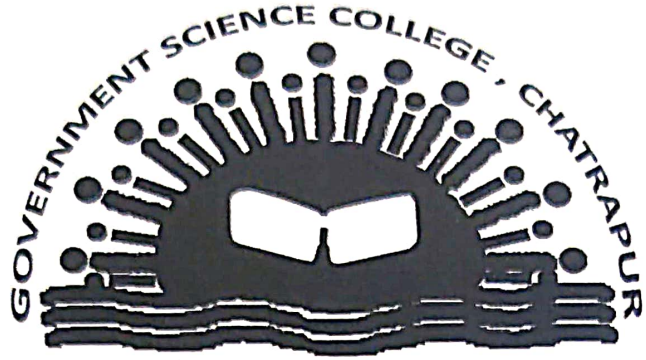


GREEN AUDIT REPORT
FOR
ACADEMIC SESSION 2023-24
GOVT SCIENCE COLLEGE CHATRAPUR



ସରକାରୀ ବିଜ୍ଞାନ ମହାବିଦ୍ୟାଳୟ, ଛତ୍ରପୁର

GOVT SCIENCE COLLEGE CHATRAPUR,
GANJAM

B. Anjan Kumar Prusty, Ph.D
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Asst. Agril Engineer
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(B. Anjan Kumar Prusty)

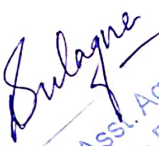
Team Members for Green Audit Committee

1. Dr Bijay Kumar Mohanty, Associate Professor (Retd.), Khallikote Unitary University, Berhampur.
2. Prof. B. Anjan Kumar Prusty, Professor & Head, Department of Environmental Science, Berhampur University (External member)
3. Ms Susree Sulagna, Deputy Director, Horticulture Berhampur (External Member)
4. Sri Manaorajan Maharana, Asst Prof of Botany (Convenor)


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Background and Objective

In these days world is moving toward its self-determined sustainable goals. This HEI which is nurturing the young minds of our nation must be oriented towards these sustainable goals and must continuously sensitised towards the Environmental issues. This college through action-based programmes regularly insists the values of Environment conservation and practice the “Go Green” daily lives. We regularly comply our College level energy Audit, save electricity, water, recycle waste materials, and perform plantation in many outreach activities through Youth Red Cross Unit, Eco Club, NCC and NSS programmes.

Green auditing is defined as an official review of college environmental impact Assessment. As part of this movement, an internal environmental audit (Green Audit) is performed to assess the current ecological situation of campus. A green audit is a beneficial tool for a college to establish where and how much energy, water, or resources are being used. The institution can then examine how to adopt improvements and save money. We are aimed to step forward in small steps in this college level and spread this message through students in local communities. Our Green Audit assess the Carbon Footprint inside the college by examining the carbon dioxide emission contributed through various construction works, renovation works, vehicular emission inside this college and there by we train various stakeholders of this college to reduce the carbon foot print. Student are taught not to use plastics inside and outside the college campus as it is the key waste or all environmental pollution hazard to wildlife.

Environmental Management System which was primarily meant for Industries now it becomes necessary for all other institutes taking into account of larger environmental degradation in the name of national economic and social development. So, our students and other stakeholders are trained to act according to the rules drafted in such policies.

THE COLLEGE: AN OVERVIEW:

Govt Science College is situated near Tampara Lake which is a Tourist of Odisha. The college is spread over 4.1 acres of Land besides NH-16 and NAC Chatrapur. Ganjam District being an Economically enriched part of south Odisha educationally has not stepped equal to its economy. Here male students end up with college dropouts due to various social or economic issues and lack proper guidance in terms of education and environmental protection and cleanliness of their surroundings. So, being a fully Govt. College situated at District Headquarters Government Science College, Chatrapur has been trying to reduce the above gap created locally and maintain the educational standard nationally.

Keeping the above objectives in hand of this college Green Audit committee has defined the following objectives.

- a. To state the current environmental issues related to local community which affect the stakeholders of this HEI.
- b. To extract the current threats to “Go Green” steps of college emerging due to beautification and renovation works.
- c. To emphasize more in waste management and conservation of water bodies in this semiurban community.

To motivate all the stake holders of this college towards self-involvement in campus cleaning and thus stretch helping hands to College Administration.

To draft a standard regulation for protection of College resources through College Administration.

COURSE OFFERED

Bachelor of Arts (Hons.) 256 SEATS PER YEAR

1. Economics (64 seats)
2. English (32 seats)
3. History (64 seats)
4. Odia (64 seats)
5. Political Science (64 seats)

Bachelor of Science (Hons.) 128 SEATS PER YEAR

1. Botany (64 seats)
2. Chemistry (48 seats)
3. Mathematics (32 seats)
4. Physics (48 seats)
5. Zoology (64 seats)

Bachelor of Commerce.

1. Accounting Honors (256 seats)

Note: All undergraduate degree courses are taught in three years, semester mode following the model CBCS Curriculum.

Green Audit Report

The audit for the session 2023-24 was conducted in the month of March 2024 with the following members.

1. Dr Bijay Kumar Mohanty, Associate Professor (Retd.), Khallikote Unitary University, Berhampur.
2. Prof. B. Anjan Kumar Prusty, Professor & Head, Department of Environmental Science, Berhampur University (External member)
3. Ms Susree Sulagna, Deputy Director, Horticulture Berhampur (External Member)
4. Sri Manoranjan Maharana, Asst Prof of Botany

An environmental audit is a assessment of consciousness of our work place in time that verify our commitment towards our fellow members of Biodiversity. The audit will be non-worthy when doesn't change our mind set toward selfish behaviour towards Environment. The components of this audit include waste management, disuse of plastics, energy conservation, insisting go green practices, maintenance of health and hygiene and spreading of sustainable goal ideas among common people. This audit report includes observations and recommendations for increasing environmental awareness.

ENVIRONMENTAL AUDIT QUESTIONNAIRE

1. Does any Environmental Audit conducted earlier? Ans- No
2. What is the total population of the Institute?

	Male	Female	Total
Students	806	921	1727
Teachers	20	18	38
Non-Teaching Staff	23	4	27
Sub Total	849	943	1792
Approximate Number of Visitors (Per day)			15
What is the total number of working days of your campus in a year?			205 days approximately

3. Where is the campus located? At College square, Chatrapur town of Chatrapur Block Ganjam

4. Which of the following are available in your institute?

1 Garden area	Yes
2 Play ground	Yes
3 Kitchen	No
4 Toilets	Yes
5 Garbage or Waste Store Yard	Temporary
6 Laboratory	Yes
7 Canteen	No
8 Hostel Facility (numbers)	No
9 Guest House	Yes

5. Which of the following are found near your institute?

1 Municipal dump yard	About 2 kms away
2 Garbage heap	No

3 Public convenience	Yes
4 Sewer line	yes
5 Stagnant waters	No
6 Open drainage	yes
7 Industry – (Mention the type)	No
8 Bus / Railway station	Yes, half Km distance
9 Public halls	Yes, 500mts away

6. WASTE MINIMIZATION AND RECYCLING

1	Does your institute generate any waste? If so, what are they?	Yes, Solid waste, paper waste, plastic waste, toiletry waste, etc.			
2	What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	Bio Degradable	Bio-Non-degradable	Hazardous	others
		5Kg	1Kg	500gms	NA
3	How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify)	1 composting pit is there in campus, Reuse of one side printed Paper for internal communication. Domestic Waste is given to NAC. Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste.			
4	Do you use recycled paper in institute?	Yes, used in SAMS section.			
5	Do you use reused paper in institute?	Yes			
6	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Yes, NCC, Youth Red Cross and NSS carried out numerous activities. Recycling campaigns, e-waste management, plastic Free Campus campaigns.			
7	Can you achieve zero garbage in your institute? If yes, how?	Yes, as per new waste management rules all kind of waste is managed in an adequate manner without any deviation.			
8	Is there a garden in your institute?	Yes			
9	Total number of Plants in Campus	Plant type	Approx. number		
		Trees	About 140		
		Shrubs	About 350		
		Grass Cover	1.8 Acre		
10	Is the College campus have any Horticulture Department	No			
11	Number of Tree Plantation Drives organized by College per annum. (If Any)	Yes, Three Tree Plantation Drives are Organized Annually. 50+ trees planted in this academic year			
12	Number of Trees Planted in Last AY.	26			
	Survival Rate	55%			
13	List few ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	Electricity is saved by use of LED bulbs for illumination. Alternate source of energy i.e. Solar Panel proposed to be installed.			
14	Are there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some	Yes, Renewable source of energy through solar plant is under progress. Messages will be displayed at various locations to aware the People about Energy Savings.			

		Use of Natural Lights and Natural Ventilation are promoted.
15	How many CFL/LED bulbs has your institute installed?	100 % of total Conventional bulbs are replaced by LED Lights.
16	Do you run "switch off" drills at institute?	Yes
17	Are your computers and other equipment's put on power-saving mode?	Yes, In Practice
18	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	No
19	List uses of water in your institute	Basic usage of water in campus are; Drinking, Gardening & Toilets, and Others. Total consumption is 300 KL/month (approx.)
20	How does your institute store water? Are there any water saving techniques followed in your institute?	Overhead Water tank installed for storage of water.
21	If there is water wastage, specify why and how can the wastage be prevented / stopped?	No
22	Locate the point of entry of water and point of exit of waste water in your institute.	Entry- Water comes from bore well on the campus Exit- From Water Drainage System to the soak pits
23	Write down few ways that could reduce the amount of water used in your institute	By following ways: 1. Close the taps after usage 2. Water Conservation awareness for new students
24	Does your institute harvest rain water?	No, instead we have water charging points where rain water goes underground

7. CLEAN AIR

25	Are the Rooms in Campus being Well Ventilated?	Yes
26	Window Floor ratio of the Rooms	Very Good
27	Provide details of college-owned motorized vehicles?	NIL
28	Air Quality Monitoring Program (If Any)	No monitoring is being done
29	Students suffer from respiratory ailments? (If Any)	No
30	Details of Genset	No

8. ENVIRONMENTAL LEGISLATIVE COMPLIANCE

31	Does Environmental Ambient Air Quality Monitoring conducted by the Institute?	No
32	Does Water and Wastewater Quality monitoring conduct by the Institute?	No
33	Is any warning notice, letter issued by state government bodies?	No

34	Does any Hazardous waste generate by the Institute?	No
35	Does any Bio medical waste generate by the Institute? If yes explain its category and disposal method	No
36	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
37	Does your institute have any rules to protect the environment? List possible rules you could include.	Yes, there are some initiatives like banned single use plastic. Their Environmental Policy yet to be formulated.
38	Does housekeeping schedule in your campus?	Yes, Swatch Bharat movement
39	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes, Periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by institute
40	Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes
41	Does Institute participate in National and Local Environmental Protection Movement?	Yes, Swatch Bharat Abhiyan by students at campus.
42	Does Institute have any Recognition/certification for environment friendliness?	No
43	Does Institute use renewable energy?	Future proposal
44	Does Institution conduct a green/environmental audit of its campus?	Yes, this is first environmental audit done by the College.

9. INITIATIVES TO BE TAKEN

- Renewable Energy: Solar panel is proposed to be functional throughout the year.
- Plantation drive:
- Ground Water Recharge: 100%
- Pollution Reduction: Personal Vehicles (Students) not to be allowed at campus beyond a particular point.
- Solid Waste Management: NAC lifts the waste materials twice a week on request.
- Adoption of Village/society: Yes, through NSS Units
- Water Conservation: Yes, water saving push taps to be fitted in the drinking water zone and the toilets to avoid the wastage.

10. RECOMMENDATIONS:

1. Draft environmental policy by college Administration that is to be conveyed to all faculties and other staff members.
2. Environmental Monitoring (Ambient Air Quality Monitoring, Water Monitoring) must be performed on a quarterly basis in collaboration with the Dept. of Environmental Science, Berhampur University.
3. Use of digital systems to reduce the need of paperwork.
4. A water metre should be put at the institute to track water consumption.

5. Increase environmental promotional events on campus to raise awareness.

SUGGESTIONS FOR IMPROVEMENT:

- Environment Policy to be adopted by the College Campus.
- The college has multiple (about 5) electric water pumps. This must be restructured to reduce the no. of pumps for less energy consumption.
- Hazardous chemicals and waste should be stored in a designated area, and safety/warning signs should be placed.
- Unused college land must be labelled and may be converted to college park.
- A waste management system for the campus should be developed.



(Campus Cleaning activities by Naval NCC and NSS Volunteers)



(Garbage Collection)

(Plantation through celebration of Vanmahotshav)

CONCLUSION:

This audit entailed comprehensive engagement with the whole campus team, as well as meetings with important personnel on a wide range of environmental issues. Several observations were made throughout the audit in order to make the campus more environmental friendly. The recommendations are often accompanied by observations for the college to act on. According to the audit team, the overall site is properly managed in terms of environmental guidelines. Critical examination revealed the lack of awareness among students, especially the newcomers towards the green habits and energy conservation. This college produce a lot of old and waste furniture which need to be recycled or may be used through waste management projects.

Signature of team members:

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