

**GREEN AUDIT REPORT**  
**Academic Year 2019-20**  
**RAJDHANI COLLEGE, BHUBANESWAR**

A Green Audit Committee was constituted by the Principal (Vide Office Letter No 118/09.01.21) with following members

1. Dr Hrushikesh Nayak (Bot) – Deputy Co-ordinator
2. Dr Priyadarshini Rautray (Zool)
3. Dr Dharitri Rath (Chem)

A meeting was held on 15.01.2021 at 1.15 PM in the Principal's chamber to constitute a Green Club and take on a green audit of the campus. The eco-evaluation/audit for the session 2019-20 started late due to the Covid-pandemic.

Objectives of the Green Audit Committee

- The first objective was to constitute a Green Club for motivating, monitoring students to look after the eco-friendly activities of the Campus.
- To carry out the Bio-diversity study (both flora and fauna) of the campus engaging experts and student volunteers of Botany and Zoology departments
- To have an audit of energy budget of the college, the percentage met by the solar energy.
- The water requirement of the institute, source of supply, waste-water treatment if any. To evaluate the Water Use Efficiency of the institute
- To verify the cleanliness of the toilets and canteen
- To take on the stock of both degradable and bio-nondegradable wastes of the campus, particularly the forest litter and the college canteen.

As per the resolution of the Green Audit committee held on 15.11.01.2021, following activities are undertaken:

1. Launching of Green Club
2. Energy Audit
3. Water Audit
4. Mapping of Biodiversity Resources of the Campus
5. Sanitation and Hygiene Audit

## 1. Green Club

A Green Club was officially inaugurated by the Dr Neehar Ranjan Nayak, Member Secretary, Odisha Biodiversity Board, Bhubaneswar and our esteemed Principal on 2<sup>nd</sup> of February 2021. The meeting was attended by faculty members and students of the college. Sixty five (65) students registered themselves to volunteer for the eco-friendly activities of the campus. Both Principal and the chief guest emphasised on the students participation for cleanliness of the campus and other eco-drives. As a kick-start to the programme, 2 saplings were planted by the guest and the principal near the College entrance. Twenty (20) tree-species saplings donated by the Biodiversity Board were planted in the campus as the initial venture of the club.



Launching of Green Club on 02.02.21 (Principal on Deliberation)

### **Methodology of Audit**

The team, comprising Dr Hrushikesh Nayak, Dr Dharitri Rath, Dr Priyadarshini Rautray, visited the cash section to get information regarding electricity consumption, Azure Power personnel for solar output, water related data from college care-taker, and physical verification of the toilets, water purifiers and the campus, excluding hostels.

## 2. Energy Audit(undertaken on 21.01.21)

Energy, particularly electrical energy is the mainstay of an educational institute. The major supply is made by electricity distribution company, CESU. Part of the requirement is met by solar Photovoltaic cells installed by Azure Power, 25.20 kW capacity. The stock of the situation was accessed from the cashier of the college and in-charge of Solar cell Company.

Units of electrical energy utilized/day	Units of energy generated from solar cell/day	Percentage (%) of Green Energy
Approximately 258 units	Approximately 88 units	33

## 3. Water Audit

A Water Audit was undertaken on 25.01.21 by the team. It is a full analysis of water processed by a utility. Water audit comprises of total water supply to the institute, amount used and wastewater disposed off. Bore well is the main source of water for the institute. In addition to this municipal water supply is another source of water. Rain water harvest facility at 3 locations available but its use is not yet made, care should be taken care of.

Quantity of water available from bore well and municipal supply/day	11000 lit
Quantity of water utilized/day	6000 lit
Quantity of surplus water/day	5000 lit
Quantity of waste water generated/day	6000 lit
Number of overhead tanks	11
No of bore well	01

No. of Aqua guards	07
No. of Aqua guards in working condition	03

#### 4. Mapping of Biodiversity Resources of the Campus

Our team members made an overall survey of the existing biodiversity in the campus on 05.02.21. The campus covers 15 acres of land, out of which four (04) acres of land under social forestry and avenue plantation with good canopy. Initially, a visual qualitative observation was made for the tree species present. Nearly 40 tree species are present in campus and familiar ones are given in the table:

Sl No	Local or EnglishName	Botanical Name
1.	Banyan	<i>Ficus benghalensis</i>
2.	Neem	<i>Azadirachta indica</i>
3.	Tamarind	<i>Tamarindus indica</i>
4.	Jamun	<i>Syzygiumcumini</i>
5.	Kadamb	<i>Anthocephaluscadamba</i>
6	Kaniar	<i>Thespesia populnea</i>
7.	Teak	<i>Tectona grandis</i>
8.	Betel nut	<i>Areca catechu</i>
9.	Baula	<i>Mimusopselengi</i>
10	Jackfruit	<i>Artocarpus integrifolia</i>
11.	Kanchan	<i>Bahunia sp.</i>
12.	Coconut	<i>Cocus nucifera</i>
13.	Guava	<i>Psidium guajava</i>
14	Amla	<i>Emblica officinalis</i>
15.	Gulmohur	<i>Delonix regia</i>
16.	Radhachuda	<i>Caesalpinia pulcherima</i>
17.	Ashoka	<i>Saracaashoka</i>
18.	Sunari	<i>Cassia fistula</i>
19	China rose	<i>Hibiscus rosa-sinensis</i>
20	Mango	<i>Mangifera indica</i>

## 5. Sanitation and Hygiene Condition

The team observed the students common room, toilets on 05.02.21 and found the maintenance of toilets poor, cleaning and bleaching be done on daily basis. Suggestions are made for better sanitation. Wastewater treatment facility not available.

### Suggestions and Future Course of Action:

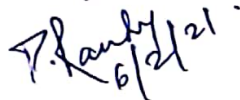
- a. At least 3 compost pits be made at different locations for deposition of wastes and vermicomposting.
- b. Awareness among students be practised to put off lights and fans not in use in the building. The average daily consumption comes around 260 units
- c. Greenery development and waste management be inculcated among students and staff.
- d. A detailed survey of flora and fauna is to be undertaken by students of Botany and zoology, respectively with help of experts.
- e. Campus cleaning fortnightly by students be undertaken.

Signature of the Team members:

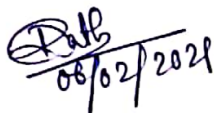
1. Dr Hrushikesh Nayak (Botany):

  
06.02.21

2. Dr Priyadarshini Rautray (Zoology):

  
6/2/21

3. Dr Dharitri Rath (Chemistry):

  
06/02/2021