Green Audit 22-23



## **GREEN AUDIT REPORT**

## 2022-23

### (ENVIRONMENT AUDIT, ENERGY AUDIT AND GREEN AUDIT)

Bharati Vidyapeeth's New Law College, Sangli (Affiliated to Shivaji University, Kolhapur) NAAC Accredited with 'A' Grade, with CGPA **3.11** with A Grade,

> Certified by Mr. Manohar Shivthare and Mr. Vijay Sawant (MS Enviro Pollution Control Services & Consultant)

> > 2022-23





Manohar Shivthare B.Sc. (Microbiology) M.Sc. (Environment) 907 588 1115

Ref. No:-909

Date: 09-06-2023

## CERTIFICATE

This to certify that,

the Green Audit Report of Bharati Vidyapeeth's New Law College, Sangli

has been prepared and certified by the MS Enviro Pollution Control Services

& Consultant based on the documents produced by the college.

Date: 09/06/2023

Place: Sangli

Thanking you,

Yours faithfully,





Reg. Office : 144, Diskal, Tal. Khatav, Dist. Satara 415 504
 imanohar.shivthare@gmail.com | msenviro2020@gmail.com

Satara Office : S.No. 637, Flat No. 101, Padmavati Niwas. Manglwar Peth, Satara - 415 001 Sangali Office : 5-23, Urmila Plaza, Zunjar Chowk Goanbhag, Sangli - 416 416

## CONTENTS

SR. NO.	CHAPTER	PAGE NO.
	CERTIFICATE	
	ACKNOWLEDGEMENT	
	EXECUTIVE SUMMARY	
1.	Introduction	
	1.1 About Green Audit	
	1.2 Aims and objectives of Environmental Audit	
	1.3 About College	
	1.4 Vision of the College	
	1.5 Mission of the College	
	1.6 Goals and Objectives of the College	
	1.7 Motto of the College	
	1.8 Logo of the College	
	1.9 Environmental Policy	
2.	Green Audit	
	2.1 Implementation of the Environmental Policy	
	2.2 Environment Awareness Activities	
3.	Environmental Aspects	
	3.1 Energy Audit	
	3.2 Green Cover	
	3.3 Solid Waste Management	
	3.4 Liquid waste Management	
4.	Best Environmental Practices	
	41 Eco-Club	
5.	Summary, Conclusion and Recommendations	

## Bharati Vidyapeeth's New Law College ,Sangli

## **List of Photos**

1.	The Google Earth Image of the Bharati Vidyapeeth's New Law College, Sangli
2.	Generator operated on Diesel at college campus
3.	E-waste collected
4.	Liquid waste Drainage System

### **EXECUTIVE SUMMARY**

Green audit is the tool of management system used methodologically for protection and conservation of the environment. It is also used for the sustenance of the environment. The MS Enviro Diskal, Satara conducted a "Green Audit" of Bharati Vidyapeeth's New Law College, Sangli in the academic year 2022-23. Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. The audit suggests different standard parameters, methods and projects for environmental protection. The green audit is useful to detect and monitor sources of environment pollution and it emphasizes on management of all types of wastes, monitoring of energy consumption.

The main objective to carry out green audit is to check green practices followed by university and to conduct a well formulated audit report to understand where we stand on a scale of environmental soundness. Questionnaires were prepared for solid waste, energy, e-waste. The audit was carried for solid waste, electricity and energy. It also lists green initiatives taken by college to save environmental resources.

#### 1. Solid Waste:

Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The solid waste audit focused on volume, type and current management practice of solid waste generated in Bharati Vidyapeeth's New Law College, Sangli . The solid waste collected was paper waste, plastic, biodegradable waste, glass waste and other miscellaneous waste. Paper waste is a major solid waste generated at the college. Old answer sheets, old bills and confidential reports are sent for shredding, pulping and recycling after completion of their preservation period. Plastic waste is generated at college including administrative sections as well as support services is sent for recycling through an independent vendor. Metal and waste is stored and given to authorized vendors for further processing. Biodegradable waste and some of the waste from main canteen is collected and handed over to garbage collecting vehicle of Municipal Corporation.

#### 2. Electricity and energy audit:

Energy sources utilized by the college include electricity, liquid petroleum, and LPG. The major use of energy is in classes, offices, canteen and on campus for lighting, e-devices, and cooking. There are three Air conditioners used in the college which consume 5.22 KW/annum. At other places in college like porches, office corridors and other services LED lamps and LED tube lights which reduce consumption of electricity.

#### 3. E-waste:

E-waste generated in the college is of schedule II of CPCB, New Delhi. E-waste generated in the college is disposed of in a scientific way. No E-waste is generated every year. Whatever e-waste is generated, it is disposed of through an independent recycling agency by the Management of Bharati Vidyapeeth Pune.

## Chapter 1 Introduction

**1.1 About Green Audit**: Green Audit is the most efficient ecological tool to solve such environmental problems. It is a process of regular identification, quantification, documenting, reporting, and monitoring of environmentally important components in a specified area.

The Green Audit process can play an important role in promotion of environmental awareness and sensitization about resource use. It can create consciousness towards ecological values and ethics. Through green audit one can get direction about how to improve the condition of environment. It also serves as a means to identify opportunities to save money, enhance work quality, improves employee health, safety and morale, reduce liabilities and achieve other forms of business values.

Green auditing and the implementation of mitigation measures is a win-win situation for the entire college, the learners and the planet. It can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students with a better understanding of green impact oncampus.

In view of the NAAC circular regarding Green Auditing, the College Management decided to conduct an external Green Evaluation by a competent Green Audit Assessment Team headed by Mr. Manohar Shivthare. Green Audit focuses on the Green Campus, Waste Management, Air Pollution, Energy Management & Carbon footprint etc. being implemented by the Bharati Vidyapeeth's New Law College, Sangli management. The concepts, structure, objectives, methodology, tools of analysis, objectives of the audit are discussed below.

#### 1.2 Aims and objectives of Environmental Audit in Academic Institutes

- 1. To nurture environment friendly management in academic institutions following aims and objectives were formulated.
- 2. To recognize the initiative taken by the organization towards the environment.
- 3. To secure the environment and cut down on the threats posed to human health.
- 4. To provide baseline information to enable organization to evaluate and manage environmental change, threat and risk.
- 5. To identify and control the impact of activities of organizations on the environment.
- 6. To suggest the best protocols for sustainable development organization and environment.
- 7. To assess environmental performance and the effectiveness of the measures to achieve the defined objectives and targets.
- 8. To identify the different pressures on organizations to improve their environmental performance.
- 9. To ensure that the natural resources are utilized properly as per national policy of environment.
- 10. To establish the parameters for maintaining health and welfare of the community of the organization.
- 11. To set the procedure for disposal of all types of harmful wastes.

#### **1.3 About College:**

Bharati Vidyapeeth's New Law College, Sangli, has been accredited with a CGPA of 3.11 with A Grade in the first cycle of NAAC accreditation, is one of the units of Bharati Vidyapeeth, Pune affiliated to Shivaji University Kolhapur. It was established in the year 1997 with the object of providing legal professionals and social engineers to fulfill the dream of '*Social Transformation though Dynamic Education*' of Hon'ble Dr. Patangrao Kadam, Founder of Bharati Vidyapeeth, Pune and the Chancellor of Bharati Vidyapeeth University, Pune. Sangli is an important city in the State of Mahrastrata, having a wide network of private businesses, trade centers, wide government and co-operative sectors. This has led to an increasing demand for legal experts and professionals. The factor such as consumerism, increased awareness of legal rights has resulted into the need for responsible advocacy. The college has been working to meet

demand of society and students desirous of studying law, to bring the dynamic knowledge of law within the reach of common man and thereby to bring social transformation.

In a short span, college has taken meticulous efforts to prove its distinct image as innovative institution imparting legal education. From very inception, the college has won the appraisal of students, parents, and legal luminaries as premier legal institution in Shivaji University, Kolhapur. The college has progressed in every perspective of legal education. The list of star alumni show the contribution of the college in national development. Initially in 1997, the college commenced the Under-Graduate Three Years Law program (LL.B.). The Five Years Law program with the increasing demand for post higher secondary education was started with the recognition of Government of Maharashtra and approved by the apex body Bar Council of India in 2001-02. Recently the college has also made available a few short-term courses in collaboration with the Adult and Continuing Education Department, Shivaji University Kolhapur. The college with its salient features such as enriched library with internet and other facilities, well qualified staff, Intensive study programs, innovative teaching methods, remedial coaching and short-term courses, social commitment through extension activities has achieved remarkable status.

#### 1.4 Vision of the College:

'Quality Legal Education for Professional Competencies and Social Transformation'

#### **1.5 Mission of the College:**

Imparting quality and value based legal education to nurture students with Advocacy skills, ethics and social orientation.

#### 1.6 Goals and Objectives of the College:

a) To maintain quality, encourage and achieve excellence in legal education.

- b) To provide competent legal professionals to society.
- c) To make students conversant with the administration of justice
- d) To inculcate values amongst students to play an important role in nation building.

e) To make consistent efforts to spread legal awareness and provide free legal aid and advice to the society at large.

f) To provide and enhance access to knowledge of law for the underprivileged sections of society.

The vision and mission statements of the college are clearly indicative of the objectives of the National Policy on Education demanding that centers of higher education should perform multiple roles like creating new knowledge, acquiring new capabilities and producing an intelligent human resource pool, through teaching, research and extension activities. The college plans and executes its curricular, co-curricular and extracurricular activities to translate the vision and mission statements into reality.

#### 1.7 Motto of Bharati Vidyapeeth's New Law College, Sangli:

#### "Social Transformation through Dynamic Education"

Bharati Vidyapeeth is an organization with a difference. It has its own well defined ideological orientation and commitments. Social transformation in a desired direction is one of its cherished goals and it believes that education can be an effective prime mover for such social transformation. Dr. Patangrao Kadam has very aptly coined **"Social Transformation through Dynamic Education"** as the official motto of Bharati Vidyapeeth. Education can be an effective instrument of social change, if it is dynamic. This conceptualization of dynamic education at Bharati Vidyapeeth is reflected in the innovative academic programs and activities carried out in its institutions.

#### **1.8 Environmental Policy:**

Bharati Vidyapeeth's New Law College, Sangli is aimed at balancing environmental protection and the conservation of natural resources with other policy goals, such as affordable energy, air and drinking water quality monitoring. The college has established clean and green campus with awareness and protection and in fulfilling sustainable development goals set forth to implement environmental policies given by government from time to time.

Name	Bharati Vidyapeeth's New Law College ,Sangli		
	(Affiliated to Shivaji University, Kolhapur)		
	NAAC Accredited with 'A' Grade, with CGPA 3.11		
Address	Bharti Vidyapeeth Bhavan,		
Tudiess	Rajwada Chowk, Sangli. 416416		
City	Sangli		
E. Mail	nlcsangli@bharatividyapeeth.edu		
Website	http://nlcsangli.bharatividyapeeth.edu		

#### Table : Name and Address of the Institution:

## Location:



The Google Earth Image of Bharati Vidyapeeth's New Law College ,Sangli

#### CHAPTER 2 Green Audit

In keeping with the need of the National interest of Swachta and Swastha Bharat, Bharati Vidyapeeth's New Law College, Sangli is well aware about environmental issues and has gone through its environmental audit for better understanding of environmental aspects and impacts of the activities carried out in the College campus on the environment.

#### 2.1 Implementation of the Environmental Policy:

Bharati Vidyapeeth's New Law College, Sangli is aimed at balancing environmental protection and the conservation of natural resources with other policy goals, such as affordable energy, air and drinking water quality monitoring, rainwater harvesting. The college has established a clean and green campus with awareness and protection and in fulfilling environmental goals and sustainable development goals set forth to implement environmental policies given by government from time to time. NSS and eco-club students are frontiers and other students, and staff members are supporting the implementation of the environmental policy.

#### 2.2 Environment Awareness Activities:

#### **2.2.1. Tree Plantation in the college campus:**

The college is Centrally located in Sangli City and has very limited campus area there are limitations for plantation of big trees still the college tried hard through container gardening. This method of gardening is used in galleries and even at terrace. In addition to this the corridors and porches are beautified with various types of plants. To make people aware about importance of trees and plantation in the economy of the nature and human lives, students and staff of Bharati Vidyapeeth's New Law College, Sangli takes efforts for plantation of trees at various outdoor places like hill slops, grounds and sideways of paths etc .

Thus, trees /plants give us host of their productive functions, protective functions and regulatory functions. As green plants are autotrophs and primary producers, they maintain biodiversity of flora and fauna of a particular area. They have a great place in the economy of nature.



#### 2.2.2 Cleanliness drive:

It is everybody's responsibility, and one should keep themselves and their surroundings clean and hygienic. It also brings good and positive thoughts in the mind which slows down the occurrence of diseases. In relation to this plastic eradication and cleanliness drives are frequently organized by colleges.

#### CHAPTER 3 Environmental Aspects

#### 3.1 Energy Audit:

Energy is an important parameter that has to be study while going through green audit. We use different forms of energy such as electricity, LPG, petrol, diesel, wood etc. to carry out our day-to-day activities. On the background of climate change and Paris Agreement, India has intended to reduce its carbon emission by various ways. Reject, Reduce and Replace are the three R"s for efficient use of energy. Electricity and LPG are the forms of energy majorly used in higher education institutes. The use of LED lights instead of incandescent lamps and tube lights is one of the important green practices followed by college. Along with the use of LED lamps use of natural ventilation, natural light are useful practices to carry out in the college to reduce the use of electricity. Following is the data related to energy consumption and conservation practices analyzed under audit process of Bharati Vidyapeeth's New Law College, Sangli.

#### **3.1.2 Energy Consumption:**

a) Electricity consumption by Meter No. 01, 07643094455 Avg. consumption = 643 units.

Electricity supplied from the Maharashtra State Electricity Board (Mahavitaran) is the main source of energy for the activities on the campus like illuminating rooms, operating fans computers, instruments, motor and for AC. It is depicted from above tables and graphs. that the average electricity consumption by college is 643 units per month. Diesel operated. Green power Kirloskar generator is used as an alternating source of Energy during emergency. conditions.

#### Bharati Vidyapeeth's New Law College ,Sangli



#### 3.3 Green Cover:

The college has planted many trees at various places in the city through NSS, other students and faculty members. Though the college has limitation of open space, the planting is done inside the pots and in available open space.

#### 3.4 Solid Waste Management:

Solid waste generation and its management is a burning issue in current days. it is necessary to manage the solid waste properly to reduce the load on waste management system. The purpose of this audit is to find out the quantity, volume, type and current management practice of solid waste generation in the Bharati Vidyapeeth's New Law College, Sangli campus. This report will help for further solid waste management and to go for green campus development.



#### 3.4.1 Biodegradable Waste:

The main source of biodegradable waste in educational institutes is generally from student's tiffin and eatables. Garden waste generated from pruning of trees, fallen leaves, etc. is also an important source of biodegradable waste in the college Campus. This biodegradable which is segregated by providing separate dustbins of green color for Biodegradable waste and thrown into garbage collecting vehicle of Municipal Corporation.

#### 3.4.2 Paper Waste:

A major part of the solid waste generated at the college campus is paper. Though paper is a biodegradable material, it has good potential of recycling thus will help in conserving the resources and trees indirectly. The College follows the green practice by reusing single side used papers for writing and printing. Important and confidential reports/ papers are sent for pulping and recycling after completion of their preservation period. Other green practices like use of one-sided paper, paperless activities like e-mailing all notices instead of printing it of paper, putting the information on what's app groups are also practiced in the college to reduce the use of paper.

#### **3.4.3 E-Waste Management**

It is important to dispose waste properly. When it comes to e-waste the problem becomes even more dangerous. E-waste is the electronic products that are unwanted or not working. One of the bad disposal habits is throwing e-wasted in the general dustbin along with other biodegradable or non-biodegradable waste. The E-waste collected in college includes LED bulbs, electronic cables, monitors, CPUs, keyboards, printers, batteries, mobiles, chargers, ear phones, etc. which are not working.



The collected e-waste is handed to vendors which were chosen by Bharati Vidyapeeth's head office.

#### **3.4.4 Biomedical waste management**

#### Sanitary napkin vending and disposal machine.

Menstrual hygiene is one of the basic hygiene needs and plays a vital role in preserving women's health. The process of menstruation or talking about it is still considering a taboo, and women refrain from talking about it openly. Lack of sanitation facilities in colleges is the biggest challenge faced by girls studying in colleges during periods. During the menstruation cycle, girls won't feel comfortable carrying sanitary pads with them in colleges with the thought of embarrassment they will face if anybody sees this in her bag. All these results in missing the lectures or deciding to drop out of college.

To protect our environment and hygrines, proper care and initiative have been taken by our institute. The college has installed sanitary vending and disposal machines for the careful disposal of sanitary napkins used by every woman on campus. The ash generated from this disposal machines is used as manure.

#### 3.5 Liquid waste Management

Management of waste liquid is a key aspect as we are looking for pollution free environment. In our college campus, liquid waste is mostly generated Sewage waste, and canteen effluent.

Proper sewage system is existed in the campus. There are Pour flush/ Water seal latrine in the campus as a result no fly or smell problem remained.



#### Photo

Liquid waste Drainage System

## **CHAPTER 4**

#### **Best Environmental Practices**

Bharati Vidyapeeth's New Law College, Sangli follows all possible practices to conserve the

nature and reduce its ecological footprints through Eco Club.

# Eco Club: The college established Eco-Club on 2<sup>nd</sup> Oct. 2021 . In all 85 students from the college registered and joined the club.



**Meeting of Eco-Club** 

Green Audit 22-23

Some of the practices of Eco Club are as below.

#### The club conducts various Environmental Awareness programs as follows:

#### 1. Eco friendly Diwali Competition :1st Nov2021

The main idea behind celebrating an eco-friendly Diwali is to maintain the sustainability of our environment and protect our planet earth. These competitions encourage students to keep the environment well. Out of the participants 3 best were awarded with the certificate. Name of the awarded students are

- 1. First prize –Rucha Pathak (Pre Law-V)
- 2. Second Prize- Sakshi patil ( Pre law- I)
- 3. Third Prize- Bharati Kanase (pre law- I)



#### 2. Quiz Competition on Energy Conservation Day on 15th Dec. 2021

Eco-club organized Interclass Quiz Competition on the occasion of National Energy Conservation Day on Wednesday 15th December 2021 to send the message of importance of conserving energy in every walk of life among human being.50 students had participated in the competition out of which 3 with high score were awarded with the certificate.

#### Name of the awarded students are:

First prize - Daya Ugale (pre-law V)

Second prize- Pankaj kamble (llb-i)

Third prize- Rucha Pathak (pre law v)

### Bharati Vidyapeeth's New Law College ,Sangli







4. Awareness Rally on World environment Day ,6.June 2022



5. Street play for awareness Day, 6 June 2022



#### 6. Cleanliness drive



**Cleanliness drive at Riverside, Sangli** 

**Cleanliness drive at college** 

## 7.Flag Collection Program, Date – 18/8/2022

In Tasgaon city, by walking from Wada ,Vasti and educating the citizens about the environment, more than 665 national flags were respectfully collected and handed to the municipal administration

e . e	युवकांनी ज	ापला राष्ट्रीय	सन्मान
	सकाळ वृत्तमेवा	प्रालगक्ते मुद्दं काष्यत अले.	मुख्यधिकले पृथ्वेराव पाटील,
		भारते विद्यापेट न्यू तां कॉलेजच्या	जिवधनुष्य पाउँदेशनचे संस्थापक
		प्रचर्या ही, पूज संताहक यांच्या	अध्यक्ष संस्थ चलाग, सामाजिक
	विद्यापीठ यू तो कतिव तमेव		कार्यकते निमार मुल्ता यांने प्रणंदानि
	महविद्यालयालंत वेगाऱ्या इको	सितोफा आमिन, राष्ट्रीय सेवा योजनेचे	
The second se	क्तबच्च मध्यमातृन तसगव शहरात	कार्यवाह प्र. प्रमांत आंडोकर, पिन	मुत्त्य, भारती कणसे, सुदर्शन बॅठगा,
	ंहर पर तिरंग' या उपडम्पालेंत राष्ट्रीय	कार्यवाः प्र.फलवं माने वांच्या	गजराव माले, जविम प्रताग, अजिप
and the second se	खबांचे संकल्प करण्यत आले.	सर्गदर्शनखलो विविध कार्यक्रम	कटन योगे स्वासीवक म्लून कान
1व : भारती विद्यापीठ न्यू साँ कॉलेजर्लन वेणाऱ्या इको क्लवच्या	मुन्दो दोझोहन अधिक राष्ट्रीय ध्वजांचे	झले. य उद्धम्यचं संगत तरमाव	केले. मुख्याधिकारी पृथ्वीराव पार्टल
मातर गर्शव ध्वजांचे मंचलन कालाना विद्यार्थी व मान्यवर,		येथे झले. तमगत नारारंषदेवे	with Engeneral Street State

Green Audit 22-23

Students depositing collected Flags to officer of municipal corporation.



## 8.Plastic Free Day on 26 July 2023



#### Green Audit 22-23

#### **Plantation:**

Though the open campus is limited to college, college students and faculty follow plantation activity to nurture the affection towards nature among the students. Plantation has been done at empty places. Small plants like shrubs and herbs are planted in pots and kept inside the corridors of the college building.



Plantation by students at their homes on World Environment Day 5, June 23

#### **CHAPTER 5**

#### Summary, Conclusion and Recommendations

#### **Summary:**

Green Audit is one of the important tool to check the balance of natural resources and its judicial use. Green auditing is the process of identifying and determining whether institutional practices are eco-friendly and sustainable. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area. The MS Enviro, Diskal, Satara has conducted a "Green Audit" of Bharati Vidyapeeth's New Law College, Sangli in the academic year 2022-23. The main objective to carry out green audit is to check the green practices followed by college and to conduct a well defined audit report to understand whether the college is on the track of sustainable development.

After completing the audit procedure of college for green practices, there are following conclusions and recommendations which can be followed by college in future for keeping campus environment friendly.

#### **Conclusion:**

From the green audit following are some of the conclusions:

1. College takes efforts to dispose majority waste by proper methods. online circulars and notices are helpful for reducing the use of papers.

2. Biodegradable waste is properly dumped.

3. Reducing the use of one time use plastic bottles, cups, folders, pens, bouquets, decorative items

will be useful to solve the problem of plastic pollution to some extent.

- 4. Toilets and bathrooms are consuming more water in the college campus. The replacement of old taps can be beneficial for solving this issue.
- 6. The use of electrical cars and e-bikes will be good initiatives to save fuel.
- 7. E-waste handling and disposal are properly done.
- 8.Electricity is saved by the use of CFL/LED bulbs for illumination and switched off when not in use.

#### **Recommendations:**

Following are some of the key recommendation for improving campus environment:

- 1. The rain water harvesting system should be developed to reuse the water for other purposes.
- 2. Eco-friendly parameters should be included in the purchase of articles and goods for the Campus.
- 3. Bore well water meter must be installed at the institute for monitoring the water consumption per capita in each block.
- 4. Need of increase in promotional activities for spreading awareness about green initiatives and environmental awareness at the campus.
- 5. Green building guidelines should be followed for future expansion projects of the College.
- 6. Electrification of campus lights by solar power should be encouraged.
- 7. Installation of solar panels will be useful in conserving the natural resources.



Authorized Signatory

----End Sof Report-----