visit report contains observations and recommendations for the improvement of environmental consciousness.

COLLEGE MAP



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Bonobithi Nature Park

Nature Park is a unique landscape of wilderness where ecological assemblages of native species in the form of biological communities are recreated and maintained over marginal lands. In other words, Nature Park is nature reserves that harbor natural heritage of the area and have conservation, educational and cultural values and enhance the quality of environment in urban centers. The underlying principle of the Nature Park is to recreate self sustaining ecosystems with native flora and fauna characteristic of the area for enhancing the quality of urban environment.

In Durgapur Women's College a self-generated rich and diverse nature park is situated. An immense variety of species of microbes, plants, insects, amphibians, reptiles, birds, fish, etc. can be part of a wetland ecosystem. Natural lowlands submerged in water throughout the year are important to us as they remove pollution, recharge groundwater supplies, control floods, provide homes for the varieties of plants and animals, and have cooling effects on the air temperature in their vicinity beneficial to this environment. Some common, wildlife and migratory species are certainly observed and some common, medicinal plants or trees are also present around this ecosystem.



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_		LIST OF AN	MALS	b			T OF PLANTS
AMPHIBIANS	Common Indian Toad	Duttaphrynus melanostictus	INSECTS	Lime butterfly	Papilio demoleus	Durba	Cynodon dactylon
	Common Indian Tree Frog	Polypedates maculatus		Common mime	Papilio clytia	Sara	Saccharum munja
	Indian Bull Frog	Hoplobatrachus tigerinus		Common mormon	Papilio polytes	Kash	Saccharum spontaneum
	Indian Rat Snake	Ptyas mucosa		Common emigrant	Catopsilia pomona	Kush	Desmostachya bipinnata
	Checkered Keel Back	Fowlea piscator		Common pierrot	Castalius rosimon	Apang	Achyranthes aspera
	Indian Wolf Snake	Lycodon aulicus		Motteled emigrant	Catopsilia pyranthe	Dochuti	Ageratum conyzoides
	Vine Snake	Ahaetulla nasuta		Lemon pansy	Junonia lemonias	Sanchi	Alternanthera sessilis
	Russell's Viper	Daboia russelii		Peacock pansy	Junonia almana	Dadmari	Cassia alata
REPTILES	Common Krait	Bungarus caeruleus		Great egg fly	Hypolimnas bolina	Gandhabena	Cymbopogon schoenanth
	Banded Krait	Bungarus fasciatus		Common crow	Euploea core	Mutha	Cyperus rotundus
	Keeled Indian Mabuya	Eutropis carinata		Common wanderer	Pareronia valeria	Bhumisushni	Evolvulus nummularius
	Asian House Gecko	Hemidactylus frenatus		Common grass yellow	Eurema hecabe	Kulekhara	Hygrophila auriculata
	Indian Garden Lizard	Calotes versicolor		Gram blue	Euchrysops cnejus	Kalmishak/ morning glory	Ipomoea aquatica
	Indian Rock Agama	Psammophilus dorsalis		Common ciliate blue	Anthene emolus	Saibani lata	Lantana camara
	Common Crow	Corvus brachyrhynchos		Common jezebel	Delias eucharis	Sushni	Maselia minuta
	House Sparrow	Passer domesticus		Grey pansy	lunonia atlites	Lojjaboti	Mimosa pudica
F	Common Myna	Acridotheres tristis		Chocolate pansy	Junonia iphita	Sajne	Moringa oleifera
	Spotted Dove	Spilopelia chinensis		Tawny coster	Acraea terpsicore	Amrul	Oxalis corniculata
	Oriental Magpie Robin	Copsychus saularis		PATE TALE 200		Bara chandrika	Rauvolfia tetraphylla
F		r Chrysocolaptes guttacristatus	29 76			Peet/swet berela	Sida cordifolia
-	Rose-ringed Parakeet	Psittacula krameri				Titabegun	Solanum torvum
	Cattle Egret	Bubulcus ibis	State of the local division of the local div			Targanda	Tridax procumbens
1	Intermediate Egret	Ardea intermedia			Among Street and Street States	Bhui kul	Zizyphus nummularia
BIRDS	Pond Heron	Ardeola grayii				Dadukung	Cassia alata
DIRUS	Spotted Owlet	Athene brama	Co-N			Chakunda	Cassia tora
	Barn Owl	Tyto alba	State			Kalkasunda	Cassia axidentalis
	Red Vented Bulbul	Pycnonotus cafer				Kolkasunda	Cassia sophera
Ć.	Whiskered Bulbul	Pycnonotus jocosus			Same	Kungooya	Urena sinuata
	Black Hooded Oriole	Oriolus xanthornus		den mitteren by	A second segment to be the second in the second second	Jongli Ghagra	Urena lobata
	Asian Koel	Eudynamys scolopaceus	The second second	TOTAL STATES	FR.	Rabon lata	Mikania micrantha
	Green Bee Eater	Merops orientalis	1000	NY 10 10 11	TYCE CHARAC	Telakucha/kudri	Coccinia indica
	Common Tailor Bird	Orthotomus sutorius			- KE - 777.83	Bulrush	Typha latifolia
	lungle Babbler	Turdoides striata				Nayantara	Catharanthus roseus
	Purple Sunbird	Cinnyris asiaticus	291 1 1			Siris	Albizzia lebbek
7	Scaly-breasted Munia	Lonchura punctulata		and the second s	Personal and a local distance of the local distance	Sishu	Dalbergia sissoo
1	Palm Squirrel	Funambulus palmarum			101 A	Subabul	Leucaena leucocephala
X	Indian Grey Mongoose	Herpestes edwardsii		100 C 100 C		Radha chura	Peltophorum pterocarpu
MAMMALS	Small Indian Mongoose	Herpestes javanicus	ALC: NO.			Krishna chura	Caesalpinia pulcherrima
MAMMALS							

LISTS OF ANIMALS AND PLANTS COMMONLY PRESENT IN COLLEGE CAMPUS

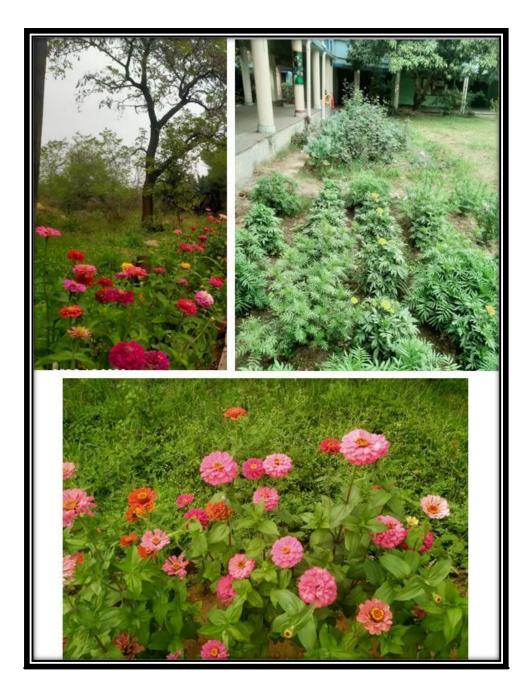
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MAMMALS	Palm Civet	Paradoxurus		
		hermaphroditus		
	Black Faced Monkey	Ateles chamek		
	Lime butterfly	Papilio demoleus		
	Common mime	Papilio clytia		
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	Common jezebel	Delias eucharis		
	Grey pansy	Junonia atlites		
	Chocolate pansy	Junonia iphita		
	Tawny coster	Acraea terpsicore		

The Kitchen Garden at our College hostel campus



The Garden at our College and Hostel campus



The Greenery at our College campus



Solar Panels on the College roof







Durgapur womens <durgapurwomenscollege@gmail.com>

Proposal for Restoration of Inland Water Body for Sustainable Development in Durgapur Women's College Campus

1 message

Mahananda Kanjilal <mahanandakanjilal912@gmail.com> To: "wridd.wb@gmail.com" <wridd.wb@gmail.com> Cc: psecy.wridd-wb@gov.in Bcc: durgapurwomenscollege@gmail.com Tue, Aug 29, 2023 at 2:13 PM

To,

The Principal Secretary (Additional Charge)

Water Resources Investigation and Development Department

Khadya Bhavan, Kolkata 700087

Sub- Proposal for Restoration of Inland Water Body for Sustainable Development in Durgapur Women's College Campus

Respected Sir/ Madam,

This is to express our interest in converting unused marshy land on our College campus into an inland water body along with a herbal garden, a plantation project, and a butterfly garden with the assistance of your esteemed department. Our College, located in an Industrial city, consists of an area of 14 acres of land, of which approximately 70% is currently lying unused. We feel that due to the extreme level of pollution and the scarcity of water in the city, the opportunity that our College campus provides for us to address these issues should be utilized in a fruitful and effective manner. We propose to turn the marshy land into a sustainable ecosystem that will benefit both the College and the local community. Under these circumstances, we have prepared a proposal for the same for your kind perusal and necessary action. We hope that our efforts in this direction will be met with your kind approval, and we will be able to implement the proposal in our College at your earliest convenience.

Thanking you,

Yours sincerely,

Dr Mahananda Kanjilal

Principal

Durgapur Women's College

Kazi Nazrul University

Contact no.- 9433353624

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Memo No. 734-2/WPBD-OC(148)/2021(Part-I)

Date: 6 .08.2024

To The Principal Durgapur Women's College Mahatma Gandhi Road, Durgapur Paschim Bardhaman,713209

Madam.

You will be happy to know that West Bengal Pollution Control Board (WBPCB) is planning for installation of Continuous Ambient Air Quality Monitoring Station (CAAQMS) as well as Display Board in Durgapur City as a part of the National Clean Air Programme (NCAP).

The CAAQMS is an analyser-based unit that measures PM_{2.5}, PM₁₀, SO₂, NO₂, NH₃, CO, O₃, VOC and meteorological parameters like Ambient Temperature, Relative Humidity, Vertical Wind Speed, Wind Speed, Wind Direction, Biometric Pressure, Solar Radiation and Precipitation.

On the basis of your verbal consent, the Officials of WBPCB along with your officials visited the Durgapur Women's College Hostel, Durgapur-713209 on 02/08/2024 and found a suitable location inside the said College hostel premises for installation of such CAAQMS. You are requested to provide the following basic requirements for such installation:

- i) Ground area of 5m X 5m on which a 1m platform will be built for mounting air-conditioned container with air quality monitoring instruments.
- Electricity connection will be required for running of such station. Payment of electricity bill will be made by the WBPCB.
- iii) The location will be accessible by the vendors of electricity and broadband service providers for connection and servicing, whenever required.

It may please be noted that one display board will be provided at a suitable place of your premises so that the common people can access the real time data. Hence, you are requested to kindly give your consent for installation of CAAQMS in your premises.

This letter is being issued with the approval of the competent authority.

Yours faithfully.

Environmental Engineer & In-charge WBPCB, Durgapur Regional Office

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Date: 01.10.24

TO WHOM IT MAY CONCERN

This is to certify that after the inspection of the entire premises of Durgapur Women's College, Durgapur, Paschim Bardhaman, that this college has a very well-maintained green campus.

A nature park named 'Bonobithi' has been beautifully created with a butterfly garden attached to it, an attractive site for student lepidopterists. Another project in the pipeline is to dig a pond and plant more trees in the periphery giving it a dale-like look. This place has a perennial steady water level so the pond will never run out of water even in the scorching summer heat. A project proposal for the restoration of in land water body for sustainable development has already been sent to the Water Resources Investigation and Development Department, Khadya Bhavan. A rainwater harvesting system is also proposed to be set in the pond. To save electricity wastage solar panels have been installed on the roof of the college. The West Bengal Pollution Control Board (WBPCB) has sanctioned to install a Continuous Ambient Air Quality Monitoring Station as well as a Display Board in Durgapur city as a part of the National Clean Air Programme. The photographs used in the report are taken by the Environmental Compliance Committee team members during the preparation of the report.

The major observations are as follows:

- I. 'Bonobithi' Nature Park
- II. Butterfly Garden
- III. Herbal Garden
- IV. Vegetable Garden
- V. Seasonal Flower Garden
- VI. Maintenance of several trees like Mango, Jackfruit, Mahogony, Krishna chura etc
- VII. Submission of a project proposal to the Water Resources Investigation and Development Department, Khadya Bhavan for the restoration of in land water
- VIII. Solar panels to save electricity
 - IX. Istallation of LED tubes and lamps
 - X. Systemic waste disposal by DMC
 - XI. Recycling of vegetable waste from the College Canteen to Vegetable Garden
- XII. Planning to install a Continuous Ambient Air Quality Monitoring Station and a Display Board by West Bengal Pollution Control Board (WBPCB)

The overall functioning of 'The Green Campus' is highly satisfactory and recommendable.

Dr. Moitreyee Banerjee Chakrabarty Assistant Professor and Head Department of Conservation Biology Durgapur Government College

Moitreyee Chakrabarty Assistant Professor in Conservation Biology (W.B.E.S.) PG Department of Conservation Biology Durgapur Government College Durgapur - 713214

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TO WHOM IT MAY CONCERN

The following recommendations are suggested to the Environmental Compliance Committee of Durgapur Women's College for upgradation of their Green Campus

- 1. Survey on the energy consumption of the college and use of alternative source of energy with special emphasis on Green Energy
- 2. Awareness and other activities regarding solid waste, chemical waste and other waste generated in the college
- Regular monitoring on air quality data with the proposed monitoring unit of WBPCB as and when installed
- 4. Construction of a board containing list of flora and fauna
- 5. Report on activities of the nature club of the college

I wish all success to the team and college for execution of the Green Campus.

Morthey & Chakrabarty 10 Dr. Moitreyee Chakrabarty 03 24 Assistant Professor Department of Conservation Biology Durgapur Government College

Moitreyee Chakrabarty Assistant Professor in Conservation Biology (W.B.E.S.) PG Department of Conservation Biology Durgapur Government College Durgapur - 713214