

## **S.B.R. Govt. Women's College, Berhampur**

### **External Green Audit Report**

The External audit for the session 2023-24 was conducted during April 2024 with the following members.

1. Prof. Dr. B. K. Mohanty, Rtd. Prof. of Botany, Khallikote University, Berhampur.
2. Dr. Panchanan Gouda, Rtd. Prof. of Chemistry, Khallikote University, Berhampur.
3. Prof. Dr. L. K. Tripathy, Rtd. R. D. E, Berhampur.

The Environment Audit of S.B.R. Govt. Women's College, Berhampur, Dist. Ganjam, Odisha was conducted during 19<sup>th</sup> and 20<sup>th</sup> of April 2024 and the Auditors suggest the following basing on the findings.

### **ENVIRONMENTAL AUDIT QUESTIONNAIRE**

1. Does any Environmental Audit conducted earlier? YES
2. What is the total population of the Institute?

	Male	Female	Total
Students	-	1084	1084
Teachers	20	22	42
Non-Teaching Staff	15	04	19
Sub Total	35	1110	1145
Approximate Number of Visitors (Per day)			85
What is the total number of working days of your campus in a year?			241

3. Where is the campus located? In front of OSRTC Depot, Khallikote College Road, Berhampur, Odisha, 760001

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

1 Garden area	Yes
2 Play ground	No
3 Kitchen	No
4 Toilets	Yes
5 Garbage Or Waste Store Yard	Temporary
6 Laboratory	Yes

7 Canteen	Yes
8 Hostel Facility (numbers)	02
9 Guest House	No

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 water	No
6 Open drainage	No
7 Industry – (Mention the type)	No
8 Bus station	Yes, 1Km distance
9 Public halls	Yes, 200mts away

6. WASTE MINIMIZATION AND RECYCLING

1	Does your institute generate any waste? If so, what are they?	Yes, Solid waste, Canteen 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
		15Kg	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 being taken away by Municipality. Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste.			
4	Do you use recycled paper in institute?	Yes, in academic evaluation works			
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, NSS carried out numerous activities. Recycling campaigns, e-waste management, Antiplastic campaigns, Van Mahotsav etc.	
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	<b>Plant type</b>	<b>Approx. number</b>
		Trees	More than 360
		Shrubs	More than 300
		Grass Cover	0.5 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, Two Plantation Drives are Organized Annually. 20 saplings were planted in this academic year	
12	Number of Trees Planted in Last AY.	20	
	Survival Rate	80%	
13	List few ways that you use energy in your institute. (Electricity, LPG, firewood, others).	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 consideration.  Messages should be displayed at various locations to aware the students and staff 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

**Table showing the power consumption details of last year**

Month-year	Electricity consumption (KVA)
April 2023	5125
May 2023	6722
June 2023	2835
July 2023	5310
August 2023	10214
September 2023	7259
October 2023	5925
November 2023	5961
December 2023	1814
January 2024	1828
February 2024	5147
March 2024	6379

## 7. WATER CONSERVATION

19	List uses of water in your institute	Basic usage of water in campus are; Drinking, Gardening & Toilets, and Others. Total consumption is 900 KL/month (approx.)
20	How does your institute store water? Are there any water saving techniques followed in your institute?	Overhead Water tank installed on the rooftop of various buildings for storage of water. To avoid overflow of water, controlling valves are provided in water supply system.
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 Municipal Supply and bore well to the campus, Exit- From Water Drainage System to outside municipal drains
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. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage 3. 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

#### 8. CLEAN AIR

25	Are the Rooms in Campus are 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	Yes, 03 Number of Gensets -model, Kirloskar, Yamaha, Under working Codition

#### 9. ENVIRONMENTAL LEGISLATIVE COMPLIANCE

31	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
32	Does your institute have any rules to protect the environment? List possible rules you could include.	They have banned single use plastic. Their environment policy includes awareness, and environmental conservation efforts through NSS and NCC. All under graduates are studying the paper of Environmental Sciences, prescribed by UGC. Environment policy uploaded on the website.

33	Does Environmental Ambient Air Quality Monitoring conducted by the Institute?	NA
34	Does Water and Wastewater Quality monitoring conducted by the Institute?	No
35	Is any warning notice, letter issued by state government bodies?	No
36	Does any Hazardous waste generated by the Institute?	No
37	Does any Bio medical waste generated by the Institute? If yes explain its category and disposal method	No
38	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
39	Does your institute have any rules to protect the environment? List possible rules you could include.	Yes, there are some rules like e banned single use plastic. Their Environmental Policy includes awareness and environmental conservation.
40	Does housekeeping schedule in your campus?	Yes, Swatch Bharat Movement
41	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
42	Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes
43	Does Institute participate in National and Local Environmental Protection Movement?	Yes, Swatch Bharat Abhiyan by students at campus in the campus and Gopalpur Beach. Plantation Drive.
44	Does the Institute have any Recognition/certification for	No



	environment friendliness?	
45	Does Institute using renewable energy?	Proposed for future
46	Does Institution conduct a green/environmental audit of its campus?	Yes, This is the Second External environmental audit done by the College.

## 10. BEST PRACTICES/ INITIATIVES

- Renewable Energy: Solar panel is proposed to be installed.
- Plantation drive:
- Ground Water Recharge: 80%
- Pollution Reduction: Personal Vehicles (Students) not allowed at campus
- E Waste Management: E waste is sent to the Municipality for adequate disposal
- Solid Waste Management: Municipality lifts the waste materials daily
- Adoption of Village/society: Yes, through NSS Units
- Water Conservation: Yes, water saving push taps fitted in the drinking water zone and the toilets to avoid the wastage.

### SUGGESTIONS FOR IMPROVEMENT:

1. Environmental Monitoring (Ambient Air Quality Monitoring, Water Monitoring) must be performed on a six-month basis by the State Pollution Control Board/approved laboratory.
2. Use of digital systems to reduce the need of paper work.
3. A water metre should be put at the institute to track water consumption.
4. Increase environmental promotional events on campus to raise awareness.
5. Environmental awareness posters should be displayed prominently on campus.
6. Acids, and other chemicals should be stored in a designated area, and safety/warning signs should be placed.
7. Use of Solar energy sources should be established on the campus.

### CONCLUSION:

This audit required extensive engagement with the entire campus team, as well as meetings with key personnel on a variety of environmental issues. Several observations were made throughout the audit to improve the campus's environmental friendliness. The recommendations are frequently accompanied by observations for the college to consider. The audit team determined that the overall site is properly managed in terms of

environmental stewardship. There are no major observations, but the following must be implemented immediately: waste management records by monthly inventory of hazardous waste, rainwater harvesting/recharging, and periodic inspection of building housekeeping and environment policy.

**Date: 20.04.2024**

**Signature of the Auditors:**

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