GREEN AUDIT REPORT (2023-2024)

B.L.D.E. Association's

JSS College of Education, Vijayapura

Prepared By

SAHYAGIRI ENTERPRISES

Kalpataroo Building, Near Ram Mandir, Ward No.2 JathTaluka- Jath, Dist- Sangli

416404 **Phone:** 91-9028075073 **Email:** sahyagirienterprises@gmail.com

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- Teaching & Non- teaching Staff of College

For giving us necessary inputs to carry out this very vital exercise of Green Audit. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

2.0 DISCLAIMER

Sahyagiri Enterprises Green Audit Team has prepared this report for B.L.D.E. Association's JSS College of Education, Vijayapura based on input data submitted by the representatives of College complemented with the best judgment capacity of the expert team.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

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Report by: Mayuri M. Jadhav
EMS Lead Auditor

3.0 CONCEPT

Green Audit is defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyse environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Green audit is assigned to the criteria 7 of NAAC, (National Assessment and Accreditation Council) which is a self-governing organization of India which declares the institutions as Grade A, B or C according to the scores assigned during the accreditation.

4.0 INTRODUCTION

A Nation's growth starts from its educational institutions, where the ecology is thought as a prime factor of development associated with environment. Educational institutions now days are becoming more sensitive to environmental factors and more concepts are being introduced to make them eco-friendly. To preserve the environment within the campus, various viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the energy savings, recycle of waste, water reduction, water harvesting etc. The activities pursued by colleges can also create a variety of adverse environmental impacts.

Environmental auditing is a process whereby an organization's environmental performance is tested against its environmental policies and objectives. Green audit is defined as an official examination of the effects a college has on the environment. As a part of such practice, internal environmental audit (Green Audit) is conducted to evaluate the actual scenario at the campus.

Green audit is a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. Green auditing and the implementation of mitigation measures is a win-win situation for all the college, the learners and the planet. It can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus.

Green auditing promote financial savings through reduction of resource use. It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers. Thus it is imperative that the college 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.

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.

Environmental Management Systems (EMS) is very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the

world have started adopting compatible environmental management systems either voluntarily or for promoting standards by external certification. International environmental standards do not suit the existing Indian educational system. Hence Sahyagiri Enterprises has developed a compatible system by developing locally-applicable techniques.

A very simple indigenized system has been devised to monitor the environmental performance of educational institutions. It comes with a series of questions to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance.

This innovative scheme is user-friendly and totally voluntary. The environmental monitoring system helps the institution to set environmental examples for the community and to educate young learners. It can be adapted to urban and / or rural situations.

5.0 OVERVIEW OF INSTITUTE

The inception of BLDE Association in 1910 dawned a golden era of revolution and new awakening in education field. It was due to the farsighted vision of eminent lovers of knowledge such as Dr. F.G. Halakatti and Poojya Sangana Basava Swamiji of Banthnal and others. Their philanthropic mission was to propagate education in this educationally and economically backward region. The phenomenal growth and development of the Association took place under the dynamic leadership of Late Shri B.M. Patil. Presently, the association has witnessed academic excellence by the dedication of Shri M.B. Patil, the President of Association. Today, the Association runs 75 educational institutions in all genres of education from Primary level to P.G courses and it embraces Professional and Technical Colleges such as Medical, Engineering and Pharmacy etc. It has also 1000 bedded hospital and Research Centers in Medical Science and Humanities. The Association has also built a Multi Super Specialty hospital. It will be opened for public service shortly. To crown its glory, the Association has obtained the status of BLDE University. At present, more than 25, 512 students have been studying in various disciplines with 2200 teaching and 1660 administrative staff. BLDE institutions in their vast expansion and dissemination of knowledge stand testimony of excellence in education and social service.

BLDEA established a College of Education in 1980. At the time of its inception, it was affiliated with Karnataka University, Dharwad. The college was the brainchild of Shri B M Patil, the then General Secretary of the BLDE Association. He was a farsighted visionary who recognized the need to provide quality education in the teaching field. Prof. N G Karur, the founder Principal of the institute, laid a strong foundation with a missionary zeal to develop the best teacher education institution in Karnataka.

In 1995 the college was renamed Jnanayogi Shri Siddeshwara Swamiji College of Education. From the year 2010 – 11 college has been affiliated with Rani Channamma University, Belagavi. IGNOU and KSOU recognized the college's standard and quality of education and set up their study centres on the campus. The college has 6 Acre campus Area. The college is accredited by NAAC to B grade.

The college offers courses in B.Ed, M.Ed, and PhD courses for candidates willing to pursue a career in education. The college, right from its inception has shown academic excellence and students have won meritorious awards and have maintained top ranks in the University examinations as well as in extra-curricular activities. Total Student strength of college is 250. College has total 10 teaching staff and 9 non-teaching staff. College has highly qualified staff.

The infrastructure of a college plays a vital role in the development of the college as the students are now focusing on the labs, class rooms, etc. while selecting a college. It is important that the college has very good infrastructure with ICT Based Classrooms, Specious Computer Lab, I.Q.A.C Department, NSS, Separate Canteen, Auditorium, Library, Ladies Recreation Room, Department Cabins, Playground and Store Rooms etc. Various indoor and outdoor games are conducted by college.

The college has also adopted the 'Green Campus' system for environmental conservation and sustainability. The goal is to reduce CO_2 emission, water use while creating an atmosphere where students can learn and be healthy.

6.0 AUDIT OBJECTIVES AND SCOPE

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its sustainability.
- To secure the environment and cut down the threats posed to human health by analysing the pattern and extent of resource use on the campus.
- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requires high cost.
- Developing an environmental ethic and value systems in young people.
- Improving environmental standards.
- Benchmarking for environmental protection initiatives.
- Enhancement of College profile.

7.0 EXECUTIVE SUMMARY

The rapid urbanization and economic development at local, regional and global level has 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 for sustainable development.

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes out-dated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

B.L.D.E. Association's JSS College of Education, Vijayapura done internal green assessment and annual reports published for continual improvements; QS Programme and doing their bid towards environmental protection and environmental awareness at local and global front.

The methodology include: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity.

This audit report contains observations, appreciations and recommendations for improvement of environmental consciousness.

8.0 METH0DOLOGY

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- Waste Management
- Energy Conservation
- Water Conservation
- Green area management/biodiversity survey
- Noise, Ventilation and Illumination study
- Carbon Footprint
- Best Practices for Environment

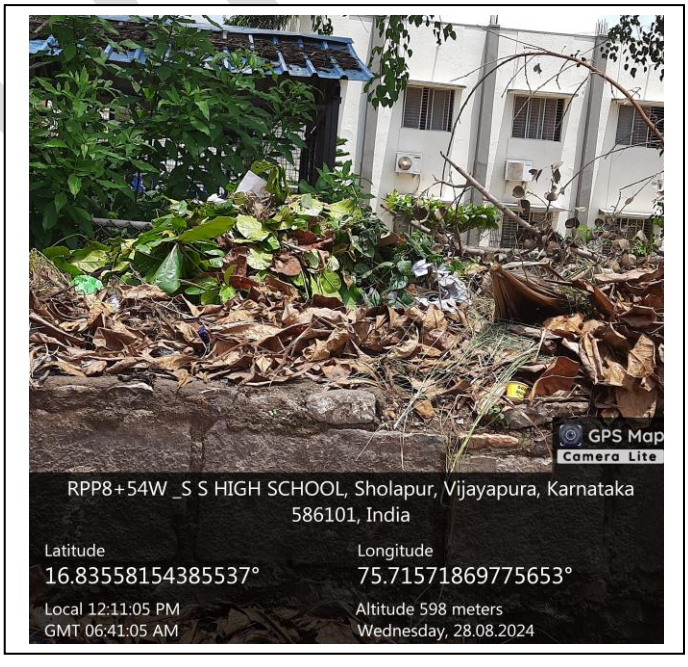
9.0 OBSERVATIONS, APPRECIATIONS AND RECOMMENDATIONS

9.1 WASTE MANAGEMENT

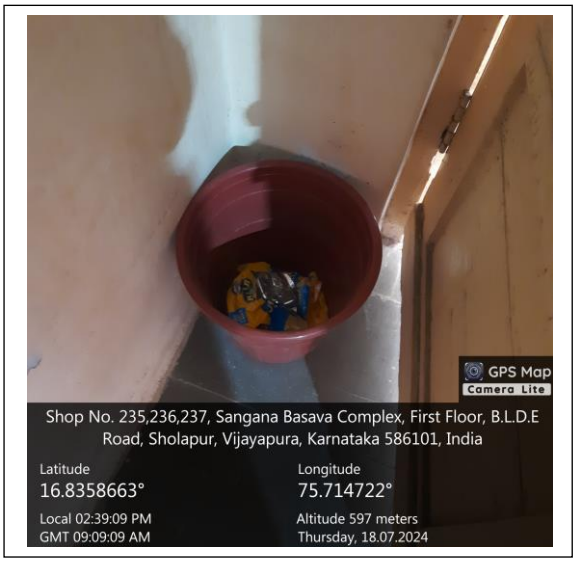
This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. and recycling. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus. The different solid wastes collected as mentioned above.

A) Observations:

The total organic waste collected in the campus is 5 kg/month. Waste generated from canteen and garden is a major solid waste in the campus. Near about 1 kg/month of non-biodegradable waste is generated in the campus including glass bottles. The waste is segregated at source by providing separate dustbins for Bio-degradable, Non-Bio-degradable waste. Single sided used papers reused for writing and printing in all departments. Very less plastic waste (0.1 kg/day) is generated by departments, office, garden etc. and it is categorized at point source and sent for recycling. The food waste from canteen is sent for composting. The institute has adopted one composting unit in campus having capacity of 500 kg and size 13'x0.7'x10'. The main purpose of this is to breakdown and decomposes all kind of organic waste by using microorganisms that require oxygen. called compost. After complete process of composting it is used as manure in the garden.



Composting Unit



Dustbins are provided throughout the college premises for waste collection

B) Appreciations:

- Each and every place of campus is provided with dustbin.
- Campus has composting unit for biodegradable waste.
- E-waste is collected**.**
- Collected E-waste is supplied to E-waste management and disposal facility in order to dispose E-waste in scientific manner.
- Every department and office tries to reduce consumption of paper.
- College reuses empty side of printed paper.

C) Recommendations:

- Make full use of all recycling facilities provided by City Municipality and private suppliers, including glass, cans, plastic bottles, batteries, print cartridges, cardboard and furniture.
- Provide sufficient, accessible and well-publicized collection points for recyclable waste with responsibility for recycling clearly allocated.

9.2 WATER CONSERVATION

This indicator addresses water consumption, water sources, irrigation, storm water appliances and fixtures. A water audit is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

A) Observations:

The study observed that bore well water and corporation water is main source of water in the campus. Water is used for drinking, canteen, toilets and gardening purpose. During the survey, no loss of water is observed, through leakages and no over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 5,000 L/day, which include 4,500 L/day for domestic purposes, 500 L/day for

gardening. College has R.O systems with capacity 250 LPH. The college has not rain water harvesting facility in a campus. The water used for drinking purpose analyzed as per IS 10500:2012 drinking water specification and observed it was potable**.**

Daily Water Consumption

Parameter	Quantity	Total water consumption
Total tanks	4	5 m3
Garden water consumption	0.5 m3	
College building water consumption	4 m3	
RO water consumption	0.5 m3	

R.O. System

Sr. No.	Parameters	Results	Acceptable Limit as per IS 1O5OO: 2012	Units
1.	Colour	< 1	Max. 5	Hazen Units
2.	Odour	Agreeable	Agreeable	-
3.	pH	7.05	6.5-8.5	-
4.	Turbidity	0.5	Max. 1	N.T.U.

5.	Total Dissolved Solids	84	Max.5OO	mg/L
6.	Calcium (as Ca)	18	Max.75	mg/L
7.	Chloride (as Cl)	17	Max.25O	mg/L
8.	Floride (as F)	< 0.08	Max.1	mg/L
9.	Iron (as Fe)	<0.07	Max.0.3	mg/L
10.	Magnesium (as Mg)	9	Max. 30	mg/L
11.	Alkalinity (as $CaCO_3$)	34	Max.200	mg/L
12.	Nitrate (as NO_3)	5.19	Max. 45	mglL
13.	Sulphate (as SO_4)	2.91	Max.200	mglL
14.	Total Hardness (as CaCO3)	57	Max.200	mg/L
15.	E. coli	Absent	No Detectable	/100 ml
16.	Total Coliforms	Absent	Not Detectable	/100 ml

B) Appreciations:

- Water is properly used in the campus and water reusing strategy is followed by the college.
- R.O. reject water is reused for washrooms and gardening purpose.
- Waste water generated from campus is connected to sewer.
- Rainwater harvesting is in process.

C) Recommendations:

- Implementation of rainwater harvesting system is necessary.
- Year wise water consumption report.
- Maintenance of R.O. system is necessary.
- Provide leakage free water taps.

9.3 ENERGY CCONSERVATION:

A) Observations:

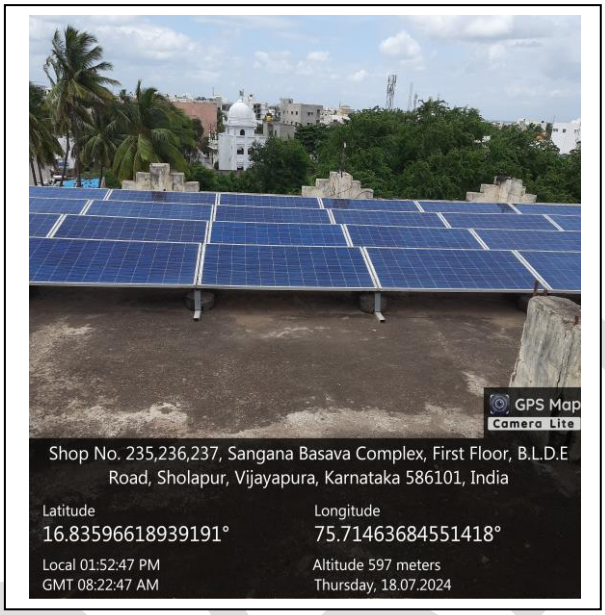
This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

Energy source utilized by all the departments and common facility center is electricity only. Maximum energy consumption is by major energy consuming equipment. College has 25kW on grid solar power plant.

All the departments and common facility centers are equipped with LED lamps. Approximately 28 computers, 4 printers, 13 projectors, 80 fans, 30 bulbs, 104 LED tubes and 2 star 2 AC these all are observed during the survey. Equipment like Computers is used with power saving mode. Also, campus administration runs switch-off drill on regular basis. In various labs after completion of wok,

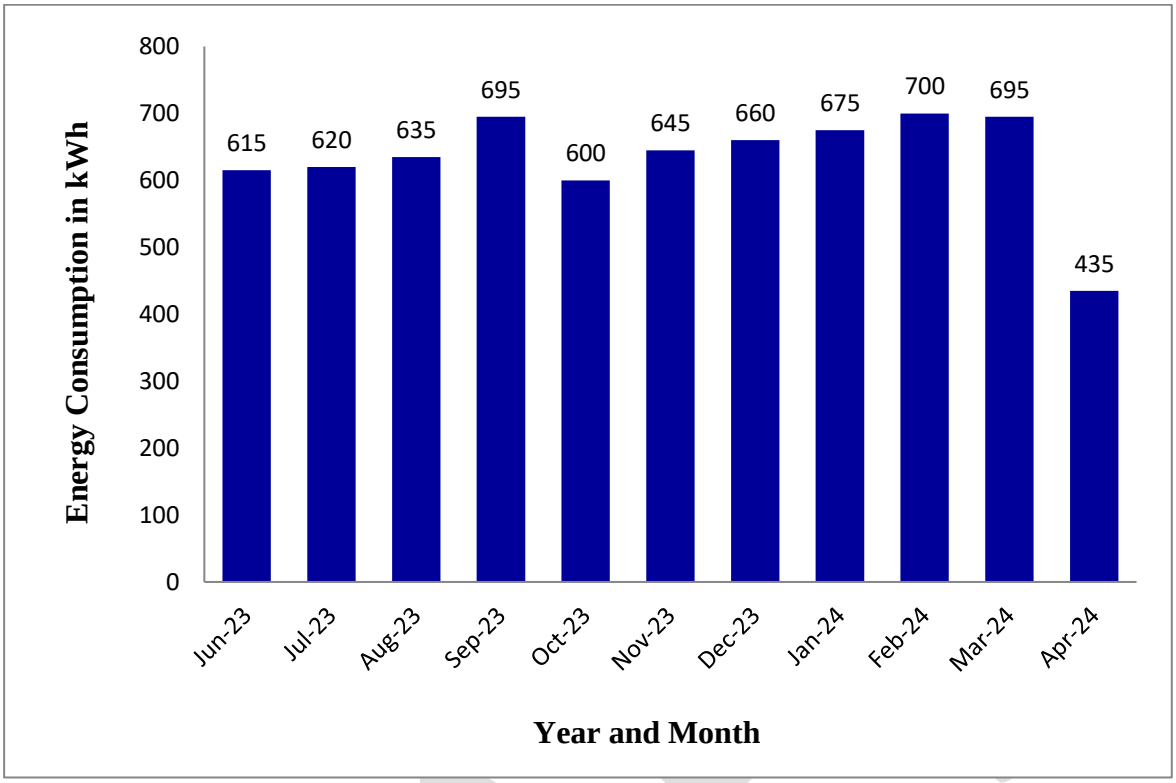
electricity was shut down; it is one of the practices for energy conservation.

The campus imports electricity from Karnataka Power Transmission Corporation Limited (KPTCL). The total electricity that was imported by the college during the year 2023 is as shown below. Total 12 month's energy consumption of the campus is presented below for the year 2023.The graph shows that institute requires more electricity and it costs too much. If instate install solar panels then it will saves electricity charges.



25 kW solar power plant

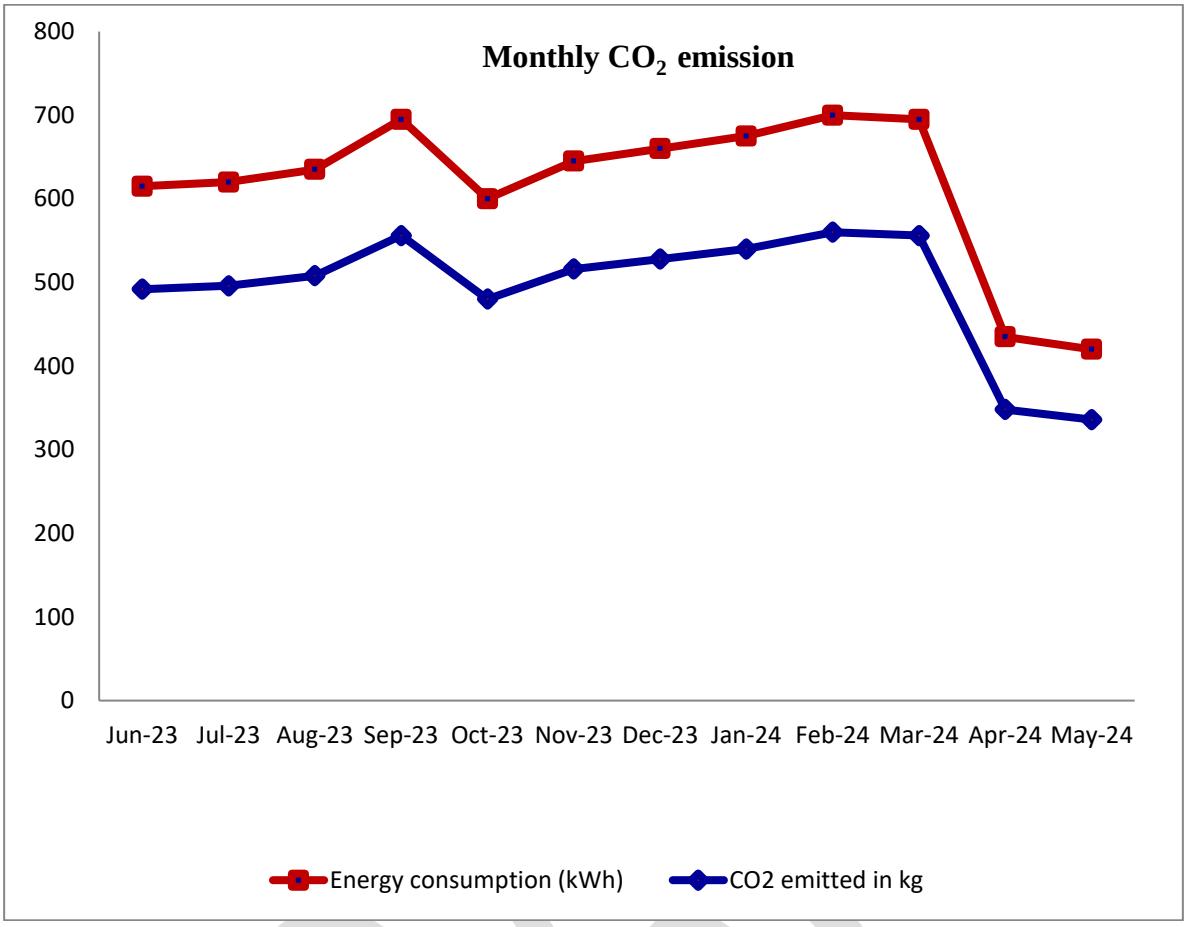
Month	Energy Consumption in units
June -2023	615
July -2023	620
August -2023	635
September -2023	695
October -2023	600
November -2023	645
December -2023	660
January -2024	675
February -2024	700
March -2024	695
April -2024	435
May -2024	420
Avg.	616.25



CARBON- DIOXIDE EMISSION

For consumption of 1 Unit (1 kWh) of Electricity, the CO_2 emitted is 0.8 Kg. OR the Emission is 0.8 Kg/kWh. In the following Table we present the total units consumed and CO_2 emitted as under:

Sr.No.	Month	Energy consumption (kWh)	CO_2 emitted in kg
1	June -2023	615	492
2	July -2023	620	496
3	August -2023	635	508
4	September -2023	695	556
5	October -2023	600	480
6	November -2023	645	516
7	December -2023	660	528
8	January -2024	675	540
9	February -2024	700	560
10	March -2024	695	556
11	April -2024	435	348
12	May -2024	420	336
	Avg.	616.25	493



B) Appreciations:

- Appreciate that college has 3 star electrical appliances like A.C.
- .Appreciate that college campus is well equipped with LED lights.
- College has 25 kW on grid solar power plant. It mitigates 935.315 tones of CO_2.

C) Recommendations:

- Installation of roof top solar panels is necessary.
- Strengthen Eco club in the college and take some initiative for energy conservation and create awareness of energy management among the students and staff.

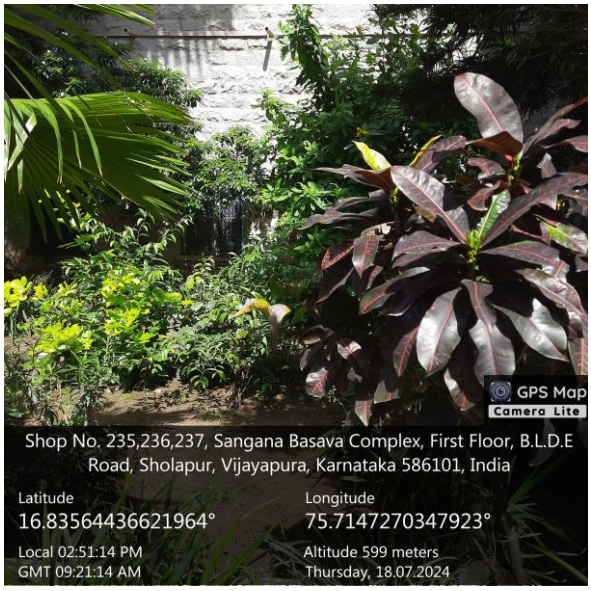
9.4 GREEN AREA MANAGEMENT/BIODIVERSITY SURVEY

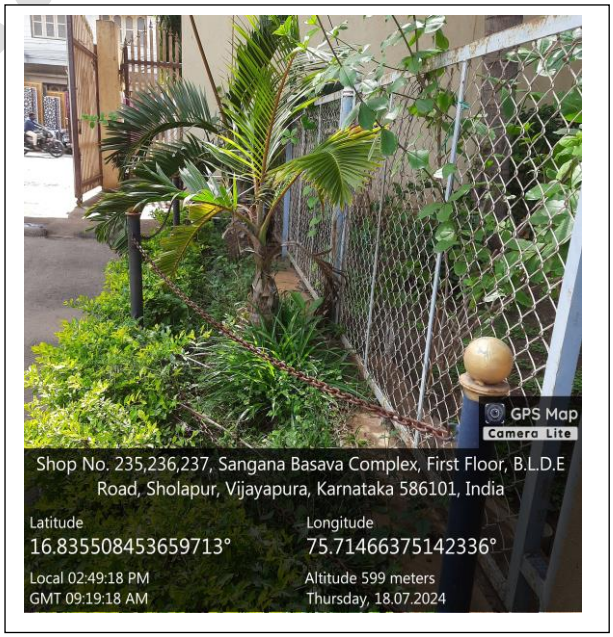
This includes the plants, greenery and sustainability of the campus to ensure that the buildings confirms to green standards. This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programs.

A) Observations:

To create-green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students, principal and all departments' faculty members.

Campus is located in the vicinity of approximately 20 (species) of trees total no.55, 15 (species) of shrubs total no.45. Approximately 15 species of birds, 8 species of mammals and 6 species of reptiles are found in the campus. Various tree plantation programs are being organized during the month of July and August at college campus and outside the college campus. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among students and staff members. The plantation program includes plantation of various type of indigenous species of ornamental and medicinal as well as wild plant species under the biodiversity and ecological survey. The Institute has a policy of gift a plant to guests in any program. It is a good thing for environment.





Green Campus

B) Appreciations

- Appreciate that the college has well developed and maintained green cover.

- Appreciate that the college has variety of trees, bushes, shrubs.
- Appreciate that college organize plant distribution program on Vanamahotsava and Ozone Day every yea***r.***
- Appreciate that college celebrates 5th June as 'Environment Day', every year and plant trees on this day to make the campus Greener**.**

C) Recommendations:

- Review periodically the list of trees planted in the campus, allot name plates and numbers to the trees and keep records.
- Try to plant more trees in the campus.
- Promote environmental awareness as a part of course work in various curricular areas, independent research projects and community services.
- Ensure that an audit is conducted annually. And action is taken on the basis of audit report and recommendation and findings.

9.5 NOISE, VENTILATION AND ILLUMINATION MONITORING

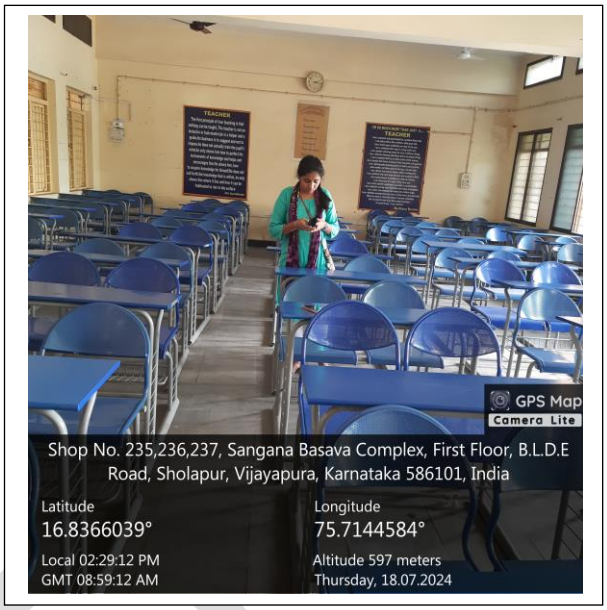
1. Noise Study:

The noise levels measurements were carried out using Noise level meter. The Noise level survey was carried out at two locations, at outside as well inside the study area campus. The major source of noise identified in the study area has been predominantly the vehicular movement and the transportation activities.

Location	**Time**	**1**	**2**	**3**	**4**	**5**	**Noise Level Readings dB (A)**
Outside	**1:30**	74.5	61	65	56	58	64.1
	2:30	72.8	58	61	60	59	62.16
Inside	**1:40**	66.7	75	55	53	61	60.54
	2:40	69.5	67	55	61	59	60.5
As per The Noise Pollution (Regulation & control) Rules, 2000 (Rules 3(1) and 4(1))							

Area Code	Area Type	Limits in dB(A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
B	Commercial	65	55

Noise Level Monitoring Outside the Campus



Noise Level Monitoring Inside the Campus

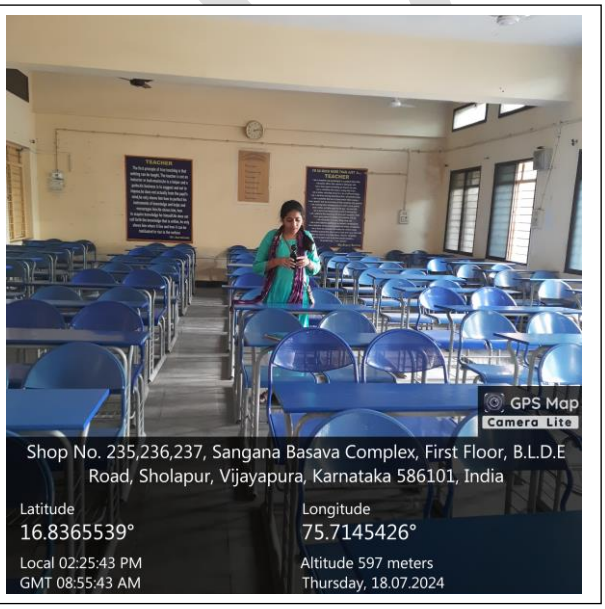
Observation:

All results of Noise level monitoring (Inside & Outside) found within limits as per the Noise Pollution (Regulation & control) Rules, 2000.

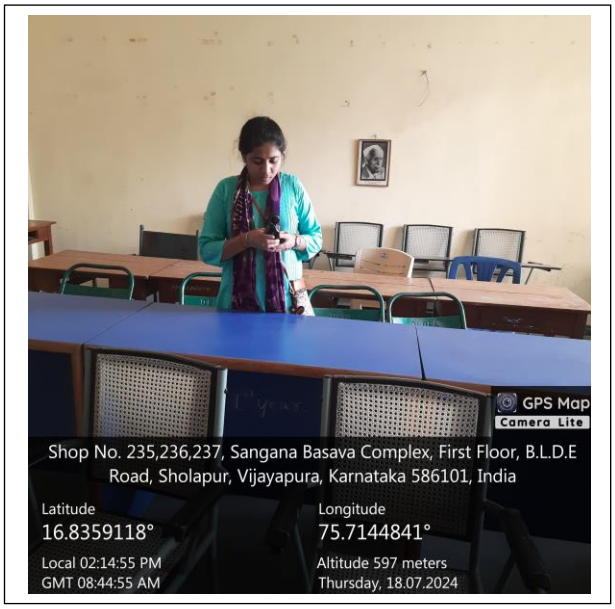
2. Ventilation Study:

The ventilation study was carried out by using anemometer. The study was carried out in classroom & Laboratory.

Sr. No.	Name of Location	Temperature (º c)	Air velocity (m/s)
1.	Classroom	28.5	0.8
2.	Laboratory	28.8	0.9



Ventilation Monitoring in Classroom



Ventilation Monitoring in Laboratory

Observation:

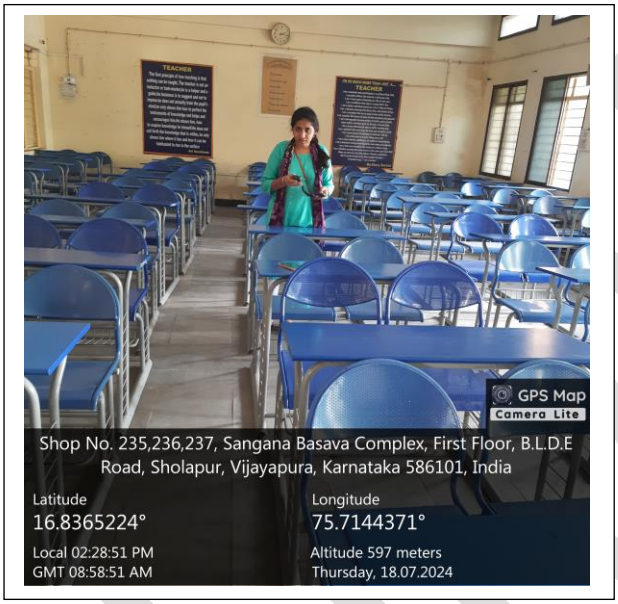
All results of ventilation study (classroom) found within limits as per Factory Act 1948,

Rule 22-A.

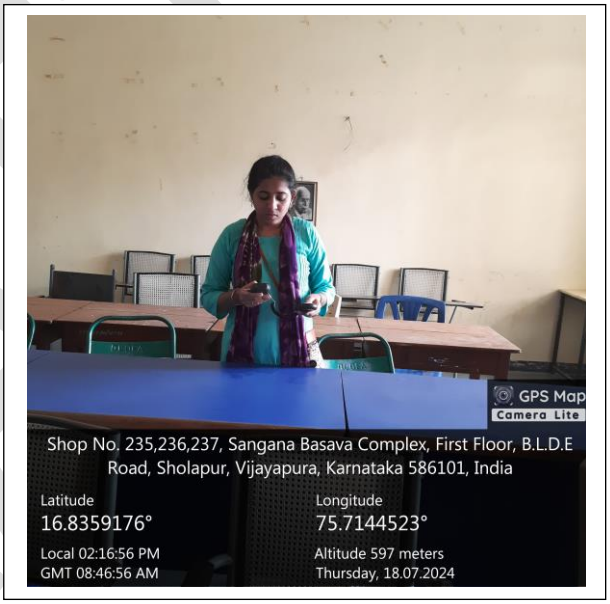
3. Illumination Study:

The Illumination Study was carried out using Lux meter. And it was carried out in classroom & Laboratory.

Sr. No.	Location	Time	Lux Level Reading (LUX)				Average Lux
			1	2	3	4	
1.	Classroom	2:00	360	355	325	383	355.75
2.	Laboratory	2:30	410	421	437	442	427.5



Illumination Monitoring in Classroom



Illumination Monitoring in Laboratory

All results of Illumination Study (Classroom) found within limits as per IS 3646 (Part I):1992

9.6 CARBON FOOTPRINT

A carbon footprint (CF) is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.

A carbon footprint is an estimate of the climate change impact of activity – such as making a product, living a lifestyle or running a company.

There are many existing and evolving standards for calculating carbon footprints but in truth no footprint is precise. For more complicated activities these uncertainties are greatly multiplied.

a) Carbon Emissions:

List of carbon emissions

Classification/Scope	Sources	Description
Scope 1	Equipments usage	DG set

(Direct)		
Scope 2 (Indirect)	Electricity Use	B.L.D.E. Association's JSS College of Education, Vijayapura uses electricity to heat, cool, light, and run appliances at its facilities.
Scope 3 (Indirect)	Employee commuting	Employees commute from their residences to the college

Emission Data and Calculations:

- Scope 1 – All Direct Emissions from the activities of an institution or under their control. Including fuel combustion on site such as gas, etc.

Scope 1 Emissions

Type of Fuel	**Quantity**	**Emission Factor**	**Kg CO_2/month**
Fuel used for DG set	25 lit/month	2.653	66.325
LPG	40 kg/month	2.983	119.32
TOTAL SCOPE 1 EMISSIONS			**185.645 Kg CO_2/month**

- Scope 2 – Indirect Emissions from electricity purchased and used by the institution. Emissions are created during the production of the energy and eventually used by the organization.

Emissions from Purchased electricity:

Indirect Emissions /scope 2 emissions

Type of Emission	**Quantity**	**Emission Factor**	**Kg CO_2**
Emissions from Purchased electricity	616.25 kWh/month	0.97	597.76 Kg CO_2/month
TOTAL SCOPE 2 EMISSIONS			**597.76 Kg CO_2/month**

- Scope 3 – All Other Indirect Emissions from activities of the institution, occurring from sources that they do not own or control.

A. Employee Transportation: Increase in student intake can lead to increased greenhouse gas (GHG) pollution caused by the resulting growth in vehicular traffic, energy use, and other activities. This unit seeks to identify the impact on global climate change through its emissions of greenhouse gases (GHGs), notably carbon dioxide (CO_2). Transportation is the fastest growing major contributor to global climate change, accounting for 23% of energy-related carbon dioxide (CO_2) emissions

Fuel Consumption through Upstream Transportation

Mode of transportation	Daily Count	Travelling distance (km/Vehicle) (to and fro)	Total Km	Emission Factor	Kg CO_2
2 wheeler (teachers)	10	10	100	0.0319	3.19
4 wheeler (Cars)	01	10	10	0.13	1.3
TOTAL					**4.49 Kg CO2/day**
					134.7 Kg CO_2 /month

Fuel Consumption through students Transportation

Mode of transportation	Daily Count	Travelling distance (km/Vehicle) (to and fro)	Total Km	Emission Factor	Kg CO_2
2 wheeler	25	10	250	0.0319	7.975
Bus	06	20	120	0.01516	1.82
TOTAL					**9.795 Kg CO2/day**
					293.85 Kg CO_2 /month

B) Solid Waste Generation:

Dry Solid Waste Generation

Wet waste generated	Emission factor	Total Kg CO_2
5 kg/month	0.21	**1.05 Kg CO_2 /month**

Total emissions throughout a year

Total emissions throughout a year

Reporting Year	Total Emissions (kg CO2 /month)	Total Emissions (kg CO_2 /year)
2023	1213.005	14556.06

C) Appreciations:

- The vehicle owned by faculty with pollution check stickers are permitted into the campus.
- The institute encourages the staff and students to use public transport for safety security, fuel conservation and to reduce environmental pollution.
- Few faculties are using electric vehicles and other staff also encouraged to use of electric vehicles.

D) Recommendations:

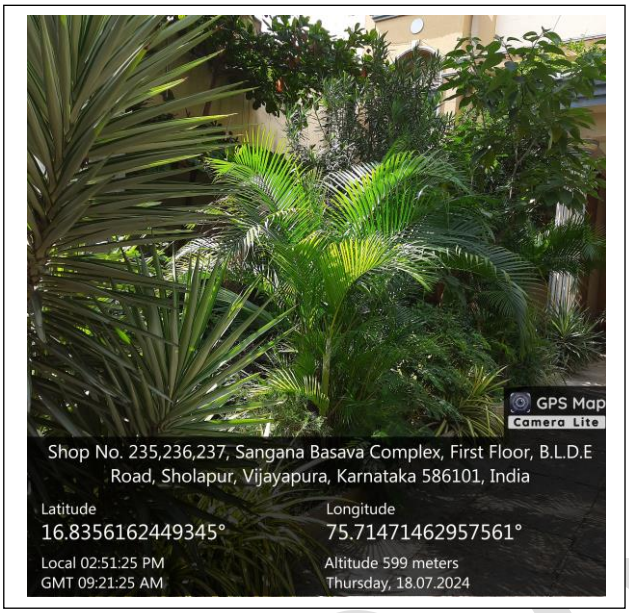
- Make sure most teachers and students opt for public transport instead of using personal vehicle.
- Use as much renewable sources of energy as you can.
- For reducing Carbon Footprint of the college, try to conduct 'No Vehicle Day' on every Saturday.

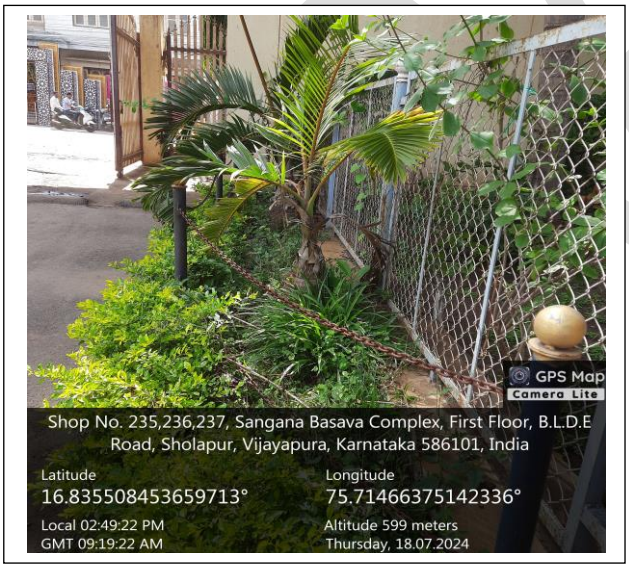
10. BEST PRACTICES FOR ENVIRONMENT

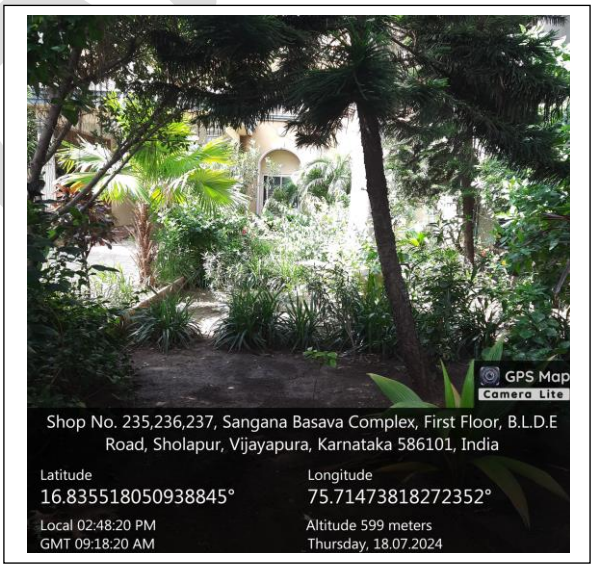
1. **Biodiversity Conservation:**

♣ They have green campus which provides habitat to various species.

♣ They maintain flora and fauna in the campus.







2. Tree Plantation Drives and Days Celebrations

♣ Periodically the plantation drives conducted by students and staff of campus.

♣ Every Guest is honored by tree at campus.

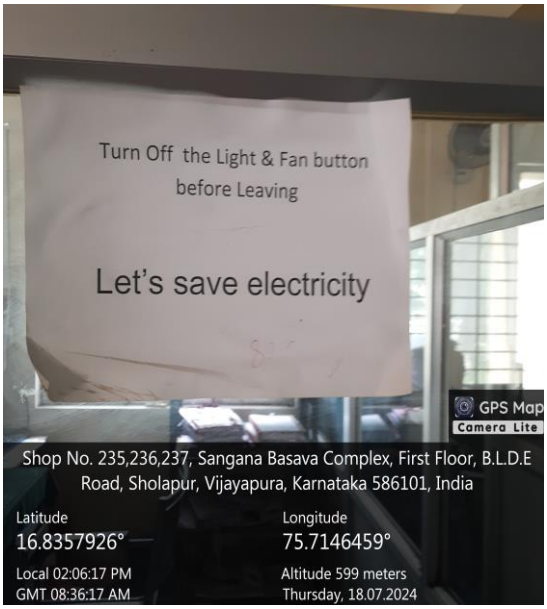
♣ World Environment Day, Ozone Day etc. Celebrated by students and staff every year.

♣ College takes green initiative beyond the campus by tree plantation and sapling distribution program.

♣ To create awareness among the students campus is provided with different Environmental protection slogans.

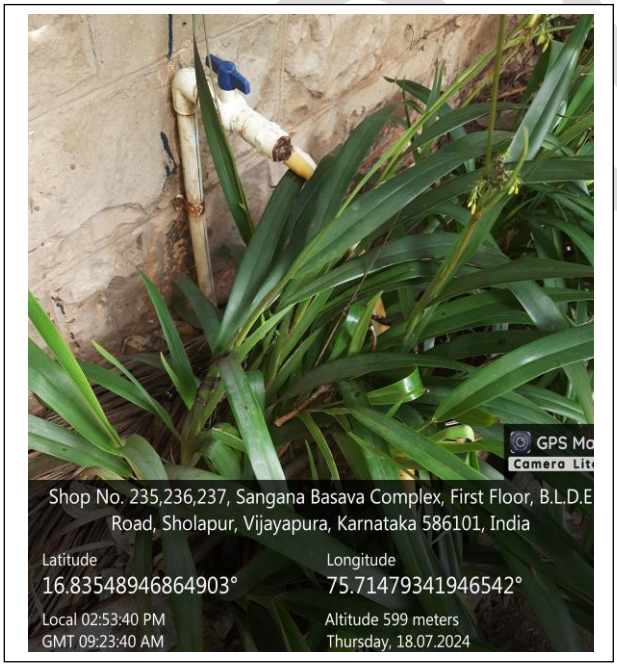
3. Solid Waste Management

- Different mechanisms for proper disposal of biodegradable, non-biodegradable and MSW are implemented in campus.
- Cleanliness drives are arranged by college.
- Sign boards for awareness of environment are there in the campus



4. Water Conservation

- ♣ Water saving push taps fitted in the drinking water zone and the toilets to avoid the wastage of water.
- ♣ Pipe is used through the campus for watering plants.
- ♣ Wastewater from R.O. is reused for gardening purpose and for toilets.



11. OVERALL RECOMMENDATIONS

- Formation of Environment Policy and communicate to all faculties and other staff members.
- Environmental Monitoring i.e. (Ambient Air Quality monitoring, D.G set monitoring, Water monitoring) need to be conducted by approved laboratory with frequency of six month.
- Reduction in use of paper work by go digital system.
- Implementation of rainwater harvesting system.
- Increase in Environmental promotional activities for spreading awareness at campus.
- As practically feasible avoid use of personal vehicles inside the campus.

12. CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. B.L.D.E. Association's JSS College of Education, Vijayapura has Eco Club for sustainable use of resources. The audit has identified several observations for making the campus premise more environmental friendly. The recommendations are also mentioned with observations for campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. The paperless work system, green campus management, solar power plant, waste management and water conservation practices are noteworthy.

As part of green audit of campus, we carried out the environmental monitoring of campus which includes Illumination, Noise level, Ventilation monitoring and Water Testing which is used for drinking purpose in the campus. It was observed that Illumination and Ventilation is adequate considering natural light and air velocity present. Noise level in the campus is well within the limit i.e. below 65 dB at day time. Drinking water also analyzed and found it was potable.

There are some major observations and they are implementation of rainwater harvesting system is necessary. And few minor things are important to initiate urgently are waste management records by monthly inventory, water balance cycle and periodic inspection of buildings housekeeping and environment policy.