

Green Audit Report

(2022-2023)

Nashik Shikshan Prasarak Mandal, Nashik

Late Bindu Ramrao Deshmukh

Arts, Commerce & Science

Mahila Mahavidyalaya, Nashik Road.

Nashik-422101 Maharashtra, India



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Executive Summary

Nashik Shikshan Prasarak Mandal's, Nashik Late Bindu Ramrao Deshmukh Arts & Commerce Mahila Mahavidyalaya, Nashik Road deeply believes in Environmental care and understands its importance in the present world. Because of the environmental burden, it is necessary to plant trees in the surrounding area, so that human life will be saved from the hazards arising out of the depletion of plants and trees.

The purpose of the Green Audit was to ensure that the Green Campus Programme is actively promoted by the college. Due to pandemic Covid- 19 many activities in the campus of the college were postponed. Yet, online activities and programmes were conducted. Yoga can improve the physical and mental health, while preparing the mind and body for long-term health. Hence, Yoga Classes and workshops are conducted for the students, staff and for the society.

1. Introduction

Green Audit can be defined as systematic identification, recording, Reporting and analysis of components of environmental diversity, "The green Audit aims to analyze environmental practices within and outside the campus" which will have an impact on the eco- friendly ambience it is initiated with motive of inspecting the work conducting within the organization whose exercises can pose risk to the health of inhabitant and the environment through green audit, once gets a directions a show to improve the condition of environment and there are various factors that have determine the growth of carrying out green audit. The green audit aims to analyse environmental practices within and outside the college campuses, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic

identification, quantification, recording, reporting and analysis of components of college environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the green audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the green audit.

NEED FOR GREEN AUDITING :

Green auditing is the process of identifying and determining whether institutions practices are ecofriendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in common areas Now, it is necessary to check whether our processes are consuming more than required resources? Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one.

GOALS OF GREEN AUDIT :

College conducted a green audit with specific goals as:

1. Identification and documentation of green practices followed by college.
2. Identify strength and weakness in green practices.
3. Analyze and suggest solution for problems identified.
4. Assess facility of different types of waste management.
5. Increase environmental awareness throughout campus
6. Identify and assess environmental risk.
7. Motivates staff for optimized sustainable use of available resources.
8. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become

problem.

OBJECTIVES OF GREEN AUDIT :

1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
- 2.To identify and analyze significant environmental issues.
- 3.Setup goals vision, and mission for Green practices in campus-
- 4.Establish and implement Environment Management in various departments.
- 5.Continuous assessment for betterment in performance in green practices

BENEFITS OF GREEN AUDIT TO EDUCATIONAL INSTITUTIONS :

There are many advantages of green audit to an Educational Institute:

1. It would help to protect the environment in and around the campus.
- 2.Recognize the cost saving methods through waste minimization and energy conservation.
- 3.Empower the organization to frame a better environmental performance.
- 4.It portrays good image of institution through its clean and green campus.

Finally, it will help to build positive impression for through green initiatives the upcoming NAAC visit.

About the College:

Started functioning in the academic year 1998-99, is the only Women's college in Nashik affiliated to the University of Pune .It has acquired 'B' grade under NAAC Reaccreditation and also has affiliation under the UGC Scheme of 2(f) & 12B. It is the fastest growing college in Nashik with its academic excellence and discipline. Besides the Arts and Commerce courses of the university, the college runs various professional courses for enabling the girl-students to secure jobs in the competitive and IT based environment under the banner of Center for Career Enhancement and Training(CCET). The College has secured permanent affiliation with the Savitribai Phule Pune University in the year 2008- 09 and also conducts two post- graduation courses M.Com. & M.A. in Economics. With able and visionary guidance of the office bearers of the Nashik Shikshan Prasarak Mandal, its hard working, committed staff and needy students, college is making mark in every sphere of academic and extra-curricular aspects of all the stake holders.

The College has been running various student centric activities. State Level English Paper Presentation Competition, Personality Development Workshop, Online Accountancy Quiz, Competitive Examination Guidance Workshop, Soft Skills Workshop, Nirbhay Kanya Abhiyan, Trekking Camp, Mock Parliament are among these activities.

The college is trying to develop green campus system for environmental conservation and sustainability.

There are main three pillars i.e. zero environmental foot print, positive impact on Occupant health and performance and hundred percent graduate and post graduate demonstrating environmental literacy. The college administration works on the several facets of green campus including water conservation, tree plantation, waste management, paperless work, alternative energy and mapping of biodiversity.

Objectives of the Study:

The main Objectives of the green audit are to promote the environment management and conservation in the college campus. The purpose of the audit is to identify and 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:

1. To introduce and aware students to real concerns of environment and sustainability.
2. To secure the environment and cut down the threats posed to human health by analyzing the pattern and extends of resource used on the campus.
3. To establish baseline data to asses future sustainability by avoiding interruption in environment that are more difficult to handle and their correction requires high cost.
4. To bring out status report on environmental compliance.

Methodology:

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 person and data analysis, measurement and recommendations. The study covered the following areas to summarize the present status of environment management in the campus.

1. Water Management
2. Waste Management
3. Energy Management
4. Landscape/environment construction
5. Transportation
6. Capacity building and knowledge transfer.

1. Water management

Water conservation is not only good for Society and the environment; it's also excellent practice. Water conservation can help you save money on your water, wastewater, and energy bills, as well as reduce on-site treatment expenses. Every company is different, but a water audit is a good place to start.

Water audits allow you to inventory all of your facility's water uses and suggest strategies to improve water efficiency. The findings can assist you in prioritizing actions to take in order to adopt cost-effective water-saving measures. A water audit might help you save money by lowering your water bill at home (and sewer bill if you are connected to a public sewer system). By applying easy conservation measures and without dramatically altering your lifestyle, you may reduce your water usage by up to 30%.

Wise use of Water	Water Leakage repair	Use of water purification	Rain Water Harvest	Use of Water Cooler	Water Pollution incidence	Water Use per day in liters	Water Storage	Water Tank Cleaning
✓	✓	✓	✓	✓	X	5000	10000	✓

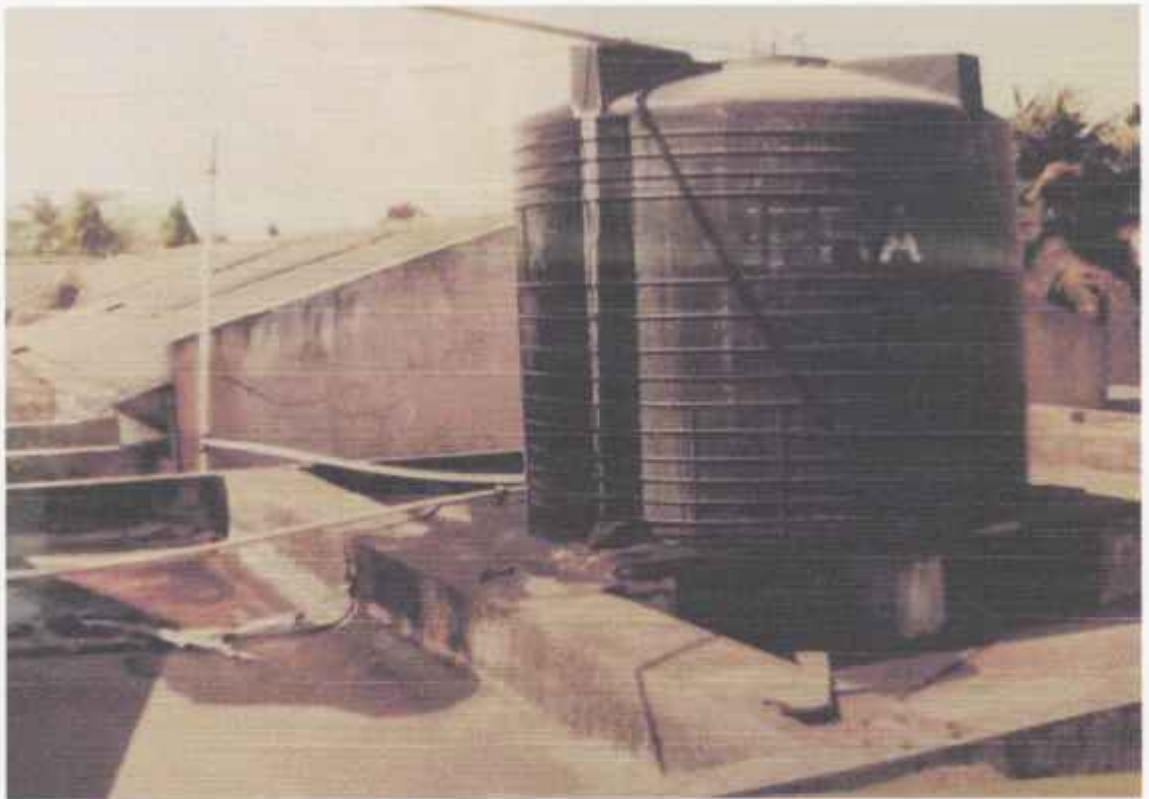
This Key indicator focus water consumption, water sources, irrigation, storm water, and fixtures. A water audit is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

A) Observation

The study observes that bore well and water provided by Nashik Municipal Corporation are the two major sources of water. Water is used for drinking purposes, toilets and gardening. During the survey no loss of water is observed. Neither by any leakages nor by overflows of water from over head tanks. The data collected from all the four departments is examined and verified. On an average, the total use of water in the college is 5000 liter per day which includes drinking, gardening and washrooms.

B) Recommendations

- Need of monitoring, controlling over flow is essential and periodically supervision drill should be arranged. In campus medium scale re used and recycle of water system is necessary.
- Minimize wastage of water and use of electricity during water filtration process should be used.



Water Tank



C) Waste Management

Solid waste generation and management has become a most emerging issue in recent years. The rate of solid waste generation is extremely significant, while in other side there is lack of adequate

technologies to manage the garbage generated. All garbage other than liquid waste is classified as solid waste. If solid trash is not properly disposed of, it can cause serious health problems as well as an unpleasant living environment. As a result, it is critical to manage solid waste in proper way to lessen the pressure on waste management systems. This study will aid in the continued management of solid waste and enhance the beauty of campus in terms of green cover

Organic Waste per day	Non Plastic Waste (Per Day)	Plastic Waste(perday)	Electronic Waste (Perday)	Glass Waste (Per Year)	Management of Organic waste :Excellent/Average/Needs improvement	Recycling of other waste Trash/Recycler	Over all waste management practices – Excellent/Average/Needs Improvements
Medium (2.5 KGPer Day)	Medium (1 KGPer Day)	Low (400gm app. PerDay)	Low -	Low (1KGPer Year)	Medium	Trash	Average

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, glass, biodegradable etc. And recycling. Furthermore solid waste of ten includes wasted material resources that could otherwise be channeled into better service through recycling, repair and reused. Solid waste generation and management is a burning issues. The survey focused on volume type and current management practice of solid waste generated in the campus.

Observation

The total solid waste collected in the campus is 3 to 5 kg per day. Waste generation from tree droppings is major solid waste generated in the campus. The waste is segregated at source by providing separate dustbins for bio degradable and plastic waste. Single sided used papers reused for writing and printing in all departments. Important and confidential reports / papers are send for recycling after competition of their preservation period. Very less plastic waste that is half kg a day is generated by college but is neither categories at point source nor send fore

cycling. Metal waste, glass waste and wooden waste is stored at given to authorized scrap agent for further processing.

The institute has adopted vermin culture composting. The main purpose of this is to reduce disposable waste in the college campus. After complete process of vermin composting it is used as manure in the garden. Awareness program among students is also conducted in the college.



Vermin Compost Project



D) E-Waste Management

E- Waste can be described as consumer and business and electronic equipment that is near or at the end of useful life. Electronic components contain cadmium, lead, mercury, etc can damage human health and the environment.

Observation

E waste generated in the campus is very less in quantity. The cartridge of laser printers is outside the college campus. The E waste and defective items from computer laboratory is being stored properly. The inverter battery is changed one time in three to four years and the computers are also changed in.

Recommendations

1. Reduce the absolute amount of waste which is produced from the college staff and office.
2. Make full use of all recycling facility provided by Nashik Municipal Corporation and private supplier, including glass, cans, white and brown paper, plastic bottles, batteries, print cartridge, cardboard and furniture provides sufficient accessible and well publicized collection point for recyclable waste and responsibility for recycling should be clearly allotted.
3. Recycle or safely dispose of white goods, computer and electrical appliances. Buy back policy is also implemented for the purchases.

Resources and Energy Management

Number of Tubes Compact Florescent Lights, incandescent	No. of air Conditioners	LED/LCD Monitors	Use of Generators	Promotion of Energy Conservation Practices	Average A4 sheet of paper per day	Overall Energy Management
100	0	33	2	Yes	77	Average

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

Observations

1. This includes effective and objective evidences to create awareness towards wastage of electric energy. Hoardings, placards, messages, posters etc planted at key locations in college.
2. Energy source utilized by all departments and common facility centre is electricity only. Total energy consumption is determined as 13.2 KW year by major energy consuming equipments.
3. All the departments and common facility centers are equipped with LED lamps approximately— 150 are counted during survey. Besides this 04 are also installed in the outskirts of the college.
4. Equipments like computers are used with power saving mode. Campus administration runs switch of drill on regular basis.



Batteries installed in the Computer Lab in the college

Recommendations

1. In order to create awareness among the students and the staff regarding energy conservation various programmes, activities and workshops like street Plays, videos about awareness, Poster Competition, etc should be organized by the college.
2. Use of solar energy is essential in college campus.

Landscape/ Environment/ Construction:

A sustainable landscape is designed to be both attractive and in balance with the local climate and environment and it should require minimal resource inputs. Thus, the design must be "functional, cost-efficient, visually pleasing, environmentally friendly and maintainable" As part of the concept called sustainable development it pays close attention to the preservation of limited and costly resources, reducing waste and preventing air, water and soil pollution.

Garden Area	Tree Cover	Type of Building: Concrete/stonewalled/metal sheet roofing/Clay tile roofing	Paint user for walls:	Flouring Tiles :Stone/ Mosaic Tiles/Cement/Proc
3000Sq.Ft.	1500Sq. Ft	'Concrete Building 'Cement Sheet Roofing	Synthetic distempers	External: Cement Flouring, Cement Tiles

Transportation

Transportation is a huge consumer of energy and resources and also a major source of environment pollution (basically air pollution). People tend to use motorized vehicle even for the short distances because of inconvenience and unsafe conditions for bicycling. This leads excessive use of fuel. Limiting the motorized transport at point defined boundary is required to control the fuel usage and also to reduces its air and noise pollution. Green vehicles are very

much energy efficient, pollution free and convenient mode for short distance travelling. But because of lack off activities their use s not preferred. Eco-friendly transportation promotes use of such efficient vehicles by adequate provisions. Eco-friendly transportation is beneficial for the users as it keeps environment free of pollution and possess healthy living conditions.

Parking Area	Staff Members using two Wheelers%	Staff Members using bicycles%	Staff members using public transport%	Staff members using pooling cars%	Staff using four wheelers%
6300Sq.ft	46%	12.5%	18.75%	4.05%	9.37%



Cycle Parking

Observation

The parking area of the college is 6000sq.ft.15 staff members use two wheelers that is 46% of the staff. 04 staff members use bicycle that is12.5% of the staff. 06 staff members are use public transport and (18.75%)03 staff members use four wheeler that is 9.37%and four staff members (12.5%) don't use any vehicle. Instead, they prefer walking.

Recommendations

1. At least one day should be declared as No Vehicle Day in the Week.
2. The more and more members should use carpooling.
3. The staff residing in near by areas should been courage to use bicycles.

Capacity building and knowledge transfer

Environmental Education in syllabus	Eco Club	Ethics Committee	Extension Activity related to environment	Extra credits for green practices
Yes	Yes	Yes	Yes	No

Environmental education in syllabus is prescribed by the university for SYBCOM and SYBA students. Eco Club is established by environment department. Ethics committee is also established by student Development Council. The committee inculcate moral values among the student's Extension activities related to environment are conducted by NSS, SDC and environment committee. Almost all the students of our college come by public vehicle and bicycles so this is the best practice in the college.

Green Area

A green area is defined as any place with grass, trees, or horticulture. Tree canopy analysis is a good way to estimate how much green cover there is in a given area. Canopy cover is the covering created by the branches and crowns of plants or trees (green cover). Green cover refers to the percentage of a given area of the ground that is covered by tree crowns. According to earlier national forest policy and the National Mission for Green India (GIM), one of eight missions under the National Action Plan on Climate Change (NAPCC), 33 percent of total accessible land should be covered by vegetation. Because plants and trees are the best carbon sinks, it will aid in the

decrease of greenhouse gas emissions. This covers the campus's flora, greenery, and sustainability to guarantee that the structures meet green construction requirements. This also aids in the implementation, enforcement, and revision of the Environmental Policy through different environmental awareness programmes.

Fruit Tree	Flowers	Croton	Earthen Pots	others	Medicinal	Total
36	22	22	40	39	10	169

Observation

1. Campus is enriched with variety off local and fruit trees. Various tree plantation programs are being organized during the month of July and August at college campus.



Tree Cover Shadow in Parking Area



Green Gym



Save Water Slogans in College Campus

Tree plantation program includes various types of medicinal herbs.



Recommendations

1. Review periodically the list of trees planted in the garden.
2. Give scientific name to the trees.
3. Ensure that audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
4. Celebrate 05th June as Environment Day every year and undertake tree plantation on this day to make the campus greener.

Conclusion:

From the green audit following are some of the conclusions which can be taken for improvement in the campus.

1. Institute takes efforts to dispose majority waste by proper methods. The Green computing i.e. Online payment system, online circulars and examination procedures are helpful for reducing the use of papers and ultimately reducing carbon footprint.
2. 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.
3. Biodegradable waste is used efficiently for composting and vermin composting. There is a scope to utilize the organic matter for manure production.
4. Use of LED lamps and Tube Lights is minimum and is to be encouraged.
5. Toilets and bathrooms are consuming more water in the departments. The replacement of old taps can be beneficial for solving this issue.
6. RO drinking water has solved the major problem of safe drinking water in all departments.
7. The overall ambient air quality on the campus is good while some air quality issues may arise due to developmental activities on the campus should be addressed.
8. The sound levels on the campus is good except due to some transportation and construction activities.

Environment committee 2022-2023

From the academic year 2004 Environment has been functioning in the college. The structure of this committee is as per following.

President: Principal Dr. Sameer Limbare

Co-ordinator: Dr.MinalBarve

Members: Mr. Prakash Warkari

Dr. Tejesh Beldar

Associate Prof Vinod Nirbhavane

Student Members: Payal Sikchi

Various activities conducted by this committee. Some regular activities and some occasional activities

Regular activities.

- Watering the plants
- Nurturing the Plants
- Maintenance of Vermi- Compost Project
- Saving the energy in campus
- Keep the campus clean

Occasional activities

- Best from waste
- Visit to various places
- Competition of environment greetings
- Making of paper flowers.
- Collection of Ganapati Idol
- Making of Ganapati Idol
- Wallpaper competition



Head

Department of Geography
HPT Arts and RYK Science College
Nashik-422 005.

Ethics Committee:2022-2023

From 2014 Ethics committee has been functioning in the college. The structure of this committee is as per following.

President: Principal Dr.Sameer Limbare

Co-ordinator: Dr. Minal Barve

Members:

Dr. Tejesh beldar

Mr. Yogendra Patil

Ms. Smita Malve

Student members: Payal Sikchi

- Various activities conducted by this committee. Some regular activities and some occasional activities

Regular Activities:

- Conducting regular prayer
- Conducting regular Anthem
- Conducting regular Omkar Mantra.
- Over all discipline in the college

Occasional Activities

- All Programmes of National Integration are conducted
- All Programmes relating birth and death Anniversary of the great personality are conducted



Mr. Prakash Warkari

IQAC Co-ordinator

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