

Green Audit Report

(2021-2022)

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Executive Summary

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 Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. This audit report contains observations and recommendations for improvement of environmental consciousness.

1. Introduction

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 eco-friendly 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 goal, 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.

Introduction and Profile of 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:

To bring out status report on environmental compliance. The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resource in the campus.
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the College campus and its environment
- Enhancement of College profile
- Developing an environmental ethic and value systems in young people

Scope of Work:

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.

Observations and Recommendations

1. Water management

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 indicator addresses water consumption, water sources, irrigation, storm water, appliances and fixtures. A water audit is an onsite 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 overflow is essential and periodically supervision drill should be arranged. In campus medium scale reused and recycle of water system is necessary.
- Minimize wastage of water and use of electricity during water filtration process should be used.



C) Waste Management

Organic Waste per Day Low/Medium/High	Non Plastic Waste (Per Day)	Plastic Waste (per day)	Electronic Waste (Per day)	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 (2-3 KG Per Day)	Medium (1 KG Per Day)	Low (1/2KG PerDay)	Low -	Low (1KG Per Year)	Medium	Trash	Average

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, glass, biodegradable etc. and recycling. Further more 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 itis used as manure in the garden. Awareness program among students is also conducted in the college.

D) E-WasteManagement

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, colored 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

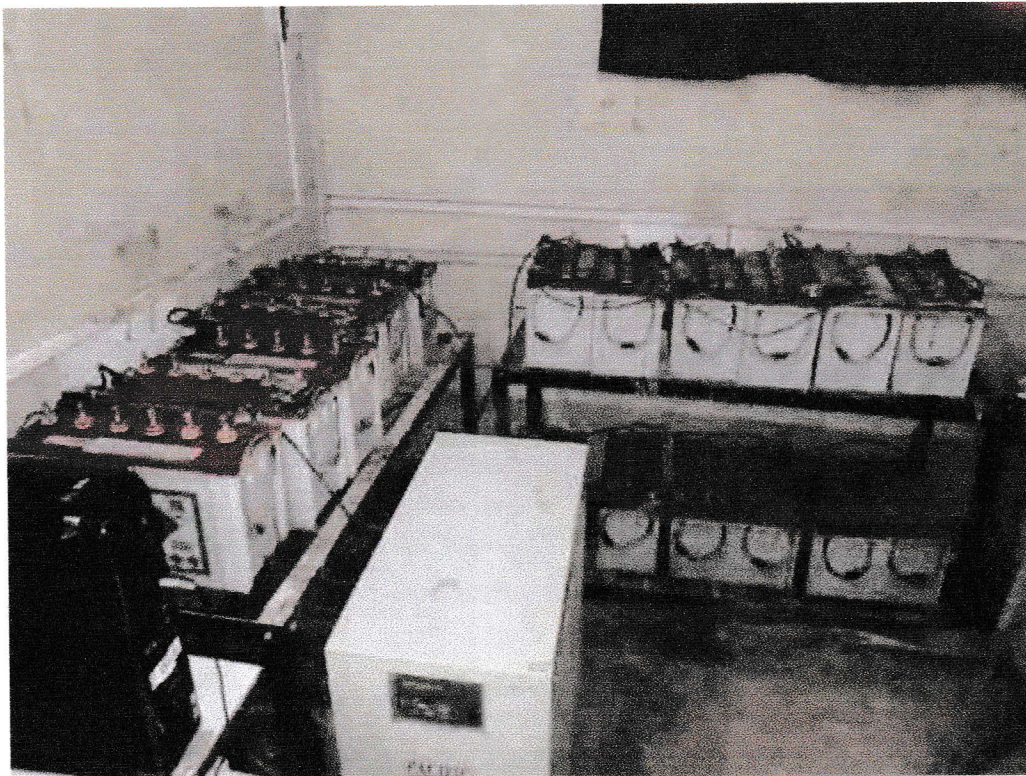
Number of Tubes Compact Florescent Lights, incandescent	No. of air Conditioners	LED/LCD Monitors	Use of Generators	Promotion of Energy Conservation Practices	Average A4 sheet of paper per day	Overall Energy Management
180	0	35	1	Yes	50	Average

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. 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.
2. 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.
3. 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.

*College has submitted the proposal for the solar energy to SPPU

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 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 lead successive use of fuel. Limiting the motorized transportation to a 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 of facilities their use is 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	51%	9%	30%	7%	3%



Cycle Parking

Observation

The parking area of the college is 6000 sq.ft. 15 staff members use two wheelers that is 51% of the staff. 04 staff members use bicycle that is 9% of the staff. 06 staff members are use public transport and (30%) 03 staff members use four wheeler that is 7% and four staff members (3%) 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

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

Fruit Tree	Flowers	Croton	Earthen Pots	others	Medicine	Total
36	22	22	50	39	10	179

Observation

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



Green campus of the college

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.

Environment committee 2021- 2022

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

President:

Principal - Dr. Leena Pandhare

Co-ordinator: Dr.Minal Barve

Members: Dr. Tejesh Beldar
Mr. Prakash Warkari

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 Wormy Compost Project
- Saving the energy in campus
- Keep the campus clean

Occasional activities

- Best from waste
- Environment free Rakhi making
- Visit to various places
- Competition of environment greetings
- Making of paper flowers.
- Collection of Ganapati Idol
- Making of Ganapati Idol
- Eco friendly Rakhi Making
- Wallpaper competition
- Participation in compost inorganic fertilizer workshop
- Participation in intercollegiate environment competitions.

Ethics Committee:2021-2022

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

President : Principal Dr.Leena Pandhare

Co-ordinator: Dr. Minal Barve

Members:

Dr. Tejesh beldar

Mr. Yogendra Patil

Ms. Smita Malve

Studen tmembers:

- 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
- Ganpati Sthapana
- Soft Skills Development Programme


Mr. Prakash Warkari

Dr. Leena Pandhare

IQAC Co-ordinator

N.S.P.M's Late Bindu Ramrao Deshmukh
Arts & Commerce Mahila Mahavidyalaya


INCHARGE PRINCIPAL
N.S.P.M's Late Bindu Ramrao Deshmukh
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Conclusion:

Considering the fact that institution is predominantly under graduate and post graduate college, there are significant activities done both by faculties and students.

The environmental awareness initiatives are substantial. The installation of Vermicomposting practices and paperless work system are noteworthy. Besides, environmental awareness program me initiated by the administration shows how the campus is going green. Few recommendations added about the energy use and conservation that solar panels should be installed and waste management should be more eco- friendly and more scientific techniques should be employed.

Smita Ramesh Pagame

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