

GREEN AND ENVIRONMENTAL AUDIT REPORT (2022-2023)



**GOVERNMENT GENERAL DEGREE COLLEGE
DANTAN-II, WEST BENGAL**

**CONSULTRAIN MANAGEMENT SERVICES,
LAKE ROAD, KOLKATA**

**TROPICAL INSTITUTE OF EARTH AND
ENVIRONMENTAL RESEARCH (TIEER),
MEDINIPUR**

CONSULTRAIN MANAGEMENT SERVICE
Lake Road, Kolkata, West Bengal, India



TROPICAL INSTITUTE OF EARTH AND
ENVIRONMENTAL RESEARCH (TIEER)

Reg. No. S/1L/42578 of 2006-07

Office address: M-10, Bidhannagar, Medinipur-721101, W.B., India

GREEN AUDIT CERTIFICATE

Academic Year: 2022-2023

This is to certify that Government General Degree College, Datan-II, Paschim Medinipur, West Bengal has good and healthy eco-friendly environment created for saving Earth and Nature. Tropical Institute of Earth and Environmental Research associated with Consultrain Management Service are satisfied after Green Audit with moral support of Honorable OIC, IQAC Team, Staff and Students for academic year 2022-2023. This efforts taken by Faculties and Students towards environment and sustainable are highly appreciable and commendable.

(Dr. Binoy Kr. Chanda)
President, TIEER

(Dr. Pranab Sahoo)
Asst. Professor &
Secretary, TIEER

(Mrs. Sanchita Bhattachariya)
ISO-Auditor & CEO, CMS

(Dr. Sudipta Kr. Maiti)
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ACKNOWLEDGEMENT

We, The Environment Audit Team thank the management of Government General Degree College at Dantan-II for assigning us such an important work on Green & Environmental audit. We appreciate the cooperation to our team for the assigned study, giving us necessary inputs to carry out audit activities.

Our special thanks to:

- ❖ Principal of the College
- ❖ IQAC Members
- ❖ Teaching & supporting staff

AUDIT EXPERT MEMBERS

The Committee members are listed below:

SL. No.	NAME	DESIGNATION	AREA IN INTEREST
1.	Dr. Binoy Kr. Chanda	President, TIEER & Former IC, VU	Environment Science & Climatology
2.	Dr. Pranab Sahoo	Secretary, TIEER & Assistant Professor and HOD, Dept of Geography, S.B. Mahavidyalaya, Kapgari	Climate Change and Environment Management and Biogeography
3.	Mrs. Sanchita Bhattachariya	Consultant, Consultrain Management services, Kolkata, & Member, TIEER, ISO-9001,14001& 50001Cerfied Auditor.	Environment Management
4.	Dr. Pijush Kanti Tripathi	Associate Professor, Dept. of Geography, Haldia Govt. College	Ecology and Environment management
5.	Dr. Sudipta Maiti	Faulty, Dept. of Botany, Raja N.L. Khan Womens' College, Midnapore	Plants Diversity & Carbon stocking, Green Management
6.	Dr. Mrinmoy Ghorai	Assistant Professor in Zoology, Panskura Banomali college.	Fauna & Aqua animals and Biodiversity conservation
7.	Dr. Chandan Karan	Faculty, Dept. of Geography, S.B. Mahavidyalaya, Kapgari	Land use Survey, Technician for Lab test. and Map Designer
8.	Sri Ananda Das	Asst. Teacher & expert	Electro physics
9.	Sri Soumitra Patra	M.Tech in Agriculture and expert	Water conservation and Micro irrigation technology
10.	Sri Sarat Chatterjee	Surveyor & Assistant Researcher	Water and Air Quality Measurement
11.	Sri Sanjib Mahata	Surveyor & Expert in RS &GIS	Map Designer

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1.0 INTRODUCTION:

The term 'Green' stands for Resource balance, Quality environment, Recycled products and Ecofriendly environment. Green and environmental Audit is a process of systematic, documented, periodic and objective evaluation of components of environmental diversity with the aim of ensuring readiness in eco-friendly environment and conservation of natural resources in its operations. The process starts with systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of the college. Green auditing is a means of assessing environmental performance. 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 healthy consciousness and promotes environmental awareness, values and ethics.



1.1 Goals & Objectives:

It aims to analysis environments within and outside of the concerned area, which will have an impact on the eco-friendly atmosphere. It provides staff and students better understanding of Resource management on their area of work.

The Main Objectives of Carrying out of Green and Environment Audit:

- To ensure the performance of the Institution with respect to environmental activities they are involved in, in compliance with existing laws and regulations
- To locate the Green area and the Geographical location of the College – aerial view
- To document the floral and faunal diversity of the College
- To develop and follow the waste management system
- To reduce the energy consumption of the Institution
- To report the expenditure on green initiatives, carbon foot print
- To record the air, water quality of the Institution
- To conserve the natural resources

Areas of Concern:

- WATER MANAGEMENT
- ENERGY MANAGEMENT
- AIR QUALITY AND CARBON FOOTPRINT
- WASTE MANAGEMENT
- E-WASTE MANAGEMENT
- BIODIVERSITY

This Audit has been conducted by a Committee constituted by the Experts & Scientists from different reputed Institutes.

The Committee developed a questionnaire for audit based on the regulatory and statutory requirements of Centre as well State. The basic data was gathered and



compiled, which the committee analyzed. By and large, the audit reveals a healthy environment inside the Government General Degree College at Kharagpur-II campus. The committee has suggested short term as well as long-term suggestions for improved environmental conditions to a higher level and authorities and all stakeholders of the College conform that they will give due attention and utilize opportunities for identified improvements.

1.2 About the College :

Government General Degree College, Dantan-II was established on 29 th October 2015 by the Government of West Bengal to spread quality higher education to the students belonging to extremely rural and backward areas of Paschim Medinipur District of West Bengal. The College is situated on the Belda-Contai State highway and is surrounded by

lush greenery and agricultural fields. Being close to a state highway connecting two moderately developed towns, Belda and Contai, the college can be accessed easily by various private and government bus services. This college was built on land previously owned by the Public Works Department (PWD) of the Government of West Bengal in Kashmuli Village of the Dantan-II block of Paschim Medinipur. According to some locals, the name Dantan originated from 'Dandabhukti' which was an antique provincial unit of the Gupta Empire. It is speculated that Chaitanya Mahaprabhu passed through here in the 16th century to reach Jagannath Temple in Puri. Being situated within the small hamlet of Kashmuli, local people also called this institution 'Kashmuli College'. This co-educational college, affiliated to Vidyasagar University, functions in the day shift starting from 10 AM to 5 PM from Monday to Saturday. Different undergraduate degree programs are offered to the students in Arts and Science streams. Apart from regular degree programs, the college has conducted different value-added courses, seminars, webinars, and workshops in recent times. The college contributes to the needs of the locals by not only providing quality education to the students from diverse social and economic backgrounds but also motivating them in character building, personality development and different co-curricular activities.

Table 1 Area Coverage of the College Campus

Area Coverage of College Premises:	Area in Percentage
Building and Construction	29
Vegetation Cover	28
Playground and Fallow land	19
Water Bodies	24

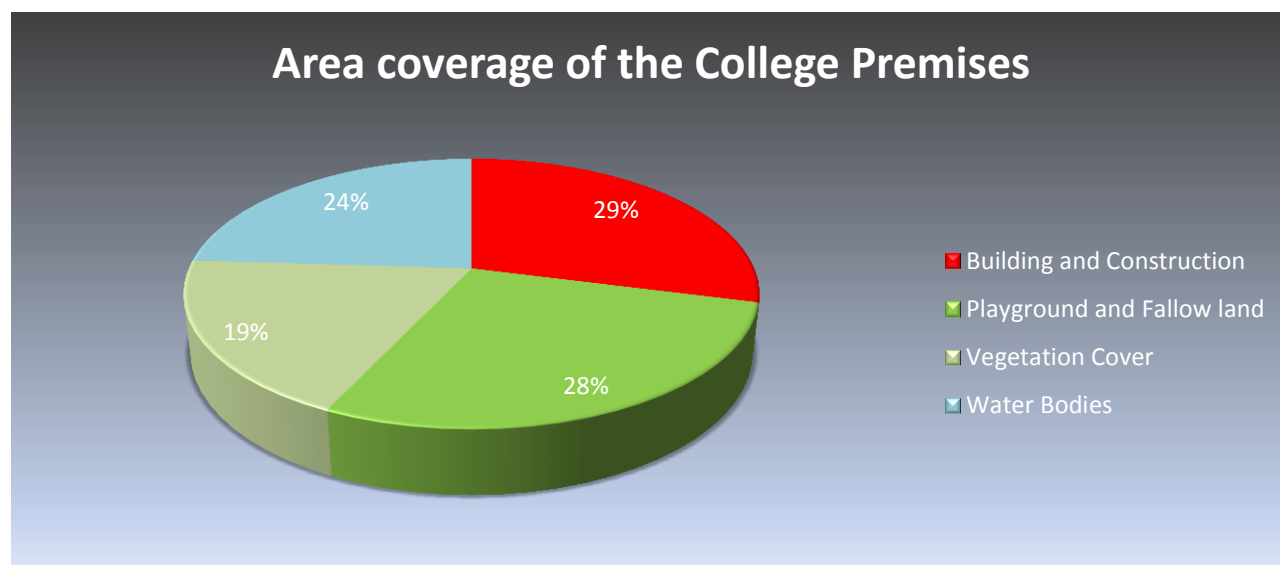


Fig. 1 Area Coverage of College Premises

General Information:

Total area of the college campus – 5.08 acre

Building area: 1.47 acres,

Green & Vegetated area: 0.97 acres.

Play Ground & Vacant land area: 1.42 acre

Water Bodies area: 1.22acre

Departments: 11 (UG Departments)

Laboratories: 05

Students: 703 nos. approx.

Teaching & Non-teaching staff: 20 (Including Officer-in-Charge) + 16

Others stakeholder: 04

Total Stake holders: 743

Auditorium /Seminar hall: 03

Gymnasium Hall: 01

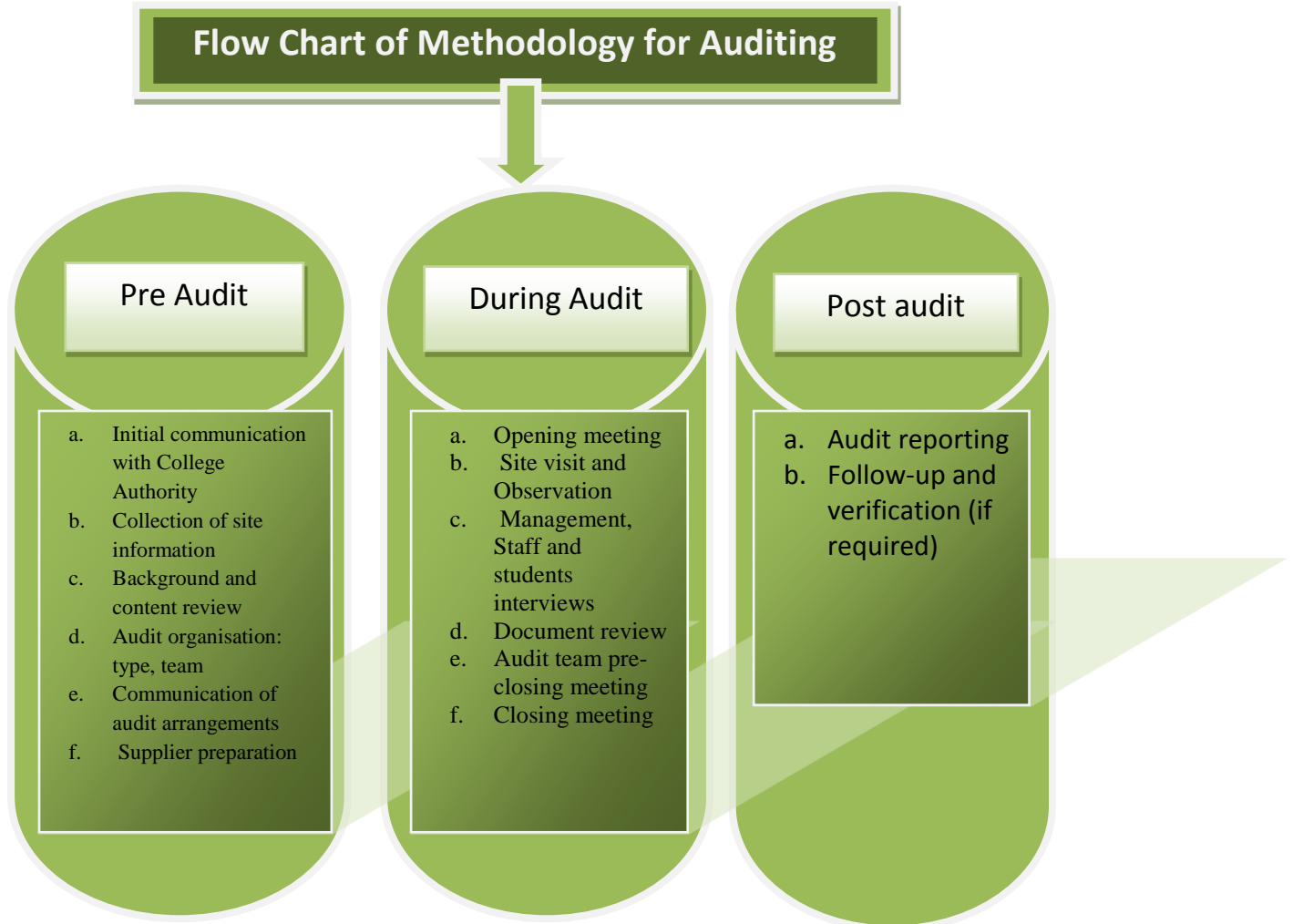
1.3 Purpose of Green and Environmental Auditing:

- To develop to more efficient resource management
- To provide basis for improved sustainability
- To create a green campus
- To enable waste management through reduction of waste generation, solid- waste and water recycling
- To promote plastic free campus and evolve health consciousness among the stakeholders
- To recognize the cost saving methods through waste minimizing and managing
- To empower the organizations to frame a better environmental performance
- To develop an environmental ethics and values systems in youngsters.
- To establish valuable tools and methods for managing and monitoring of environmental and sustainable development programs.

2.0 PRE-AUDIT STAGE:

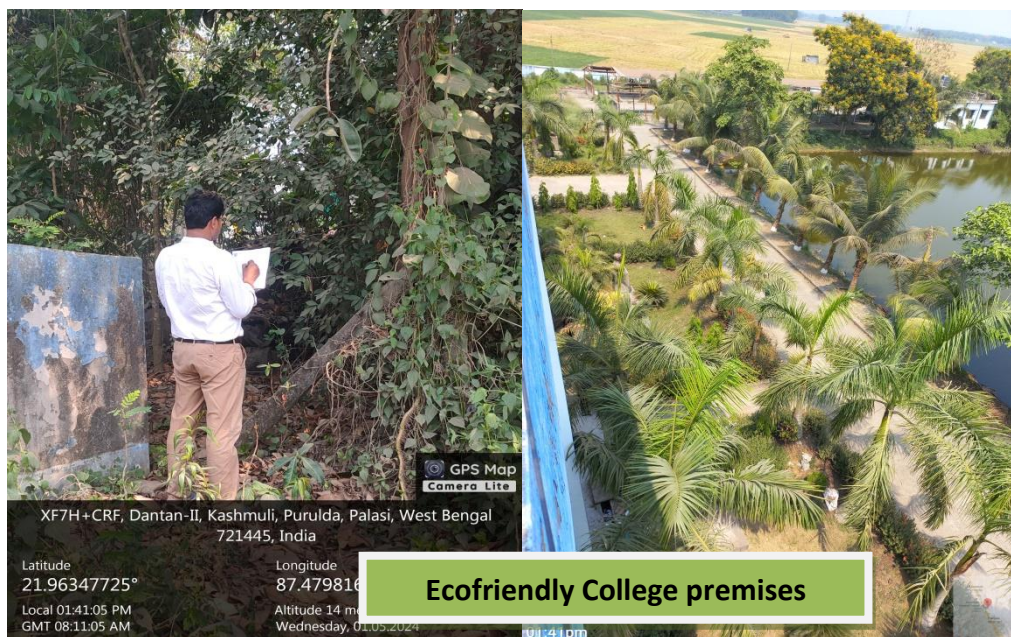
2.1 Methodology and Survey Schedules:

The methodology is adopted for this assessment by collecting the information by onsite visit, group discussion, campus survey, enquiry, observation. Perception study and opinion survey are also included in the Auditing Report.



2.2 Site Visit:

1. College and its premises were visited and analyzed by the audit-teams several times to gather information.
2. Campus trees were counted and identified.
3. Medicinal garden, play grounds, canteen, library, All Department, office rooms, Hostels, Staff Quarter and parking grounds were also visited to collect data.
4. Number and type of vehicles used by the stakeholders were counted and fuel consumption for each vehicle was verified with the user.
5. Number of LPG cylinders used in labs, canteen and hostel kitchen were also counted.
6. Water taps were checked. Leakage of a few water taps and over-flow tanks were noticed during the site inspection.



Following steps were taken for data collection:

- Survey to each department, Laboratories, Library, canteen etc.
- Data collected by observation and interview.
- Assessment of the environmental condition through measurement

2.3 Survey & Data Collection:

- A Questionnaire was developed covering all aspects of Green and Environment aspects for collection of data.
- Arrangement of Drone survey was made available to cover every corner of the college and its neighborhood areas.
- Data Analysis - Calculation of energy consumption, analysis of water reused, waste generation & disposal arrangements.

- Recommendation — On the basis of results of data analysis and observations, some steps for reducing power consumption, water consumption, waste management etc. were recommended.

We have discussed and interacted with different groups like teachers, students and staff to identify the attitudes and awareness towards environmental issues at the institutional, district, national and global level. Data and information were also collected from utility bills, reuse of water, waste management, use of energy-saving devices and e-waste. This information was added to the carbon footprint data, generating a fairly clearer picture of the emissions and impact of the reduction measures undertaken.



Greenery campus with surface water body

3.0 AUDIT STAGE :

3.1 Campus Survey and Enquiry:

Green and Environmental audit forms part of a resource management process. Total area including neighborhoods was surveyed using Drone and the data derived from this survey was detailed in our report.

Eco-campus concept mainly focuses on the reduction of contribution to emissions, on the efficient use of energy and water; Minimize waste generation or pollution and also economic efficiency. All these indicators are assessed in process of “Green Auditing of educational institute”. Covered areas included in this green auditing are water, energy, air quality & carbon footprint, waste, biodiversity campus.



College Campus survey

The Audit covered the following major areas:

1. Water Efficiency and Water Management
2. Energy Efficiency and Energy Management
3. Air Quality and Carbon foot print and Management
4. Waste Produce and Waste Management
5. Biodiversity and Green Zone management

Table-2 Total Stakeholders of the College

Students -	703 persons
Teaching, Non-teaching and Other Stakeholders	36 persons
Other(Security Guards and Karmabandhu)	4 persons
Total	743 persons
Approximate no of visitor (per day)-	01 persons

3.2 Water Efficiency and Water Management :

The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water and also proper water management practices along with rooftop rain water harvesting system must be installed in whole campus for recharging ground water and meeting part of the water requirements. It is therefore essential that any environmentally responsible institution examine its water use and Re-use practices.



Survey of Govt. General Degree College Dantan-2
 paschim medinipur, Medinipur Division 721445
 India
 21°57'51.654"N 87°28'48.824"E ±1.30m
 01.39pm

a	Usage of water	That water is use for Drinking, Washing, Cleaning, Cooking, Bathing and gardening purpose. The maximum water is use for washroom in the college. About 7285Litre water has been supplied for that sector.
b.	Consumption of water	About 15000 Litre water per day
c.	Water wastage	The leakage and misuse of water is about 155 Litre in whole campus. Small drip from a leaky tap, sewage water from pan in toilets and over flow can waste significant amount of water per day.
d.	Surface water Harvesting	One(1) Micro surface water bodies are available in college campus..

Table-3 Use of water for Different Purpose of College Premises

Use of water for Different Purpose Per Day	Use in Percentage
Drinking	11
Washroom	47
Cleaning	13
Gardening	22
Leakage	1
Others	6

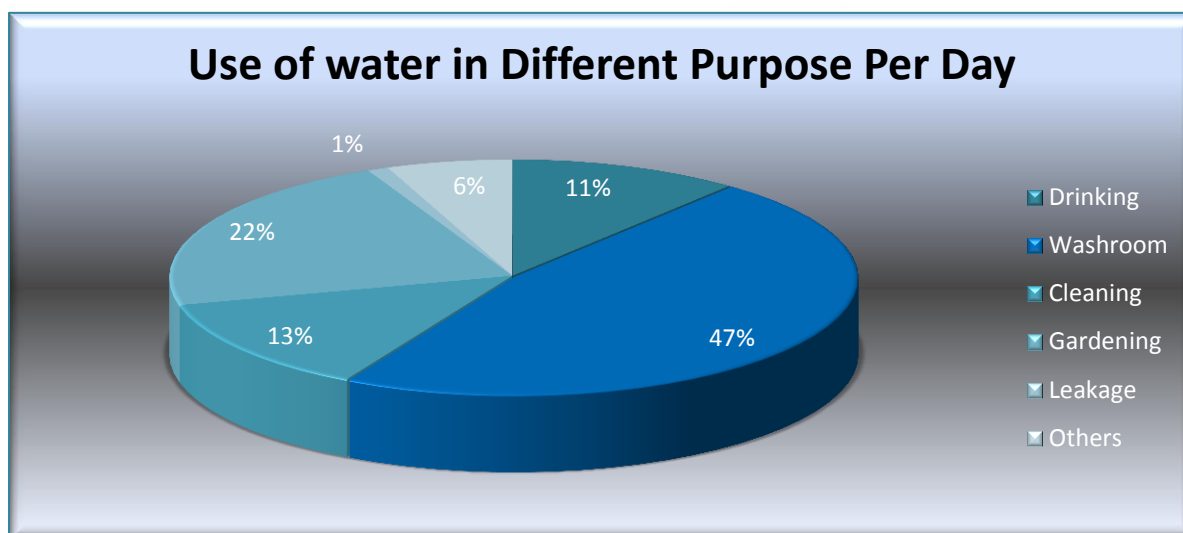


Fig.2 Use of water in Different Purpose Per Day

Taken Water management policy

Sl. No.	Factors	Weightage
1	Quality of Water	H
2	Re-use of water	M
3	Water Harvesting & Recharge	M
4	Use of Surface Water	M

* H denote- Taken management policy level above 60%

** M denote- Taken management policy level 40%-60%

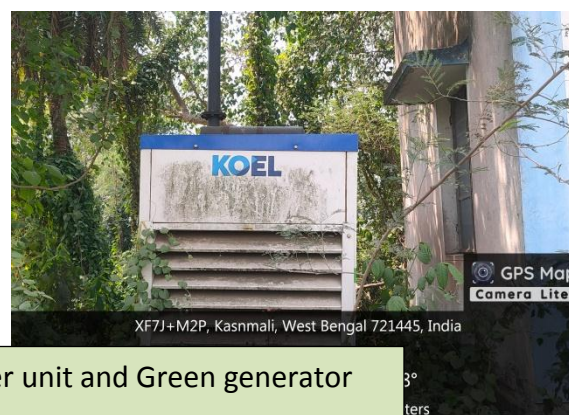
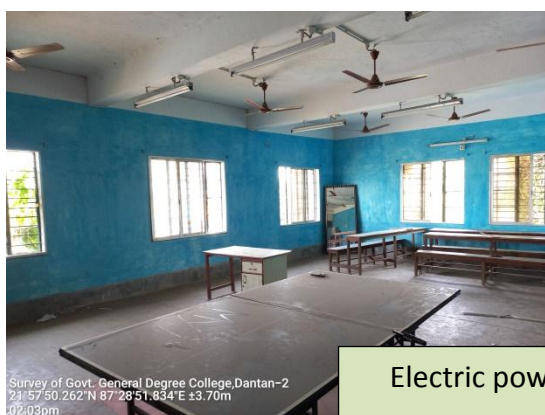
*** L denote-Taken management policy level below 40%

Observation and Recommendation

Water conservation faucets in washrooms were not seen. Installation of such faucets can save water and will help in minimising the water footprint of the institute. Sanitary wastewater generated from washrooms is connected to sewerage system.

3.3 Energy Efficiency and Energy Management:

a	Energy sources	Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. An old incandescent Tube uses approximately 40W while an energy efficient light emitting diode (LED) uses only less than 24 W.
b.	Energy consumption	The useable energy is Conventional energy. The used Electricity energy is 27961 units which costing is Rs.268435.39/- Per Year. The Maximum energy is consumed for Light & Fan, ACs and Computer Section amounting to 43% of total consumption.
c.	Usage of LPG	It has been observed that LPG gas cylinders are used in Canteen, & Laboratories (08 PC/year) for cooking and other purpose. There are Green generators used in the premises.



Electric power unit and Green generator

Table-4 Source of Energy in Percentage

Source of Energy	In Percentage
Conventional	95
Non -Conventional	0
Other(Diesel + Gas)	5

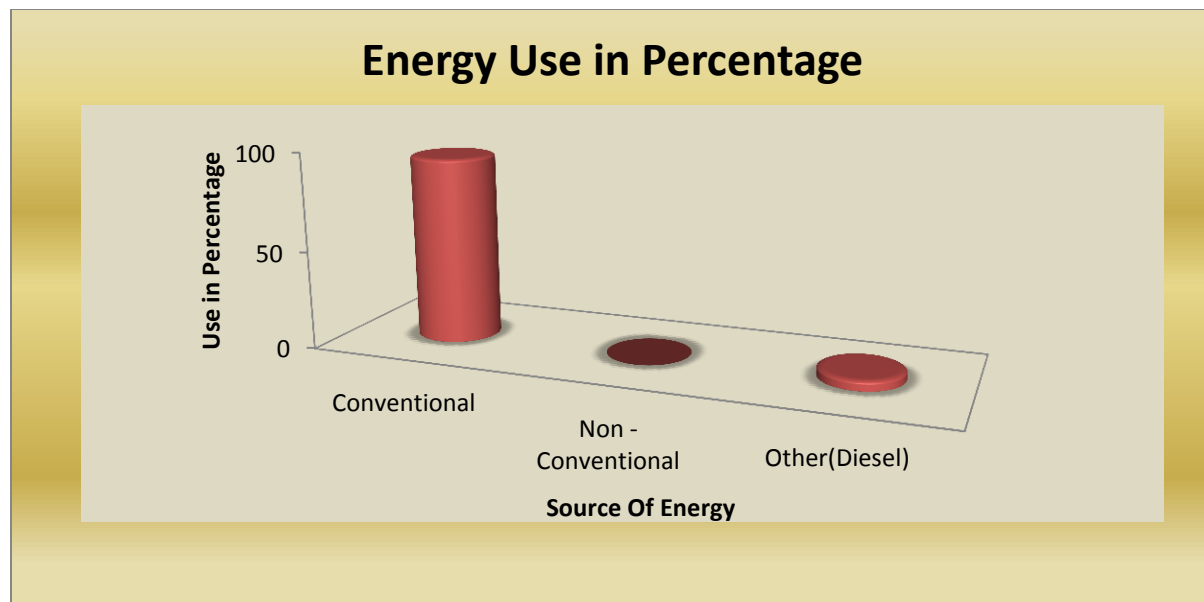


Fig. 3 Use of Energy in Percentage

Table-5 Energy Consumption for different Purpose in Percentage

Energy Consumption for different Purpose	In Percentage
light and fans	43
AC	15
Computer and Laboratory	23
Street light	11
Pump	4
Others	4

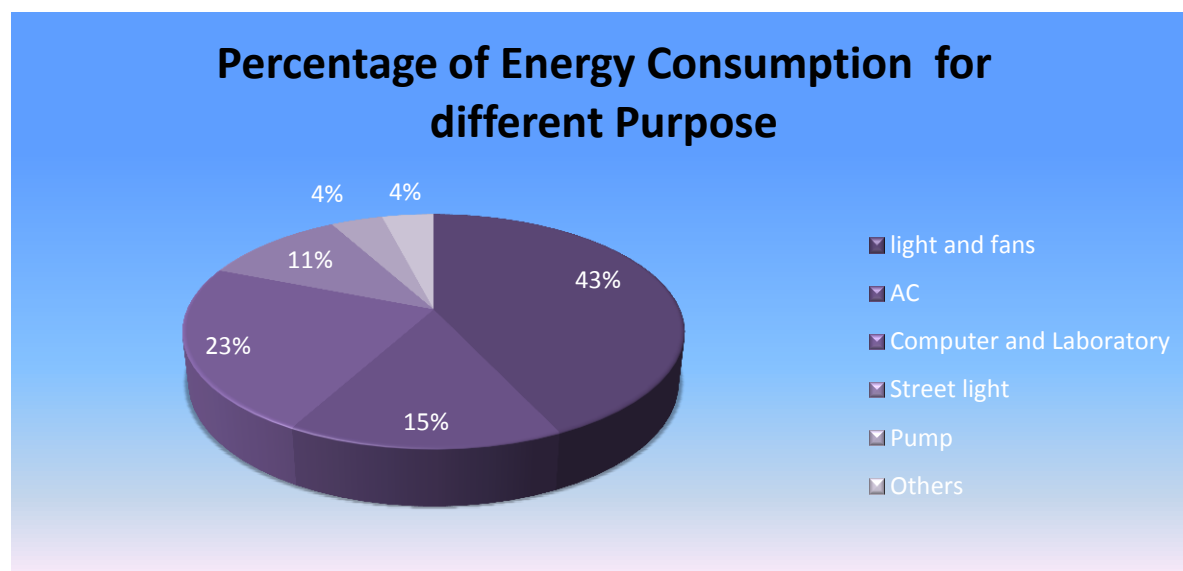


Fig. 4 Percentage of Energy Consumption in different Purpose

Observation and Recommendations:

- a) Every classroom and lab with central switch board should have a diagram linking place of tube light, fan etc. with corresponding switch. This will ensure that correct fitting is switched on/ off and can save time & unnecessary operation.
- b) Installation of automatic lights with sensors can be considered.
- c) Standard Operation Procedures (SOPs) should be prepared and followed for green purchasing wherein equipment's with star rating; those using eco-friendly materials; those with safe disposal policy or return to supplier after unused, can be considered.
- d) For purchasing new electronic appliances, star rating provided by Bureau of Energy Efficiency (BEE) should be considered. The equipment which has maximum star ratings could be purchased, which will consume less energy, ensure environmental sustainability and also operate at low cost.
- e) Usage of light reflectors is recommended as the reflectors can spread light to relatively large areas.
- f) Notices/ signage can be put up/ displayed near switches and on notice boards, informing students and staff to switch off all Departments & Sectors when not in use.
- g) Use of large percentage renewable energy should be considered.

3.4 Air Quality and Carbon Footprints :

Commutation of stakeholders has an impact on the environment through the emission of greenhouse gases into the atmosphere consequent to burning of fossil fuels (such as petrol, Diesel, LPG Gas). The most common greenhouse gases are carbon dioxide, CFC, water vapor, methane, nitrous oxide and ozone. Of all the greenhouse gases, carbon dioxide is the



Measurement of Air Quality

most leading greenhouse gas, comprising about 214ppm (2022) to the Earth's atmosphere. It undertakes the measure of bulk of carbon dioxide equivalents exhaled by the

organization through which the carbon accounting is done. It is observed that the Outdoor air quality is Fresh and comfortable for breathing to human life.

Table-6 Amount of CO₂ (ppm) in different location of the College Campus

Different location of the College Premises	Amount of CO ₂ (ppm)
Principal office	470
Office	440
Physics Lab	425
Class room	410
Central Library	430
Conference Hall	440
Computer lab	460
Main gate	400

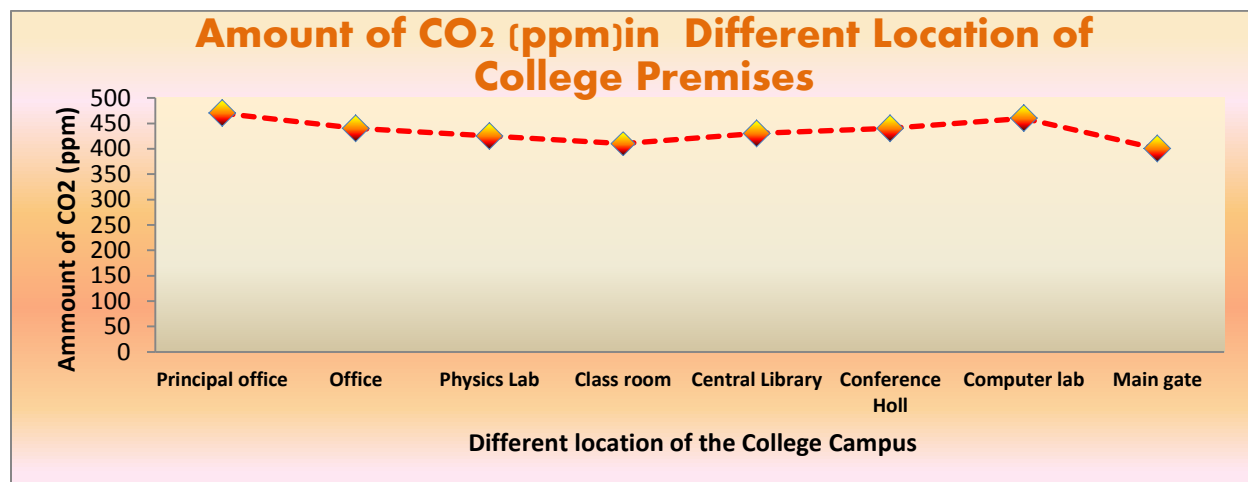


Fig. 5 Amount of CO₂ (ppm) in Different Location of the College Premises

Table-7 Amount of CO₂ (ppm) in the air in different location, (College Campus) session 2022-2023

Amount of CO ₂ (ppm) in the Air in Different places of the College Premises	Amount of CO ₂ (ppm)
Outdoor	400
Indoor (Class room)	410
Indoor (Laboratories)	430

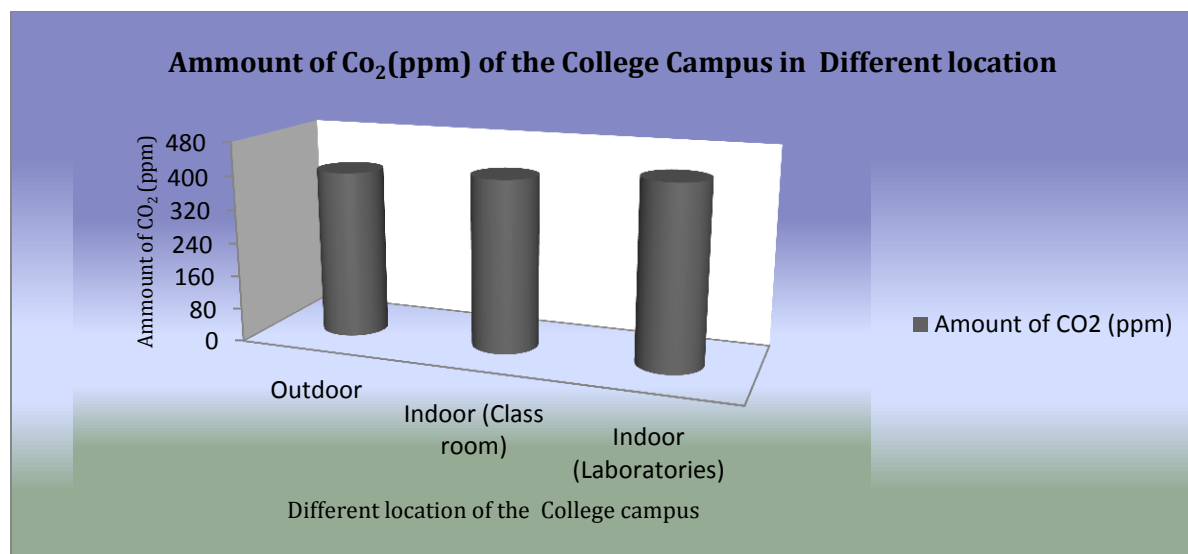


Fig. 6 Amount of CO₂(ppm) of the Air in Different location of the College Premises

Observation and Recommendation:

- a) Ventilation is achieved by fans in the institute and air conditioners in Official and Lab. places.
- b) Heating Ventilation and Air Conditioning (HVAC) system is not installed.
- c) No Exhaust fans in washrooms and chemistry lab.
- d) No indoor plants were observed in the entire institute. Indoor plants can be plotted not only for the aesthetic appearance but also for health benefits.

3.5 Generation of Waste and Waste Management:

Waste (or wastes) is useless or unusable materials or components which are discarded after principal use. Sometimes, it is a defective article and of no use. In modern outlook waste may be a valuable substance subject to an appropriate operation or action on the waste. With the context of waste management RRR (Reduce, Reuse and Recycle) model may be followed in appropriate fashion.

The auditor diagnoses the prevailing waste disposal policies and suggests the best way to combat the problems. It is therefore essential that any environmentally responsible institution examine its waste processing practices. Keeping the objective of the audit the following study will be limited to the waste generated in an academic campus and surroundings.

Table-8 Types of wastes

Type of Wastage	Amount in Kg
Degradable	22
Non degradable	3

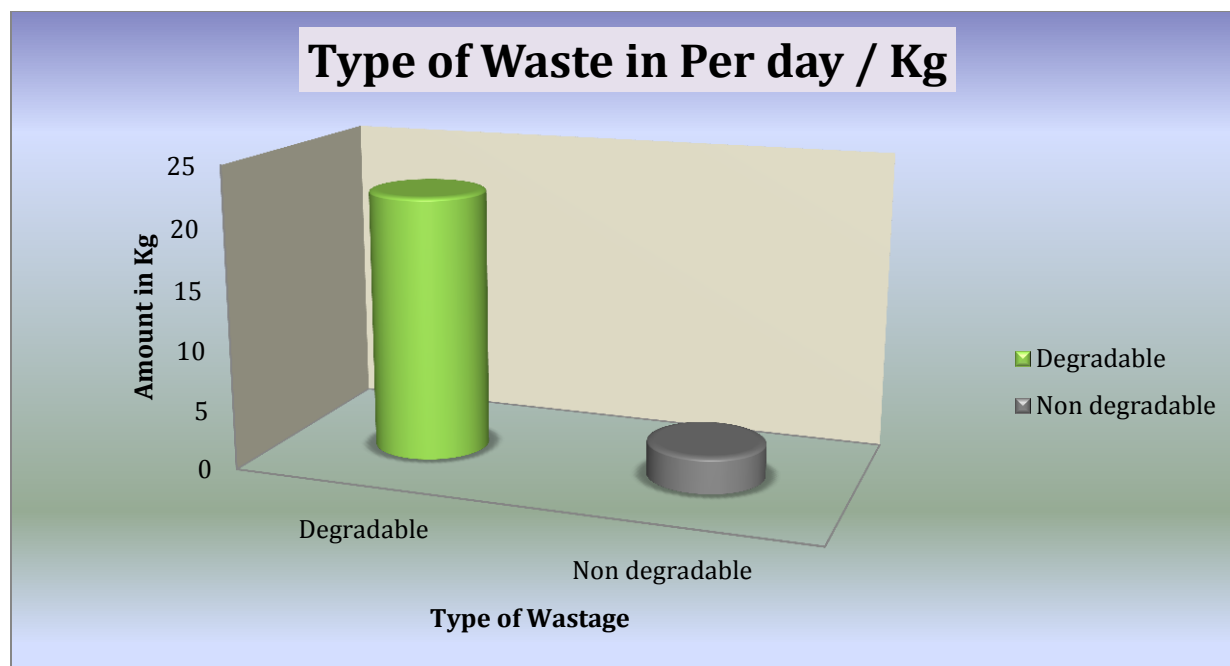


Fig. 7 Type and Amount of Waste

The following categories of wastes are generated in the College campus:

a) Solid waste - Waste generated through paper, plastic packaging causes nuisance. Some wastes are generated after various experiments, primarily, chemistry laboratory; broken test tube, glassware are the example.

b) Liquid waste - There are bio-chemical wastes generated through various chemical reactions and biological processes. Generally, these are being drained to nearby Surface water bodies contaminating water and soil. Appropriate means is suggested to adopt scientific liquid waste management practices. These are neutralization, bacterial control, and natural control through plantation.





Table-9 Source of Wastage in Different Sector (per day in Kg)

Source of Wastage in Different Sector(per day in Kg)	Degradable wasteage Amount in Kg.	Non Degradable wasteage Amount in Kg.
Garden	14	1
Office	3	1
Class room	1	0.5
Canteen	4	0.5

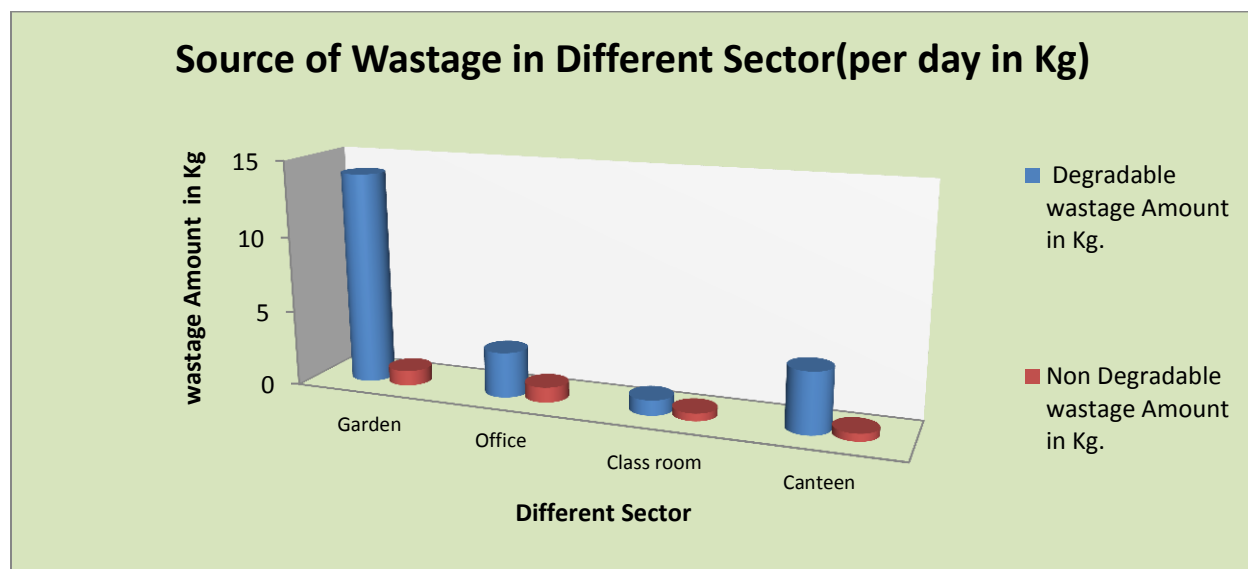


Fig. 8 Source and Amount of Wastage in Different Sector (per day in Kg)

The following are being emphasized during audit of waste management:

- Name of the waste
- Category of waste
- Quantity of waste
- Hazardous effect of the waste
- Institutional action and mechanism for waste management



Compliance audit of waste issues:

At the present stage the institute is capable in managing their waste. They are complying with the essential requirements of waste management although suggestions are given for future improvements.

Performance Audit of Waste Issues:

Implemented wastes management		
Sl.no	Factors/Indicators	Weightage
1	Plastic and Polythene free	M
2	Re-use of papers	H
3	Hazardous effect waste management	L
4	Removal of E-Wastes	M
5	Organic & food waste	M
6	Others solid wastes	M

* H denote- Taken management policy level above 60%

** M denote- Taken management policy level 40%-60%

*** L denote-Taken management policy level below 40%

No critical audit issue is there with respect to the waste management.

3.6 Auditing for Biodiversity & Green Campus Management:

Unfortunately, biodiversity is facing serious threats from habitat loss, pollution, over consumption and invasive species. Species are disappearing at an alarming rate and each loss affects nature’s delicate balance and our quality of life. In one year, a single mature tree will absorb up to 48 pounds of Carbon dioxide from the atmosphere, and release it as Oxygen. The amount of oxygen that a single tree produces is enough to provide one day’s supply of oxygen for people. So while you are busy studying and working on earning those good grades, all the trees on campus are also working hard to make the air cleaner for us. Trees on our campus impact our mental health as well; studies have shown that trees greatly reduce stress, which a huge deal is considering many students are under some amount of stress.



About 65% area is under greenery and biodiversity zone Biodiversity includes the genetic variability and diversity of life forms such as plants, animals, microbes etc. living in a wide range of ecosystems. Flora and fauna of College campus premises is rich.

Biodiversity Study

Table -1a: List of Trees in Government General Degree College at Dantan-II campus.

Sl. No.	Scientific Name	Local Name	Family
1	<i>Acacia auriculiformis</i>	Akashmoni	Fabaceae
2	<i>Albezia lebbek</i>	Khiris	Fabaceae
3	<i>Azadirachta indica</i> A.Juss.	Neem	Meliaceae
4	<i>Bombax ceiba</i> L.	Simul	Malvaceae
5	<i>Delonix regia</i>	Krisnachura	Fabaceae
6	<i>Ficus benghalensis</i> L.	Bot	Moraceae
7	<i>Ficus glomerata</i> Roxb	Jayogadumur	Moraceae
8	<i>Ficus religiosa</i> L	Aswatha	Moraceae
9	<i>Leucaena leucocephala</i> (Lam.) de Wit.	Jayanti	Fabaceae
10	<i>Mangifera indica</i> L.	Amm	Anacardaceae
11	<i>Moringa oleifera</i> Lam.	Sajne	Mringaceae
12	<i>Neolamarckia cadamba</i> (Roxb.) Bosser.	Kadam	Rubiaceae
13	<i>Nyctanthes arbor-tristis</i> L.	Seuli	Oleaceae
14	<i>Phoenix sylvestris</i> (L.) Roxb.	Khejur	Arecaceae
15	<i>Spondias pinnata</i> (Linn.f.)	Amrra	Anacardiaceae
16	<i>Ziziphus jujuba</i> Mill. (1768), nom. Cons.	Kul	Rhamnaceae

Table -1b: List of Shrubs in Government General Degree College at Dantan-II campus.

Sl. No.	Scientific Name	Family
1	<i>Annona Squamosa</i> L.	Annonaceae
2	<i>Boehmeria ramiflora</i> Jacq.	Urticaceae
3	<i>Calotropis gigantea</i> (L.) Dryand.	Asclepiadaceae

4	<i>Carica papaya</i> L.	Caricaceae
5	<i>Catharanthus roseus</i> (L.) G.Don.	Apocynaceae
6	<i>Cayratia trifolia</i> (L.) Domin	Vitaceae
7	<i>Clerodendrum indicum</i> (L.) Kuntze	Lamiaceae
8	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae
9	<i>Datura metel</i> L.	Solanaceae
10	<i>Ficus elastica</i> Roxb. Ex Hornem	Moraceae
11	<i>Hibiscus vitifolius</i> L.	Malvaceae
12	<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae
13	<i>Ixora coccinea</i> L	Rubiaceae
14	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae
15	<i>Mikania scandens</i> (L.) Wild.	Asteraceae
16	<i>Mimosa pudica</i> L.	Fabaceae
17	<i>Mirabilis jalapa</i> L.	Nyctaginaceae
18	<i>Musa acuminata</i> Colla	Musaceae
19	<i>Polyalthia longifolia</i> (Sonn.) Thwaites	Annonaceae
20	<i>Portulaca grandiflora</i> Hook.	Portulacaceae
21	<i>Psidium guajava</i> L.	Myrtaceae
22	<i>Punica granatum</i> L.	Lythraceae
23	<i>Saccharum spontaneum</i> L.	Poaceae
24	<i>Sansevieria roxburghiana</i> Schult. &Schult.f.	Asparagaceae
25	<i>Scoparia dulcis</i> (L.) Kuntze.	Scrophulariaceae
26	<i>Senna occidentalis</i> (L.)	Fabaceae
27	<i>Sida cordifolia</i> L.	Malvaceae

Table -1a: List of Herbs in Government General Degree College at Dantan-II campus.

Sl. No.	Scientific Name	Family
1	<i>Acalypha indica</i> L.	Euphorbiaceae
2	<i>Achyranthes aspera</i> L.	Amaranthaceae

3	<i>Adiantum lunulatum</i> Cav.	Pteridaceae
4	<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae
5	<i>Ageratum conyzoides</i> (L.)L.	Asteraceae
6	<i>Aloe vera</i> (L.) Burm.f.	Asphodelaceae
7	<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Amaranthaceae
8	<i>Alternanthera sessilis</i> (L.)R.Br.ex DC.	Amaranthaceae
9	<i>Blumea lacera</i> (Burm.f.) DC	Asteraceae
10	<i>Boerhavia diffusa</i> L.	Nyctaginaceae
11	<i>Cardiospermum halicacabum</i> L.	Sapindaceae
12	<i>Christella</i> <i>dentata</i> (Forssk.) Brownsey &Jermy	Thelypteridaceae
13	<i>Chrysopogon zizanioides</i> (L.) Roberty	Poaceae
14	<i>Cleome rutidosperma</i> DC.	Utricaceae
15	<i>Coldenia procumbens</i> L.	Boraginaceae
17	<i>Colocasia esculenta</i> (L.) Schott	Araceae
18	<i>Commelina diffusa</i> Burm.f.	Commelinaceae

Table -1a: List of Aquatic plants in Government General Degree College at Dantan-II campus.

Sl. No.	Scientific Name	Family
1.	<i>Alocasia esculanta</i>	Araceae
2.	<i>Alternanthera philoxeroides</i>	Asteraceae
3.	<i>Astracantha longifolia</i>	Acanthaceae
4.	<i>Commelina diffusa</i>	Commelinaceae
5.	<i>Eichhornia crassipes</i>	Potederiaceae
6.	<i>Enhydra fuctuens</i>	Asteraceae
7.	<i>Ipomoea aquatic</i>	Convolvulaceae
8.	<i>Jussia repens</i>	Onagraceae
9.	<i>Mikania scandens</i> (L.) Wild.	Asteraceae

10.	<i>Nymphaea alba</i>	Nymphaeaceae
11.	<i>Salvinia sp.</i>	Salviniaceae
12.	<i>Urticularia Sp.</i>	Lentibulariaceae

Table -2 : Plants of flower Garden

Sl. No.	Scientific Name	Local Name	Family
1	<i>Catharanthus roseus</i> (L.) G.Don.	Nayantara	Apocynaceae
2	<i>Datura metel</i> L.	Dhutura	Solanaceae
3	<i>Duranta erecta</i>	Duranta	Verbenaceae
4	<i>Hibiscus vitifolius</i> L.	Jaba	Malvaceae
5	<i>Ixora coccinea</i> L	Rangan	Rubiaceae
6	<i>Mirabilis jalapa</i> L.	Sandha moni	Nyctaginaceae
7	<i>Portulaca grandiflora</i> Hook.	Morning glory	Portulacaceae
8	<i>Rhoeo discolor</i> (L'Hér.) Hance	Rio	Commelinaceae
9	<i>Rosa chinensis</i> Jacq.	Golap	Rosaceae
10	<i>Sansevieria roxburghiana</i> Schult. & Schult.f.		Asparagaceae

Table -3: List of fruit plants present in campus

Sl. No.	Scientific Name	Local Name	Family
1	<i>Annona Squamosa</i> L.	Ata	Annonaceae
2	<i>Carica papaya</i> L.	Pepe	Caricaceae
3	<i>Musa acuminata</i> Colla	Kola	Musaceae
4	<i>Psidium guajava</i> L.	Peyara	Myrtaceae
5	<i>Punica granatum</i> L.	Bedana	Lythraceae
6	<i>Syzygium cumini</i> (L.) Skeels	Jam	Myrtaceae

Faunal Diversity- The College has two ponds, trees, waste land, low land, banana garden which are habitat of faunal components. So, wide varieties of fauna are supporting its biodiversity. The college campus is the feeding and breeding ground of the many animals. Different types of earth worm, insects (moths, butterfly, wasp, and bees), amphibian, reptilian, birds and mammals are

found near the large pond. There is one big size pond are present under the college premises. In those ponds there have many indigenous fresh water fishes which are nourished. From conversation with faculty members, different stakeholders of the college, following information are collected.

Phylum: Annelida		
Local Name	Scientific Name	
1	Kecho	<i>Pheretimaposthuma</i>
2	Joke	<i>Hirudinariasp</i>
Phylum: Arthropoda		
1	Prajapati	<i>Papilio</i> sp
2	Moth	<i>Galleria</i> sp
3	Moumachi	<i>Apissp</i>
4	Jonaki	<i>Lampyrinoctiluca</i>
5	Arsola	<i>Periplanetaamericana</i>
6	Vimrul	<i>Vespa orientalis</i>
7	Lalpipra	<i>Oecophyllasmaragdina</i>
8	Kakrabicha	<i>Buthussp</i>
9	Tetulbicha	<i>Scolopendrasp</i>
10	Kenno	<i>Julussp</i>
11	Pangapal	<i>Schistoceragregaria</i>
12	Anopilis masa	<i>Anopheles</i> sp
13	Culex masa	<i>Culexsp</i>
14	Ades masa	<i>Aedessp</i>
15	Gubrepoka	<i>Coprislunaris</i>
16	Pharing	<i>Orthetrumsp</i>
17	Wepoka	<i>Odontotermessp</i>
18	Machi	<i>Muskadomestica</i>
19	Makarsa	<i>Nephilasp</i>
Phylum: Mollusca		
20	Sthalsamuk	<i>Acatinafulica</i>
21	Jalsamuk	<i>Pilaglobosa</i>
22	Gugli	<i>Bellamyabengalensis</i>
23	Jhinuk	<i>Lamellidensmarginalis</i>
24	Kath joke	<i>Limaxsp</i>
Fresh water fishes		
1	Ruimach	<i>Labeorohita</i>
2	Katlamach	<i>Catlacatla</i>
3	Mrigelmach	<i>Cirrhinusmrigala</i>
4	Bata mach	<i>Labeobata</i>
5	Kalbose	<i>Labeocalbasu</i>
6	Batkurmach	<i>Glossogobiusgiuris</i>
7	Magurmach	<i>Clariasbatrachus</i>

8	Singimach	<i>Heteropneustesfossilis</i>
9	Latamach	<i>Channapunctatus</i>
10	Chang mach	<i>Channagachua</i>
11	Sholmach	<i>Channastrata</i>
12	Koi mach	<i>Anabasatestudineus</i>
13	Phaloimach	<i>Notopterusnotopterus</i>
14	Phutimach	<i>Puntiusticto</i>
15	Mourlamach	<i>Amblypharyngodonmola</i>
16	Techoka or Bostam pona	<i>Aplocheiluspanchax</i>
17	Kholsamach	<i>Coliasp</i>
18	Pankalmach	<i>Mastacembelussp</i>
19	Dhariamach	<i>Esomusdanricus</i>
20	Chandamach	<i>Chandasp</i>
21	Tangra	<i>Mystussp</i>
Class : Amphibia		
1	Kuno bang	<i>Duttaphrynusmelanostictus</i>
2	Sona bang	<i>Ranatigrina</i>
Class: Reptilia		
1	Loudaga	<i>Ahaetullanasutas</i>
2	Jaldhora	<i>Xenochriphis piscator</i>
3	Matiali sap	<i>Elachistodonwestermanni</i>
4	Jamna sap	<i>Ptyasmucosus</i>
5	Godi sap	<i>Varanussp</i>
6	Keute	<i>Najasp</i>
7	Tiktiki	<i>Hemidactylusflaviviridis</i>
8	Girgiti	<i>Calottes versicolor</i>
9	Kachhap	<i>Tryonixsp</i>
Class : Aves		
1	Charaipakhi	<i>Passer domesticus</i>
2	Tuntuni	<i>Orthotomussp</i>
3	Satbhaya	<i>Turdoideseaudatus</i>
4	Doyel	<i>Copsychussaularis</i>
5	Bulbul	<i>Pycnonotussp</i>
6	Kak	<i>Corvussplendens</i>
7	Shalik	<i>Acridotherestrictis</i>
8	Phinge	<i>Dicrurousadsimilis</i>
9	Kajalpakhi	<i>Laniuscristatus</i>
10	Kat thokra	<i>Dinopiumbenga</i>
11	Baspati	<i>Meropsorientalis</i>
12	Chotomachranga	<i>Alcedoatthis</i>
13	Sadabookmachranga	<i>Halcyon sp</i>
14	Tia	<i>Pisttaculasp</i>

15	Gughu	<i>Streptopeliachinensis</i>
16	Paia	<i>Columba livia</i>
17	Dahuk	<i>Amaurornisphooniurus</i>
18	Bak	<i>Ardeolagraysii</i>
Class : Mammalia		
1	Katbirali	<i>Funambuluspennantii</i>
2	Neul	<i>Herpestesedwardsii</i>
3	Mechobiral	<i>Prionailurusviverrinus</i>
4	Katas	<i>Felischaus</i>
5	Chucha	<i>Suncusmurinus</i>
6	Indur	<i>Bandicotabengalensis</i>

Table-10 Green Coverage of the College Premises

Green Coverage of the College Premises	Area in Percentage
Native and Natural Vegetation	47
Plantation	21
Agro-Plants	13
Medicinal Plants	5
Ornamental plants and flowers garden	14

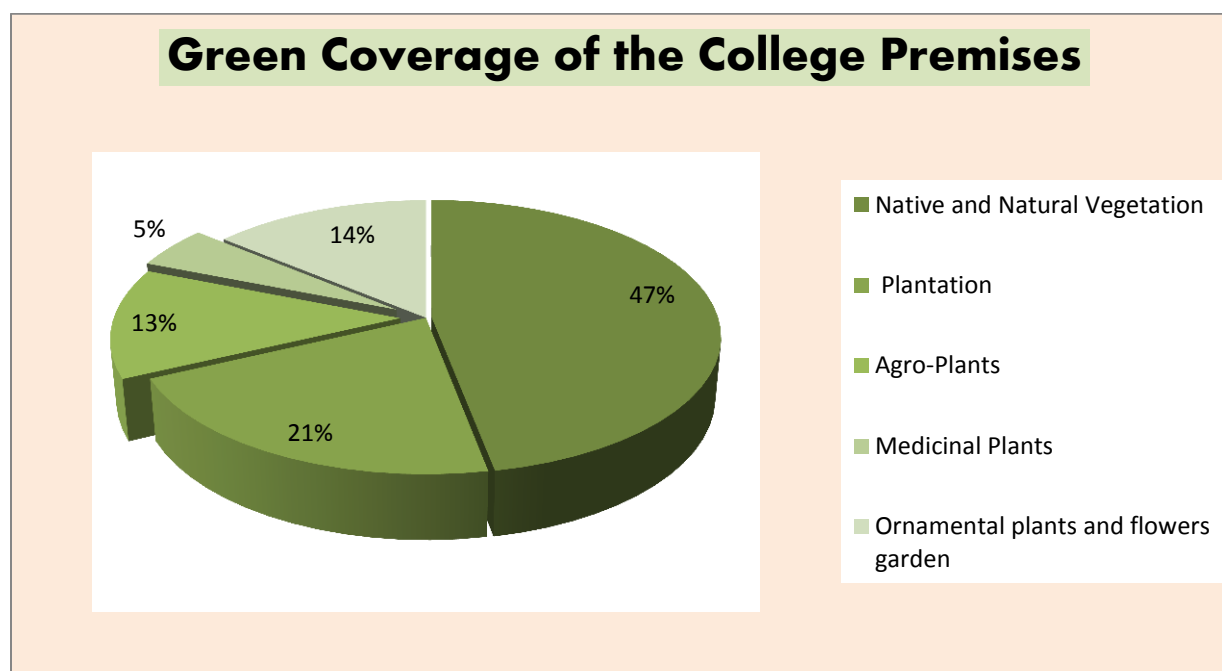


Fig. 9 Green Coverage of the College Premises

Table-11 The Avian fauna observed in the campus is enlisted below-

SL. NO.	COMMON NAME	BENGALI NAME	SCIENTIFIC NAME	IUCN STATUS
1	Red Whiskered Bulbul	Sipahi Bulbul	<i>Pycnonotusjocosus</i>	LC
2	Red Vented Bulbul	Bulbul	<i>Pycnonotuscafer</i>	LC
3	House Sparrow	ChotiCharai	<i>Passer domesticus</i>	LC
4	Eurasian Collared Dove	Par ghughu	<i>Streptopeliadecaocto</i>	LC
5	Oriental Turtle Dove		<i>Streptopaliaorientalis</i>	
	Spotted Dove	Chhiteghughu	<i>Streptopeliachinensis</i>	DD
6	Rock Dove	Rock Pigeon	<i>Columba livia</i>	LC
	Black Drongo	Finga	<i>Dicrurusmacrocerus</i>	LC
7	Asian Pied Starling	GuyeSalik	<i>Sturnus contra</i>	LC
8	White-breasted Kingfisher	SandabukMachhranga	<i>Halcyon smyrnensis</i>	VU
9	Common Kingfisher	ChottoMachhranga	<i>Alcedoatthis</i>	LC
10	House Crow	Kak	<i>Corvussplendens</i>	LC
11	Jungle Babbler	Chhatare/Satbhai	<i>Argyastriatus</i>	LC
12	Black-headed Oriole	BeneBau	<i>Oriolusxanthornus</i>	LC
13	Eurasian Golden Oriole	SonaBau	<i>Oriolusoriolus</i>	LC
14	Common Myna	Salik	<i>Acridotherestrictis</i>	LC
15	Blue Rock Pigeon	GolaPayra	<i>Columba liviademestica</i>	
16	Common Hoopoe	Mohonchura	<i>Upupaepops</i>	LC
17	Asian Koel	Kokil	<i>Eudynamysscolopacea</i>	LC
18	Rose-ringed Parakeet	Tia	<i>Psittaculakrameri</i>	LC
19	Brown Shrike	Karkata	<i>Laniuscristatus</i>	LC
20	Indian Treepie	HandiChacha	<i>Dendrocittavagabunda</i>	LC

Table-12 The Mammalian checklist is as follows-

SL. NO	COMMONNAME	BENGALINAME	SCIENTIFICNAME	IUCN RED LIST
1	FivestripedPal m Squirrel	Kath Berali	<i>Funambuluspennantii</i>	Least Concern (LC)
2	Free-rangingCat	Biral	<i>Felisdomesticus</i>	DD
3	Free-rangingDog	Kukur	<i>Canisfamiliaris</i>	DD
4	AsianPalmCivet	Bham	<i>Paradoxurushermaphroditus</i>	LC
5	FieldRat	MethoIndur	<i>Bandicotabengalensis</i>	LC
6	GreyMongoose	Beji	<i>Herpestesedwardsii</i>	LC
7	HouseMouse	NengtiIndur	<i>Musmusculus</i>	LC
8	Small Indian Civet	Kotas	<i>Viverriculaindica</i>	LC
9	Bengal Fox	Fox	<i>Vulpesbengalensis</i>	LC
10	Indian gray mongoose	Neul	<i>Herpestesedwardsii</i>	LC

*NE: Not evaluated; LC: Least concerned; NA: Not accessed

Implemented Biodiversity & Green Management		
Sl. No	Factors/ Indicators	Weightage
1	Plants Diversity	M
2	Birds and Insects	M
3	Mammals	M
4	Fishes and Amphibian	H
5	Fungus & Organisms	M

* H denote- Taken management policy level above 60%

** M denote- Taken management policy level 40%-60%

*** L denote-Taken management policy level below 40%

3.7 Reviews of Documents and Records:

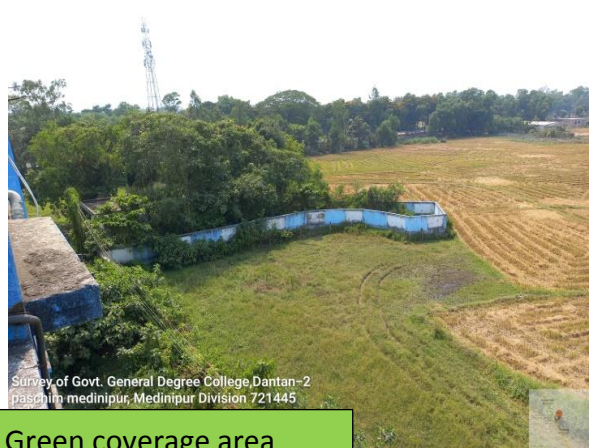
Documents such as admission registers, registers of Engineering and water charge remittance, furniture register, laboratory equipment registers, purchase register, audited statements, and office registers were examined and data were collected. College calendars, college magazines, annual report of the college and NAAC self-assessment reports, UGC report etc. were also verified as part of data collection.

3.8 Review of Policies:

Discussions were made with the College management regarding their policies on environmental management. Future plans of the College were also discussed. The management would formulate a revised environment /green policy for the college in the light of green auditing. The purpose of the green audit was to ensure that the practices followed in the campus are to be in accordance with the Green Policy adopted by the institution.

3.9 Interviews:

In order to collect college information for green auditing different audit groups which are IQAC Cell, Dept. HOD, Teaching and non-teaching staff, students, Students Union, parents and other stakeholders of the College. Discussions were also made with the office bearers to clarify doubts regarding certain points.



Surface water bodies and Green coverage area

4.0 POST AUDIT STAGE :

4.1. Data Analysis and Assessment :

The base of any Green audit and Environmental audit is that its findings are supported by documents and verifiable information. The audit process seeks, on a sampled basis, to track past actions, activities, events, and procedures to ensure that they are carried out according to systems requirements and in the correct manner. Although Green & Environmental audits are carried out using policies, procedures, documented systems and objectives as a test, there is always an element of subjectivity in an audit. Each of the three components is crucial in ensuring that the organization's environmental performance meets the goals set in its green policy. The individual functioning and the success of integration will all play a role in the degree of success or failure of the organization's environmental performance.

4.2 Results and Findings:

a) Water -

Water Audit and Assessment

Sl. No.	Object and Parameter	Observation and Finding
1.	Source of water	➤ Underground(15000 liter)
2.	Capacity of water storage (Daily)	➤ Reservoir and Overhead tanks- 16000 liter ➤ Total amount of used & misused water- 15500ltr ➤ Total misuse of water-155 ltr
3.	Amount of used water per day	15500liter
4.	Misuse of water in daily	Leakage, overflow and Misuse-155 liter
5.	Maximum used of water per day - for washroom purpose	47% (7285 liter)
6.	Amount of water for used per day- Drinking Purpose	11 % (1705liter)
7.	Surface water Harvesting	The Micro surface water bodies are available in college campus..
8.	pH level of drinking water	7-7.2
9.	TDS level of drinking water	110ppm -125ppm



b. Energy

- ❖ Electricity Consumption - 27961 Unit, Rs.- 268435.39/- Per Year
- ❖ Fossil fuel consumption per Year:
 - a. Number of Gas cylinders used for cooking purpose(Canteen) – 6 PC
 - b. Number of Gas cylinders used in Chemistry Laboratory - 02 PC
 - c. Diesel used for green Generator- 400 liter
- ❖ Number of Green Generators - 01
- ❖ Cost of generator fuel – Rs. 36000 /year

Energy Audit and Assessment

Sl. No.	Object and Parameter	Observation and Finding
1.	Source of energy (conventional)	100 %
2.	Total consumption of Electric Power	27961 unit
3.	Maximum energy consumption in the purpose	Light and fans - 12023.23 Unit/year
4.	Energy Consumption in Computer & Lab.	6431.03 unit /year
5.	No. of LPG Gas cylinder for cooking purpose	06PC/ Year
6.	No. of LPG Gas cylinder used in Laboratories	02pc/Year
7.	Amount of diesel used for green generator	400 liter/Year
8.	No. of AC and use of energy	4194.15 unit/year

c. Wastes-

- Total Students - 703 persons
- Other Stakeholders – 04 persons
- Total Stakeholders - 743 persons
- Departments – 11

- Canteen- 01

D. Wastes Management Policy:

- Biological Wastes treatment by Vermi-compost system is processing.
- E-wastes- computers, electrical and electronic parts – Disposal by selling
- Plastic waste- disposal by selling
- Solid wastes – Damaged furniture, Iron & Metal scraps- Disposal by Selling
- Food wastes – Waste Rice, Vegetable, Paper plates- Disposal in Earthen pit and Compost pit.
- Chemical wastes – Laboratory waste – Not proper treatment
- Waste water – washing, urinals, and bathrooms in soak pits.
- Glass waste – Broken glass wares from the labs by selling.
- Napkin & Clothes incinerators- Disposal in earthen pit

Waste Audit and Assessment

Sl. No.	Object and Parameter	Observation and Finding
1	Degradable waste	22 (Kg/Day)
2	Non degradable	3 (Kg/Day)
3	Main Source of waste (Organic)	Canteen and Garden
5	Plastic waste management	Use of separate dustbin and Established of different waste unit

d) Green Campus-

Green cover of the campus- 0.97acre area

Free space including Playground- 1.42acre area

Crops cultivated in the campus: Banana, Tapioca, Chilly, Cabbage, Tomato, Spinach, Brinjal, Cauliflower, Ladies finger, Pea and different seasons flowers are produced during different seasons in Hostels and Quarters Kitchen garden and College premises area.

Table 13 Biodiversity and Green Coverage

Sl. No.	Object and Parameter	Observation and Finding
1	Vegetation coverage area	19%(0.97Acre)
2	Types of green coverage	<ul style="list-style-type: none"> ➤ Native and Natural Vegetation- 47% ➤ Medicinal plants- 5% ➤ Agro-plants- 13%
3	Different types of Animal	<ul style="list-style-type: none"> ➤ Mammals -Squirrel, Rat, Free ranging Cat, Free ranging Dog, Field Rat, Bengal Fox etc. ➤ Amphibian-Snake, Frogs ➤ Birds- Crow, Common Moyna, Pigeon, etc. ➤ Insects- Ants, Butterfly, Spider etc.
4	Biodiversity and Green Management Programme	<ul style="list-style-type: none"> ➤ Awareness program arrange by- college among the students and Stuff through the year ➤ Observation and celebration of environmental days ➤ Installation of different trees and plants naming plate

Campus farming

Organic vegetable cultivation as interim crop is another plan to be materialized soon. The department of Zoology has been consistently undertaking Fishes cultivation, and Botany department has been planting of flowers and ornaments trees in winter .

e) Carbon Footprint-

- Number of Students & Staff using cycles – 200
- Number of persons using cars – 1
- Number of persons uses two wheelers – 12
- Number of students uses Buses - 503
- Number of persons using other transportations – 27
- Number of visitors per day – 6
- Average distance travelled by stake holders – 10 kms /day
- Expenditure for transportation per person per day – Rs.15/-

4.3 SUMMARY:

- I. The environmental awareness initiatives are adequate.
- II. The College campus is plastic free and maintained the outdoor air quality.
- III. The installation of solar panels, Vermi composting practices are inadequate.
- IV. There is NSS team of the College towards its environmental performance for Community development.
- V. Indoor air quality of the laboratories is very uncomfortable and inhospitable.
- VI. Use of notice boards and signs are inadequate to reduce over exploitation of natural resources.

- VII. Programs on green initiatives have to be increased. Campus is declared “Clean Campus”
 VIII. Fully carbon foot prints and wastes free zone actions should be taken to maintain this.
 IX. Rain water harvesting systems, solar power generation, Bio Gas, Re-use of water environmental education programs have to be fully explored.

Implemented Air Quality management		
Sl No	Indicator	Weightage
1	Carbon & Smoke free	H
2	Exhaust fans & Ventilation	M
3	Emission of GHGs	M
4	Indoor Plants	L

* H denote- Taken management policy level above 60%

** M denote- Taken management policy level 40%-60%

*** L denote-Taken management policy level below 40%

Major Audit Observations		
Sl. No	Sectors/Indicators	weightage
1	Water efficiency Audit	H
2	Energy efficiency Audit	M
3	Air Quality & Carbon foot print Audit	M
4	Wastes Audit	M
5	Green & Biodiversity Audit	M

* H denote- Taken management policy level above 60%

** M denote- Taken management policy level 40%-60%

*** L denote-Taken management policy level below 40%

4.4 Environmental Education:

The following environmental education program may be implemented in the College before the next green and environmental auditing:-

- ❖ Setting up Water recycle and Reuse project for Drinking water purpose.
- ❖ Setting up of medicinal plant nursery, water management, vegetable cultivation, tree planting, energy management, landscape management programme , and rain water harvesting and water re-use methods.
- ❖ Increase the number of display boards on environmental awareness such as – save water, save electricity, no wastage of food/water, no smoking, switch off light and fan after use, plastic free campus etc.
- ❖ Activate the nature or green clubs
- ❖ Set up Organic vegetable garden, Honey farm, Mushrooms, Indigenous fish farm etc. for providing proper training to the students.

- ❖ Conduct exhibition and poster competition on Green and Clean campus for sustainable and healthy academic environment.

4.5 Common Recommendations

- ✓ Maintain of Indoor air quality
- ✓ Establish a solar pump house or solar submersible pump
- ✓ Adopt an environmental policy for the college
- ✓ Establish a purchase policy for environmental friendly materials
- ✓ Introduce UGC Environmental Science course to all students
- ✓ Conduct more seminars and group discussions on environmental education
- ✓ Students and staff can be permitted to solve local environmental problems
- ✓ Renovation of cooking system in the canteen to save gas and wooden fuel
- ✓ Installation of modern e-waste management unit
- ✓ Establish the crasser machine for plastic waste treatment
- ✓ Establish a biodiversity park
- ✓ Establish a scientific treatment unit for chemical waste management.

4.6 Criteria Wise Recommendations

Water Audit.

- Establish the re-use water management methods.
- Establish rain water harvesting systems for campus.
- Establish the more water reuse unit in the Hostel & staff quarter's area.
- Establish water treatment systems.
- Awareness programs on water conservation to be conducted.
- Remove damaged taps and install sensitive taps is possible.
- Drip irrigation for gardens and micro irrigation technology can be initiated

Energy Audit

- ✓ Employment of more solar panels and other renewable energy sources.
- ✓ Conduct more save energy awareness programs for students and staff.
- ✓ Replace computers and TVs with LED monitors.
- ✓ More energy efficient fans, tubes and bulb should be replaced.
- ✓ Automatic power switch off systems may be introduced.

Waste Audit

- ❖ A model solid waste treatment system to be established.
- ❖ Practice of waste segregation to be initiated.
- ❖ Establish of a unit for chemical liquid wastes and Hazardous waste management
- ❖ A model Vermi composting plant to be set up in the Hostels, canteen and Quarters of college campus.
- ❖ Establish an e-waste management unit
- ❖ Establish the crasser machine for plastic waste treatment

Green Campus Audit

- ✓ Grow potted indoor plants at verandah, class rooms and Laboratories.
- ✓ Create automatic drip irrigation system during summer holidays.
- ✓ Not just celebrating environment day but making it a daily habit.
- ✓ Providing funds to nature club for making campus more green
- ✓ Encouraging students not just through words, but through action for making the campus green all trees in the campus should be named scientifically.
- ✓ Establish a biodiversity park
- ✓ Create more space for planting in vacant land.
- ✓ Develop the Herbal and medicinal plants garden for large area
- ✓ Establish a butterfly park.
- ✓ Establish an Orchid ex-situ zone .
- ✓ Develop the Fruits trees area for Birds conservation
- ✓ Conducting competitions among departments for making students more interested in making the campus green.

Carbon footprint Audit

- ❖ Establish a system of carpooling among the staff and visitors to reduce the number of four wheelers coming to the college.
- ❖ Establish the indoor plants in office rooms ,computer lab and other laboratories to CO₂ management
- ❖ Providing more college bus services to the students and staff.
- ❖ Encourage students and staff to use cycles.
- ❖ Establish a more efficient cooking system to save gas.





Executive Summary: 2022-23

Environmental Audit is a process of systematic, documented, periodic and objective evaluation of components of environmental diversity with the aim of safeguarding the environment and natural resources. The process starts with the systematic identification, quantification, recording, reporting and analysis of components of environmental diversity and is a means of assessing environmental performance (Welford, 2002). It aims to analyze environments within and outside of the concerned area, which will have an impact on the eco-friendly atmosphere. Green and Environmental audit is a valuable means for an institution to determine how and where they are using the most resources; the institution can then consider how to implement changes and take necessary management measures. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of green impact on their area of work. Environmental auditing and the implementation of mitigation measures is a win-win situation for the institution, the learners and the planet. It can also create health consciousness and promote to holistic approaches to environmental management, awareness, values and ethics. Green and Environmental auditing promote financial savings through efficiency of resource usage. It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers. 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 institute

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.

In Government General Degree College, Dantan-II W.B the audit process involved initial interviews with the teachers and staffs to clarify policies, activities, records and the cooperation in the implementation of mitigation measures. This was followed by collection of data through the questionnaires, review of records, observation and enquiry of practices and observable outcomes. In addition, the approach ensured that the management and staff are active participants in the Green and Environmental auditing process. The baseline data prepared for the Government General Degree College, Dantan-II will be a useful tool for campus greening, resource management, planning of future projects, and a document for implementation of sustainable development. Existing data will allow the College to compare its programmers and operations with those of peer institutions, identify areas in the need of improvement, and prioritize the implementation of future projects.

The area of the College premises is 5.08 acre out of which about 0.97 acre areas is covered by trees, plants etc. and 1.22 acre areas is covered by surface water bodies and wetland In the present audit report most of the aspects are covered such as tree plantation, awareness about environment programmers, rain water harvesting and plastic free premises. The College has already taken some steps to protect the environment with help of teachers, staff and students under the guidance of Dr. Shaishab Kumar Dinda, Officer-in-Charge, Government General Degree College, Dantan-II. We expect that the management will be committed to implement the green and environmental audit recommendations. We are happy to submit this green and environmental audit report to the Government General Degree College, Dantan-II,W.B.