

GREEN AUDIT REPORT

2018-2023

K.Z.S. Science College, Bramhani, Kalmeshwer



Internal Quality Assurance Cell (IQAC)

Editor members

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Table of Contents

Sr. No.	Titles/Topics	Page No.
1.	INTRODUCTION	
2.	OBJECTIVES	
3.	METHODOLOGY	
	3.1 ABOUT THE COLLEGE	
	3.2 VISION & MISSION VISION STATEMENT	
4.	OBSERVATIONS AND RECOMMENDATIONS	
	4.1 College Campus of K.Z.S. Science College, Brahmani Google Earth Image Layout plan	
	4.2 LAND USE PATTERN	
	4.3 List of Places from Where Students Commute to K.Z.S Science college, Bramhani, Kalmeshwar	
	4.4. Water Use a) Observation b) Recommendations	
	4.5. Energy Use and Conservation a) Observation b) Recommendations	
	4.7. Waste Generation a) Observation b) Recommendations	
5.	TREE DIVERSITY	
6.	FAUNAL DIVERSITY	
7.	CONCLUSION	
8.	ACKNOWLEDGEMENTS	



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1.0 INTRODUCTION

The initiative for green audit was taken about forty eight years ago, with the intention of monitoring the efforts done by the institute for betterment of the health of the stakeholders, inhabitants and the environment. It helps to keep a check on the impacts caused by the environmental pollution. It becomes a duty for organizations to carry out an inspection every year of their ongoing processes for various reasons such as; to ensure performance in accordance with relevant rules and regulations, to improve the quality each year; to analyze the potential duties and to establish a means to reduce the expenditure and add to the revenue. Through Green audit, one can follow a proper way to improve the condition of environment and other parameters for development.

Green Audit is a progression of methodical recognition, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It also aims to investigate and improve environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience. Green audit can be 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. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. Thus it is essential that the college evaluate its own contributions toward a sustainable future for batch of stakeholders coming each year. 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.

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

2.0 OBJECTIVES:

As the Green Audit for an institution has gained popularity recently it is vital for institutions to ensure self assessment. This self assessment would reveal the actual role of the institution in minimizing the problems regarding environment. Ever since the establishment of the college everyone has put efforts to keep our campus green, clean and eco-friendly. Daily inspection, monitoring and assessment are carried out. But now an effort has been made to document these extracurricular activities done by the college.




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The main objectives of carrying out Green Audit are:

1. To map the Geographical Location of the college
2. To document the floral and faunal diversity of the college.
3. To estimate the Energy requirements of the college
5. To document the Waste disposal system
6. To introduce and aware students to real concerns of environment and its sustainability

3.0 METHODOLOGY:

The K.Z.S. Science College, Bramhani, perform green audit, where the methodology includes various parameters like:

- Water management
- Energy Conservation
- Waste management
- Flora and fauna Diversity

Further various aspects such as, preparation of land for green belt development, physical inspection of the campus daily, scrutiny and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered all these aspects and a compilation was done to review the present status of environment management in the campus.

3.1 ABOUT THE COLLEGE

The K.Z.S Science College was established in August 1992 by few learned people of Kalmeshwar who felt the need of quality higher education in Science. The college was named as 'Science College' then, offered a graduation course with core subjects; Physics, Chemistry & Mathematics (PCM group) for the students of nearby vicinity. Later in 1994, other subjects offering biology group with Botany and Zoology (CBZ group) were introduced. Soon after appropriate arrangements, in 2001, subject Computer science was introduced to keep pace with the growth and development of these rural students. The college affiliated to Nagpur University was run smoothly with all scholarly faculty members. In 2003, the Science College shifted to current premises at Bramhani as land for infrastructure development of college was received from one of the eminent personality from Kalmeshwar. Hence, in the memory of him the college was now named as K.Z.S. Science College (Kanhobaji Zolhaji Shrikhande). Since inception, K.Z.S. Science College is affiliated to R.T.M. Nagpur University, Nagpur offering




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undergraduate courses in Science with Chemistry, Zoology, Botany, Physics, Mathematics and Computer science departments to its credit. The college has conscientious faculty members and sympathetic non-teaching staff members who persistently encourage and inspire students through their work and behavior. The philosophy of the college solely revolves around one base being compassionate to the fellow beings to retain Humanity in the society.

3.2 VISION & MISSION VISION STATEMENT:

K.Z.S. Science College follows a vision:

To be a leader in fulfilling the contemporary need of the society by providing quality centric higher education with holistic development.

Mission statement:

Tamso ma jyotirmaya (To lead from darkness to light)

Imparting knowledge through education in systematic means to these undergraduates coming from a socio-economically weaker background from vicinity of Kalmeshwer tehsil is the most important motto of the institution. The college desires to continue such quality education which will make our students remarkable citizens of the country with cherishable values inculcated in them. Promoting a higher version of generations with qualities deep rooted within them. The college is constantly working hard on these rules as their mission to produce an employable, desirable, amicable and a responsible youth for the Nation.

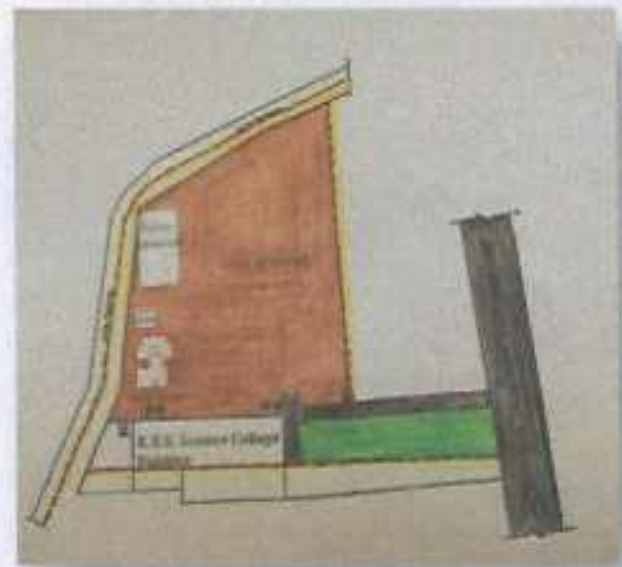
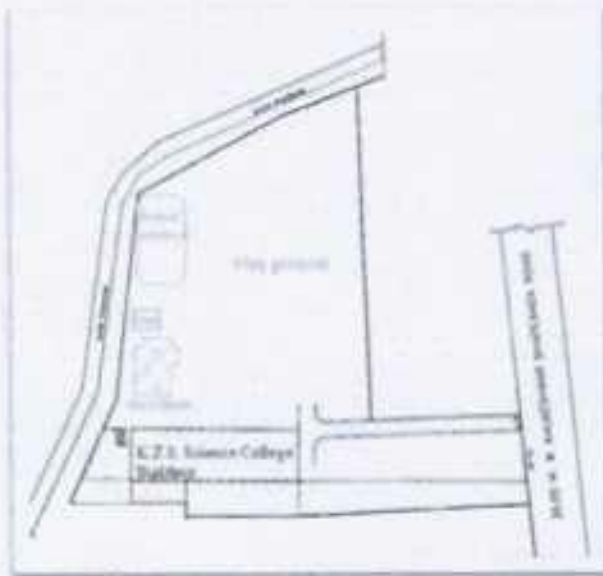



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4. Observations and Recommendations

4.1 College Campus

Google Earth Image of College Campus



Layout plan of K.Z.S. Science College, Brahmni , Kalmeshwar .




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4.2 LAND USE DATA OF K.Z.S. COLLEGE, BRAMHNI, KALMESHWAR

CATEGORIES OF LAND USE AREA	IN SQ METRES
PLOT AREA	18300.00
OPEN SPACE	15573.4126
EXISTING BUILT-UP AREA OF COLLEGE BUILDING	1282.89 + 371.61 (after 2020)=1654.5
INDOOR STADIUM	879.074
WOMEN'S HOSTEL	508.88
GYM	55.74
TOTAL BUILT UP AREA	2726.5874

4.3. Students commute from

There are specific three routes which come to the K.Z.S. Science College List of Places from Where Students Commute to K.Z.S Science college, Bramhani , Kalmeshwar

Sr. No	Route I Nagpur to Bramhni	RouteII Mohpa to Bramhni	RouteIII Saoner to Bramhni
1.	Kalmeshwar	Mohpa	Saoner
2.	Dahegaon	Mahsepathar	Khapa
3.	Yerla	Galbardi	Kothurna
4.	Fetri	Khumari	Kelod
5.	Mahurzari	Deobardi	Waroda
6.	Chicholi	Susundri-Sawandri	Zunki-Sawli
7.	Khandala	Kohli	Borgaon
8.	Gowri	Dorli	Dhapewada
9.	Pardi	Chargaon	Adasa
10.	Khairi	Sonkhamb	
11.	Linga	Khapri	
12.	Selu	Sonegaon	
13.	Uparwahi	Ghorad	
14.	Kalambi	Ubali	
15.	Bramhani	Mohgaon	
16.		Sawangi	
17.		Pipla	
18.		Kaniyadol	
19.		Lohgad	
20.		Uhgj	




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4.4. Water Use

This aspect refers to water consumption, water sources, irrigation facilities and fittings. The water sources were reviewed in an on-site visit and assessment was done to determine the water use and means towards its conservation.

a) Observations

1. The main source of water are dug well, bore well and a tank which is in the premises of the college.
2. A fixed amount of water from corporation is received and stored in the tank and used for drinking purpose in RO water coolers. The bill generated per year for water is Rs. 2400/ year (Bill enclosed)
3. For toilets, laboratory and gardening well water is used.

During the survey, no loss of water is observed, neither by any leakages, nor by 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 1500 L/day, which include 500 L/day for domestic purposes and 1000 L/day for gardening and different laboratories.

b) Recommendations

1. Overflow of water tanks to be monitored to save loss of water.
2. In campus small scale reuse and recycle of water system is necessary.
3. Minimize wastage of water and use of electricity during R O water filtration process.
4. Ensure the servicing of the RO filtration device twice a year.
5. Rain water harvesting systems should be installed for saving more water.

4.5. Energy Use and Conservation

Here the energy aspect, consumption with reference to use of electricity is been observed and assessed. The energy sources like lights, tube lights , LED , Solar Lamps, appliances, natural gas etc has been monitored which are used daily in the college campus has been listed. Without energy sources one cannot survive. Therefore, it is evidently an important aspect of college sustainability and hence, requires addition in the assessment.





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Table of electricity assets in the college premises

Sr. no.	Floor (2016-2019)	No. of Rooms	No of tube lights	No of Fans	No. of Exhaust fans	No. of LCD	No. of Computers	No. of Toilets
1	Ground Floor	16	48	32	01	01	39	10
2	First Floor	05	26	24	Nil	03	Nil	Nil
3	Girls Hostel	10	31	20	Nil	NA	NA	06
4	Girls Common Room	01	03	03	01	NA	NA	03
5	Gym	01	04	04	01	NA	NA	-
6	Indoor Stadium	02	02	02	Nil	NA	NA	08
	Total	35	114	85	03	04	39	27
	Ground Floor (2021-2022)	Ground Floor renovation						
1.	Office Room	01	05	03	00	00	03	00
2.	Management Room	01	04	04	00	00	00	01
3.	Principal's Office	01	01	01	00	00	01	00
4.	IQAC NAAC Room	01	03	02	00	00	02	00
5.	Class room I (Common)	01	03	02	00	00	00	00
6.	Chemistry Lab I	01	05	02	01	00	01	00
7.	Chemistry Lab II	01	06	03	00	00	01	00
8.	Computer Science Lab	01	02	04	00	00	22	00
9.	Maths & Physical Education	01	02	02	00	00	02	00
10.	Physics Lab	01	08	08	00	00	04	00
11.	Library	01	03	02	00	00	02	00
12.	Reading Room	01	05	03	00	00	00	00
13.	Girls Common Room	01	05	02	01	00	00	08
14.	Staff Toilet	01	01	00	00	00	00	04
15.	Pantry	01	01	00	00	00	00	00
16.	Physics Research Lab	01	02	02	00	00	00	00
17.	Toilet attached to Management Room	01	00	00	00	00	00	01
18.	Toilet attached to Principal's Office	01	00	00	01	00	00	01
19.	Chemistry lab I (taps)	04						
20.	Chemistry lab II (taps)	02						
	First Floor	First floor renovation, Zoo & Bot. lab shifted 2022						
1.	Conference Hall	01	10	10	00	01	00	00
2.	Classroom BSc. Part I 1	01	04	02	00	01	00	00
3.	Classroom BSc. Part II 2	01	04	02	00	01	00	00
4.	Classroom BSc. Part III 3	01	04	02	00	01	00	00
5.	Classroom BSc. Part I 4	01	07	08	00	01	00	00
6.	Classroom BSc. Part II 5	01	05	06	00	01	00	00
7.	Botany Laboratory	01	06	08	00	01	01	00
8.	Zoology Laboratory	01	06	08	00	00	02	00
9.	Staff Toilet	01	00	00	00	00	00	05



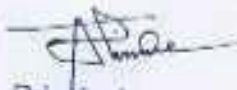
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	Extra if any						
	Zoology Lab (taps)	02					
	Botany Lab (taps)	06					

a) Observations

1. Electricity is one of the energy used by everyone attending the college premises.
2. The ground floor of the college building included administrative office, Principal's cabin, Chemistry , Physics, Computer Science laboratories, girl's common room, IQAC NAAC room, Library, Reading room , Maths & Physical education department and one classroom while the First floor has 5 classrooms, Botany and Zoology Laboratories. In the year 2020 March construction of the college extension & first floor transformation began.
3. Solar Panels (Grid tied Roof top 8kW) have been installed on the terrace that comprise of eight panels which has reduced the electricity bills to a greater extend .
4. All the departments, Laboratories and classrooms are equipped with tube-lights (LED).
5. There are 4 photovoltaic cells also installed in the ground of the college as a renewable source of energy.
6. All the computers (38 nos.) in the college are used with power saving mode and switched off whenever not in use.
7. There are two inverters in the office premises used for minor laboratory facilities and office computers, fans and lights during power cut -off.
8. There are two generators (Kirloskers) available in the college, used during load shedding by MSEB.
9. One generator is of 1.5 KV and other is of 2 KV (KOEL).
10. The diesel used for generator is purchased from the local petrol pump nearby.
11. Around 50 litre / year diesel is used for the proper maintenance and functioning.
12. The college premise is en-lighted with 2 LED lights, 2 LED lights near Hostel and Stadium had 4 Focus lamps. These lights are switched on as per requirement only. During the night there are 3-4 lights which are kept on for security reasons.
13. For water supply purpose 3 water pumps have been installed which pump the water from the Bor (2HP) to the collection tank. One pump is installed on Dug well (1HP)which pumps water to a tank (1 HP) used domestic purpose (toilets)




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14. All the science department like Physics, Chemistry, Mathematics, Botany and Zoology have many equipments on electricity but are put off whenever not use to conserve the energy one of good practices in the college.
15. Chemistry laboratory has been well equipped with 3 LPG (IIP) connection for experiments(practical) by students. The laboratory is well ventilated to let out the fumes by exhaust fan,

**K.Z.S. Science College, Bramhni-
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Electric Bill Abstract 2019-20

Sr. No.	Month	College Building	
		Unit	Bill Amount
1	19-Mar	787	10300
2	19-Apr	976	13060
3	19-May	1021	13850
4	19-Jun	982	13320
5	19-Jul	1038	14080
6	19-Aug	971	12680
7	19-Sep	815	10230
8	19-Oct	792	10290
9	19-Nov	859	11450
10	19-Dec	1117	3770
11	20-Jan	726	9900
12	20-Feb	742	10260
		10826	133190

Sr. No.	Month	Bill Amount
1	July-19	14080
2	August-19	12680
3	Sept-19	10230
4	Oct-19	10290
5	Nov-19	11450
6	Dec-19	3770
7	Jan-20	9900
8	Feb-20	10340
9	March-20	0
10	April-20	1160
11	May-20	790
12	June-20	0
	Total	84690




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BIJLEE SOLAR
BIJLEE LED LIGHTING PVT. LTD.
 RESIDENTIAL AND COMMERCIAL SOLAR POWER PLANT PROVIDER

☎ 0835428847 9866333337
 ✉ bijeeledlighting@gmail.com
 A/J Indira Nagar, Apartment No 13
 Karmeshwar, Karmeshwar, Nagpur-441001
 GSTIN : 27AAGC68178F12M

PROFORMA INVOICE

DATE OF PROFORMA INVOICE : 05.12.2018

INVOICE NO. - BIJLEE/2018-20/SPV/PV/Sanatha

SELLER :
 BIJLEE LED LIGHTING PRIVATE LIMITED
 BIODIVERSITY HOUSE, OPP. UNION BANK, R.M.T. ROAD,
 CIVT. LINES, NAGPUR 440 001.
 E-mail: bijeeledlighting@gmail.com
 CONTACT NO: 9866333337
 CONTACT NO : 9835428847 FAX : 0712-2682528
 TIN No. : 27201173018

Beneficiary :
 The Secretary Dr. Bhabha Vidyan Lokshikshan
 Sanstha,
 H. no. 10, Mouza Bramhi, Karmeshwar-441001

BRANCH NAME: BIJLEE LED LIGHTING
 PRIVATE LIMITED
BENEFICIARY BANK: STATE BANK OF INDIA
 PANS AND SEVA SADAN, CIVT. LINES,
 NAGPUR
BENEFICIARY ACCOUNT: 3018043771
 BRANCH CODE: 000000178

Consumer number of
 MSEDCL: 41874636078

Purchase order- Verbal

PRODUCT DESCRIPTION	Total Capacity	RATE	AMOUNT
1. Grid Tied Roof top Solar power system	8 kW	35,000/-	2,80,000/-
2. Installation charges	8 kW	15,000/-	1,20,000/-
			Rs. 4,00,000/-

TOTAL AMOUNT : Four Lakh Only

DELIVERY :

PAYMENT TERM : 80 % advance on PO and Sanction by MSEDCL, 40 % on Commission

PRODUCT WARRANTY : As per terms of PC

DUTIES & TAXES : GST 8.9 % Including

We hereby certify that our GST registration certificate under the act, is in force on this date on which the sale of goods specified in this Tax Invoice is made by us and that transaction of sale covered by this tax invoice has been effected by us and it shall be accounted for in the turnover at sale while filing of return and the due tax if any, payable on the sale has been paid or shall be paid.

For, BIJLEE LED LIGHTING PVT. LTD.

Bijlee LED Lighting Pvt. Ltd. are empanelled as Channel Partner with MNRE, Govt. Of India for Off Grid and Decentralized Solar Application Programme. Our Channel Partner Code is MN-SI/2018/N/18. We are also Channel Partner (New Entrepreneur) with MNRE for Grid connected Rooftop and Small Solar Power Plant Programme. Our empanelment No. : MNRE/EN/GCOT/1781.

(Signature)
 Authorized Signatory

Scanned with CamScanner



(Signature)
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b) Recommendations

1. Installation of LED lights instead of Tube light to conserve the energy.
2. More use of photovoltaic cells in the college premises.
3. Sharing of equipments on the departmental level to conserve energy.
4. Yearly servicing of Inverters, Generators and Water pumps is necessary

4.6. Waste Generation

During working days there are different waste created like waste paper, spoiled food particles, plastic bags, chips packets, construction, broken glassware, dust etc., such waste cannot be restored through reprocess and reuse. Hence solid waste generation and its management becomes a topic of concern to all. Proper handling of solid waste decreases the threats to everyone. The survey carried out mentions the present management practices of solid waste generated in the campus. The data regarding solid wastes collected as mentioned above.

a) Observations

1. The waste generated per day is collected in the campus in the dustbins.
2. Approximately it is 05 Kg/day.
3. The leaves from the trees are collected and put in a pit.
4. The waste is segregated at source by providing separate dustbins for Bio-degradable and Plastic waste.
5. Segregation of chemical waste generated in chemistry and zoology laboratories is also practiced.
6. One sided printed or used papers is reused for writing and printing in all departments.
7. Plastic waste (0.1 Kg/day) generated by some departments, office, garden etc but it is neither categorized at point source nor sent for recycling.
8. Metal waste and wooden waste is stored and given to authorized scrap agents for further processing.
9. Few glass bottles are reused in the laboratories.
10. The food waste is put in a composting pit.

b) Recommendations

1. The waste generation through the college staff should be minimized .




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2. Make use of recycling facilities given by Municipal corporation and private suppliers, including glass, cans, white, coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.
3. **SWACHYA BHARAT ABHIYAN** at college campus.
4. Proper Dust-bins should be made available in the classrooms, corridors, departments and office to keep the campus clean.
5. Single sided papers to be used for writing and photocopy.

5. Plant Diversity

Here tree plantations and medicinal plants have been mentioned to maintain the greenery of the college campus. With this we reach up to standards of 33 % green belt that helps in ensuring the Environmental Policy.

a) Observations

1. The college campus is located on the State Highway 250 on a non-agricultural land about 4.5 Acres.
2. Overall campus is located in an area of existing plant species enlisted approximately 43 types (species) trees. Plantation of these plants was done during construction of college building.
3. Sapling plantation programs are being organized during the month of July and August in college campus and neighboring villages by NSS unit.
4. This practice is continued every year which increases the greenery and restores indigenous species of the area.
5. It is encouraging for the students and motivational for people of the village.
6. Such eco-friendly environment helps to improve the air quality of the area with increased amounts of oxygen.
7. A medicinal plant garden is developed with the help of Department of Botany. There are about 22 species of medicinal plants (26 species list given).
8. Medicinal plants saplings are made for culturing.

Table consisting of list of Plant species in college campus (2018 onwards)

SR. NO.	BOTANICAL NAME	LOCAL NAME	QUANTITY
1	<i>Tectona grandis</i>	Sag	142
2	<i>Azadirachta indica</i>	Kadunimb	85
3	<i>Moringa oleifera</i>	Mungna	6
4	<i>Mangifera indica</i>	Amba	3
5	<i>Phyllanthus imbilica</i>	Aola	10
6	<i>Aegle marmelos</i>	Bel	2
7	<i>Polyalthia longifolia</i>	Khota ashok	18
8	<i>Annona squamosa</i>	Sitaphal	3
9	<i>Annona reticulata</i>	Ramphal	2
10	<i>Eucalyptus</i>	Nilgiri	9
11	<i>Roystonea regia</i>	Royalplam	8




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12	<i>Causurina equisetifolia</i>	Jangali saru	7
13	<i>Neolamarckia cadamba</i>	Kadamba	5
14	<i>Alstonia scholaris</i>	Saptaparnee	13
15	<i>Ficus bengalensis</i>	Wad	5
16	<i>Ficus religiosa</i>	Pimple	5
17	<i>Ficus sp.</i>	---	4
18	<i>Delonix regia</i>	Gulmohar	15
19	<i>Cassia siamea</i>	Seemua	6
20	<i>Cassia fistula</i>	Amaltas	8
21	<i>Cassia pulcherima</i>		4
22	<i>Bombex ceiba</i>	Katesavar	2
23	<i>Adensonia digitata</i>	Gorakhmil	1
24	<i>Manilkara zapota</i>	Chiku	1
25	<i>Citrus aurantium</i>	Santra	5
26	<i>Citrus limetta</i>	Mosambi	5
27	<i>Citrus limon</i>	Limbu	2
28	<i>Carissa spinarum</i>	Karvanda	29
29	<i>Murraya koenigii</i>	Kadipatta	2
30	<i>Delbergia sissoo</i>	Sisam	4
31	<i>Peltophorum pterocarpum</i>	Yellow gulmohar	5
32	<i>Tamarandus indica</i>	Chinch	1
33	<i>Acaela nilotica</i>	Babul	5
34	<i>Syzygium cumini</i>	Jambul	4
35	<i>Butea monosperma</i>	Palas	2
36	<i>Lawsonia innermis</i>	Mehandi	Bushy
37	<i>Cordia gharaf</i>	Gondani	1
38	<i>Ailanthus excelsa</i>	Maharuka	5
39	<i>Artocarpus heterophyllus</i>	Fanas	2
40	<i>Psidium Guajava</i>	Peru	1
41	<i>Zizipus jujuba</i>	Bor	5
42	<i>Sapindus mukorossi</i>	Ritha	2
42	<i>Nyctanthes arbortristis</i>	Parijatak	1
43	<i>Agave</i>	Ghaypat	4

Table of list of plant species in medicinal garden (2018 onwards)

SR. NO.	BOTANICANAME	LOCAL NAME
1	<i>Abrus precatorius</i>	Guni
2	<i>Piper longum</i>	Pimpri lendi
3	<i>Passiflora foetida</i>	Krushan kamal
4	<i>Plumbago zeylanica</i>	Chitruk
5	<i>Gymnema sylvestre</i>	Gudmar
6	<i>Bryophyllum pinnatum</i>	Panfuti
7	<i>Justica adhatoda</i>	Kala adulsa
8	<i>Abmoschus moschatus</i>	Kasturi bhendi
9	<i>Commiphore wightii</i>	Gugul
10	<i>Psoralea corylifolia</i>	Bavanchi




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11	<i>Asparagus sativus</i>	Shatavari
12	<i>Aloe vera</i>	Korfad
13	<i>Catharanthus roseus</i>	Sadafuli
14	<i>Phyllanthus niruri</i>	Bhui naavala
15	<i>Datura metel</i>	Dhatuna
16	<i>Rauwolfia serpentine</i>	Sarpagandha
17	<i>Hibiscus rosasinesis</i>	Jaswand
18	<i>Andrographis paniculata (Burm.f.)</i>	Kalmegh
19	<i>Mimosa pudica L.</i>	Lajadlu
20	<i>Cissus quadrangularis</i>	Haddi jod
21	<i>Passiflora incarnata</i>	Krishna kamal
22	<i>Adathoda vasica</i>	Aduisa
23	<i>Ocimum sanctum</i>	Tulasi
24	<i>Passiflora incarnate</i>	Krishna kamal
25	<i>Datura metel</i>	Dhatuna
26	<i>Euphorbia sp.</i>	Dudhi

Plant list of College campus:12.01.2023 (UPDATED)

SR.NO.	PLANT NAME	SR.NO.	PLANT NAME	SR.NO.	PLANT NAME
1	KADULIMB	70.-71	PERU	244.-a, b.	KHOTA ASHOK
2.	SITA ASHOK	72-87.	KARVAND	245.-a, b.	PHICUS SP.
3.	PELTAFORUM	88.	SISAM	246.-a, b.	ROYAL PALM
4.	KADULIMB	89.-180.	SAG	247.-a, b.	VIDHYA
5,6,7.	PELTAFORUM	181.-182.	NILGIRI	248.-a, b.	KHOTA ASHOK
8.	KADULIMB	183.	NIMBU	249.	KHOTA ASHOK
9.	PELTAFORUM	184.-185.	SANTRA	250.-252.	KADULIMB
10.	AMALTAS	186.	CHIKU	253.	SP.
11.	PELTAFORUM	187.	KARVAND	254.	PELTAFORUM
12.	KADULIMB	188.	KELI	255.	SITAPHAL
13, 14.	PELTAFORUM	189.-190.	MUGNA	256.-260.	TUTI
15.	KADULIMB	191.	SITAPHAL	261.-262.	GODNIMB
16.	GULMOHAR	192.-201.	AWALA	263.-267.	KADAMBA
17, 18.	PELTAFORUM	202.	MOSAMBI	268.-279.	SAPTAPARNEE
19.	KADULIMB	203.-208.	CASUARINA	280.-281.	PHICUS SP.
20.	PELTAFORUM	209.	CHIKU	282.	KADULIMB
21.	KADULIMB	210.	AMALTAS	283.	FANNUS
22.	CASSIA SP.	211.	JAMBUL	284.-286.	TERMINALIA SP.
23.	KADULIMB	212.-213.	BOUGANWEL		
24.	PELTAFORUM	214.-a, b.	VIDHYA		
25.	KADULIMB	215.-a, b.	KHOTA ASHOK		
26.	PELTAFORUM	216.-a, b.	VIDHYA		
27.	KADULIMB	217.	KHOTA ASHOK		
28, 29.	PELTAFORUM	218.	BOUGANWEL		
30.	GULMOHAR	219.	ROYAL PALM		
31.	KADULIMB	220.-a, b.	KHOTA ASHOK		
32.	PELTAFORUM	221.-a, b.	VIDHYA		
33.	PELTAFORUM	222.- a, b.	PHICUS		
34.	KADULIMB	223.	BOUGANWEL		
35.	KADULIMB	224.-a, b.	VIDHYA		




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36.	PELTAFORUM	225.-a., b.	KHOTA ASHOK		
37.	KADULIMB	226.	KADULIMB		
38.	AMBA	227.-a., b.	VIDHYA		
39.-47.	KADULIMB	228.-a., b.	SIJALPINIA		
48.	WAD	229.	BOUGANWEL		
49.-53.	KADULIMB	230.	KADULIMB		
54.	BEHDA	231.-a., b.	KHOTA ASHOK		
55.	KADULIMB	232.-a., b.	VIDHYA		
56.	WAD	233.-a., b.	KHOTA ASHOK		
57.-58.	AMBA	234.-a., b.	SIJALPINIA		
59.	SAPTAPARNEE	235.	KHOTA ASHOK		
60.	WAD	236.	CHAMELI		
61.	PIMPAL	237.-a., b.	VIDHYA		
62.	KADULIMB	238.	ROYAL PALM		
63.	BABUL	239.-a., b.	VIDHYA		
64.	SAPTAPARNEE	240.	JAI-JUI		
65.-67.	SISAM	241.	FAN PALM		
68.	KADULIMB	242.	PARJATAK		
69.	VIDHYA	243.-a., b.	VIDHYA		

		
Plantation activity	Sapling preparation	Grown up Teak plants
		
Nursery of medicinal plants	Landscaping by students	Formation of compost pit




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Nomanclature of the trees		

b) Recommendations

1. Periodic survey of planted saplings and ensure the irrigation facilities.
2. Nomenclature of all the trees planted in the garden, designate number to the trees and keep listing. Give scientific names to the trees.
3. Promote the sale of the saplings of medicinal plants.
4. Assign the work to group of students each year.
5. Increase the number of varieties of the medicinal plants in the nursery.
6. Compulsorily celebrate 5th June as "World Environment day" and organize tree plantations to improve the greenery of the campus.

6. FAUNAL DIVERSITY IN the COLLEGE CAMPUS

K.Z.S. Science College is located in Bramhani on SH 250 Savner- Dhapewada road in district of Nagpur. Kalmeshwar is nearby town neighboring Brahmani. Gorewada Lake and Gorewada National park is around 15 km from the college. K.Z.S. Science College is in district Nagpur falls in the Tropical climate region. Here we have extreme type of climate. The highest temperature is recorded in the month of May-June prior to the onset of monsoon which stuck the area around late June.

The faunal diversity seen in this area commonly includes birds, insects, Spiders, Reptiles. Some faunal diversity has been photographed by the department of Zoology and compiled in the report.

Sr. No	Faunal Groups	Names
1	Insects	Bugs, Butterflies, Moths, Bees, Mosquitoes, Houseflies, Beetles, Dragonflies
2	Spiders	Common spiders
3	Amphibians	Frogs
4	Reptiles	Snakes, Chameleon, Garden lizards, wall lizards
5	Birds	Pigeons, Kingfishers, Mynas, Egrets,




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Insect diversity in the campus



Swallowtail butterfly
(*Papilio machaon britannicus*)



Mylabris pustulata



Chilades pandava



Musca species



Common green botfly
(*Lucilia sericata*)



Tabanus sp.



Dysdercus cingulatus



Painted bug
(*Bagrada hilaris*)



Indian Meal Moth
(*Plodia interpunctella*)



Luna Moth



Apis cerena



Wasps sp. (Pollstes)




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7. Conclusions

The recommendations are into consideration but as the institution is undergraduate college, it limits the research opportunities for the faculty members and students. But a great amount of environmental wakefulness ideas have been discussed amongst all. The new incoming ideas include solar panels, vermin-composting pits development and rain water harvesting.

8. Acknowledgement

We acknowledge to all the members of the college staff, non-staff, and office-staff for their extended help regarding the Green audit report. They provided us with necessary facilities and assistance during the observations and recommendations of the various aspects of audit. This helped us in making the audit and putting up our views in a clear mode. We humbly thank our Principal who has given us the opportunity to carry out the work. Thus, making the report as a valuable document to enhance the new generation to take care of the greenery with environment and spread the message to protect it for many more generations to come.




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7. Conclusions

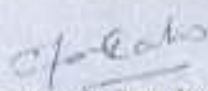
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8. Acknowledgement

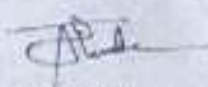
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As per my knowledge this information is evaluated and found truthful

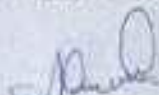
IQAC Co-ordinator


Dr. A. P. Ganorkar
Coordinator/Director
Internal Quality Assurance Cell
K.Z.S. Science College,
Bramhani-Kalmeshwar

Principal


Dr. A. K. Tikhe
Principal
K.Z.S. Science College
Bramhani, Kalmeshwar
Dist. Nagpur

Audit Committee


HEAD
Dr. (Mrs.) Dheekar/Zoology
K. Z. S. Science College
Dr. A. M. Mishra/Kalmeshwar
MEMBER




Principal
K.Z.S. Science College
Bramhani-Kalmeshwar,



This is to certify that

K. Z. S. Science College
Bramhani-Kalmeshwar 441501, Maharashtra, India

has conducted detailed
GREEN AUDIT
of their college campus and provided necessary data and
right credentials for **SCRUTINY**.

The relevant activities and appropriate measures carried out
by college on the basis of their submitted internal audit report,
have been **CHECKED & REVIEWED** and found to be
SATISFACTORY.

The initiatives taken by faculty and students towards
a better **UNDERSTANDING** of environment and
a sensitive awareness towards its
CONSERVATION & SUSTAINABILITY
are highly acknowledged & commendable.

This audit process included
College Internal Audit Report for 2022-2023
Assessed & Certificated on May 08, 2023
Certificate # EIZ/GRN/2023/05/10




Director
ENVINZOA
Nagpur




Note : The validity of this certificate is determined by the organization's compliance with Green Audit
recommendations as well as the system's maintenance and the surveillance audit.

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GESEC

ANALYSIS TEST REPORT FOR WATER SAMPLE

Test Report No: GESEC/PRO/2021-22/02/233

REPORT DATE: 04/03/2022

Name of Client	K.Z.S. Science College		
Address of Client	Brahmni, Kalmeshwar Dist- Nagpur, Maharashtra Pincode-441501		
Sample Collection Date	25/02/2022	Sample Receipt Date	26/02/2022
Analysis Started On	26/02/2022	Analysis Completed On	04/03/2022
Sample Details	Filtered Drinking Water	Location	Water Cooler
Sample Container	Plastic	Sample Quantity	2 Litre
Sample Collected by	Envirotech Research Private Limited		

Chemical Parameters

Sr. No.	Parameters	Results	Unit	Standard Limits	Method
1.	Color	<1.0	Hazen	<5.00	APHA 23rd 2017, 2120 C
2.	Turbidity	0.47	NTU	<1.00	APHA 23rd 2017, 2130 B
3.	Total Dissolved Solids	99.4	mg/lit	<500.0	APHA 23rd 2017, 2540 C
4.	PH	8.40	-	6.5-8.5	APHA 4500-H+B
5.	Total Hardness (as CaCO ₃)	74.0	mg/lit	<200.0	APHA 23rd 2017, 2340 C
6.	Iron (as Fe)	0.17	mg/lit	<0.30	APHA 23rd 2017, 3500 Fe B
7.	Magnesium (as Mg)	5.34	mg/lit	<30.0	APHA 23rd 2017, 3500 Mg B
8.	Calcium (as Ca)	20.84	mg/lit	<75.0	APHA 23rd 2017, 3500 Ca B
9.	Total Alkalinity (as CaCO ₃)	76.0	mg/lit	<200.0	APHA 23rd 2017, 2320 B
10.	Chloride (as Cl)	16.49	mg/lit	<600.0	APHA 4500-Cl-B
11.	Fluoride (as F)	0.41	mg/lit	<1.00	APHA 23rd 2017, 4500-F - D
12.	Sulphate (as SO ₄)	2.60	mg/lit	<200.0	APHA 4500- SO ₄ -E
13.	Nitrate as NO ₃	0.33	mg/lit	45.0	APHA 23rd 2017, 4500 NO ₃ B
14.	Total Coliform	Absent	MPN/100ml	Absent	APHA 23rd 2017, 9221 B


Remarks:

- > All parameters are within the limit.
- > BDL : Below Detectable Limit
- > N.S. : Not Specified

Checked By




Authorised Signatory



Terms and conditions

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of laboratory, GESEC.
4. Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not reveal to third party unless required by the statutory or legal requirement.
6. MoEF approved Lab by Govt. of India, From date: 16/02/2022 to 04/12/2022



Principal
K.Z.S. Science College
Brahmni-Kalmeshwar,