

Green Audit Report

(2018-19)

Nashik Shikshan Prasarak Mandal, Nashik

Late Bindu Ramrao Deshmukh

**Arts & Commerce 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. Various projects are run by the College i.e. Earth worm Project, Ganesh Murti Sankalan (Idol Collection and proper disposal), of Tree Plantation, Best out of waste workshop for the students, Paperless Drive, Water Conservation, etc. 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. Suryanamaskar under the title of 'Suryanamaskar Ek Avishkar', from 03rd Feb. 2017 to 24th Jan. 2018. As a result, our college has been honored with a certificate from World Records India (Near about 1.40 Crore performed by the students).

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 as how to improve the condition of environment and there are various factors that have determine the growth of carrying out green audit.

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 has received 'The Best College Award' by Board of Student Welfare SPPU (now it is changed Board of Student Welfare), Pune in 2014-2015.

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 frame work 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.

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 onside 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 overhead 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 (3KG Per Day)	Medium (1 KG Per Day)	Low (1/2 KG Per Day)	Low -	Low (1KG Per Year)	Medium	Trash	Average

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, glass, bio degradable etc. and recycling. Further more solid waste often 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 completion 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 for recycling. 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, 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	33	1	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. 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 outskirt of the college.
3. Equipments like computers are used with power saving mode. Campus administration runs switch of drill on regular basis.



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



CRS181771001



Annexure-2

Savitribai Phule Pune University

Planning And Development

Applications for financial assistance for Construction of Rooftop Solar System during the financial year 2018-2019

1.(a)	Name of the College/ Institute	Late. Bindu Ramrao Deshmukh Arts & Commerce Mahila Mahavidyalaya, Nashik Road.	
(b)	Address in Details	same gursaji nagar jail road nashik road Ta: Nashik Dist: Nashik Pincode: 422101	
(c)	Telephone No.	92532465967	
(d)	Email	nsgmactnn@yahoo.co.in	
(e)	District	NASHIK	
2.	Affiliated to Savitribai Phule Pune University	Yes	(Please attach Affiliation letter Copy)
3.	Name of the Principal/Director	Leena Chandrakant Pandhare	
	Mobile No:	9822426576	
	Principal/Director Approved?	Yes-Permanent	(If Yes, Please attach approval Copy)
4.	Whether accredited by NAAC/NBA		(If Yes, Please attach Copy)
5.	Whether AISHE DCF-II & MLS Information Uploaded :	Yes-a-41466-2018-2018	(If 'Yes', Please attach Copy)
6.	Annual Report Information Given to University (Previous Academic Year 2017-18)	Yes	(If Yes, attach copy of acknowledgement)
7.	Last Year Q.I.P. Sanctioned Grant Utilized	NA	(If 'No' Please attach Letter of Clarification)
8.	University All types of contribution i.e. Student Welfare Fund, Sports, Admission Section Prorata, Affiliation fee, etc. paid by college/institutes	Yes	(If Yes, Please attach Copy)
9.	Is the College/Institute in Tribal Area?	No	(If 'Yes', Please attach Copy of Tribal area college certificate of concern authority)
10.	Proposed Rooftop Area (Sq.Ft)	1000SQFT/10KVA	
(a)	P V Type of system & kw	Grid-Tied	
(b)	Estimated Cost Rs.	650000.00	
(c)	Net amount required Rs.	500000.0000	
11.	Is the College declared fit to receive grants under section 12(B) of UGC Act.	No	(If Yes, Please attach Copy)
12.	Details of Previous sanctioned grant by University for Construction/Civil work (Please attach Copy of Sanction Letter)		
	Year of Sanction (Date & Letter No.)	Name of Construction	Amount
	01/01/2000 00	NA	0.00
13.	Any other information	(attach separate sheet, if any)	



Nashik Shikshan Prasarak Mandal, Nashik

**Late Bindu Ramrao Deshmukh, Arts & Commerce
Mahila Mahavidyalaya**

Sane Guruji Nagar, Nashik Road, Nashik -422101

url: <http://nspm.nashikcollege.in>, email: nspmacnm@yahoo.co.in, Tel.: 0253-2463967

(ID.No.PU/NS/AC/54/1998)

आ.क्र.समवि/ २८७/२०१८-२०१९

दिनांक : २७/०८/२०१८

प्रति,
भा.उपकुलसचिव
नियोजन व विकास
सावित्रीबाई फुले पुणे विद्यापीठ, पुणे

विषय : शैक्षणिक वर्ष २०१८-२०१९ मध्ये गुणवत्ता सुधार योजनेंतर्गत सौर
ऊर्जा जनित्राचा प्रस्ताव सादर करणेबाबत

संदर्भ : सा.फु.पु.विद्यापीठाचे पत्र क्र. साणुपुवि/निववि/७९७/दिनांक ०६/०७/२०१८

महोदय,

वरील संदर्भित विषयानुसार शैक्षणिक वर्ष २०१८-२०१९ गुणवत्ता सुधार योजनेंतर्गत
महाविद्यालयाने सौर ऊर्जा जनित्राचा प्रस्ताव सावित्रीबाई फुले पुणे विद्यापीठाच्या संकेत स्थळावर ऑनलाईन
पध्दतीने सादर केला आहे. सदर प्रस्तावाची हार्ड कॉपी व आवश्यक ती सर्व कागदपत्रे सोबत जोडून
आपल्या कार्यालयात प्रस्तुत सादर करत आहे.

तरी आपण महाविद्यालयाला सौर ऊर्जा जनित्र मंजूर करावे ही विनंती.

तक्रावे,

स्नेहान्वित,

Leena Pandre

लेनीया पांडरे
प्राचार्या

ना.शि.प्र.मंडळाचे १६, बिंदू रामराव देशमुख
कला व वाणिज्य महिला महाविद्यालय,
साने गुरुजी नगर, खेळरोड, नाशिकरोड.

सोबत : विहित नमुन्याचा प्रस्ताव

Proposal for the Solar Energy proposal submitted 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 to the preservation of limited and costly resources, reducing waste and preventing air, water and soil pollution.

Garden Area	Tree Cover	Type of Building :	Paint user for walls :	Flouring Tiles :
		Concrete/stone walled/metal sheet roofing/Clay tile roofing		Stone/Mosaic Tiles/Cement/Proc
3000 Sq. Ft.	1500 Sq. 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 transportation to a defined boundary is required to control the fuel usage and also to reduce site 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 %
6300 Sq.ft	46%	12.5%	18.75%	4.05%	9.37%



Cycle Parking

Observation

The parking area of the college is 6000 sq. ft. 15 staff members use two wheelers that is 46% of the staff. 04 staff members use bicycle that is 12.5% 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 nearby areas should be encouraged 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	30	39	10	159

Observation

1. Campus is enriched with variety of floral 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



*Tree plantation is also done at Krushinagar Garden.
This program helps in encouraging eco friendly environment which provides pure
oxygen within the institute.*





The 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.

Environment committee 2018-2019

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. Sushama Hasabnis

Dr. Deepa Holkar

Associate Prof Vinod Nirbhavane

Student Members: Aarti Gutte.

Madhuri Pagare

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.
- Distribution of cotton bags in Kumbhmela.
- Collection of Ganapati Idol
- Making of Ganapati Idol
- WALL paper competition
- Participation in compost in organic fertilizer workshop
- Participation in intercollegiate environment competitions.







Ethics committee: 2018-2019

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. Sushama Hasabnis

Members: Dr. Jeevan Solunke

Associate Prof. Yogendra Patil

Asst.Prof. Smita Malve

Student members:

- Jayshree Bagad
- Pooja Sabale
- Durga Gadade
- Jyoti Thakur
- Kalyani Paradeshi
- Pratiksha Gavai.
- 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.
- Overall 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
- Ganapati Sthapana
- Soft Skills Development Programme





Conclusion

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

The environmental awareness initiatives are substantial. The installation of wormy composting practices and paperless work system are noteworthy. Besides environmental awareness program me initiated by the administration shows how the campus is going green. Few recommendation 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.



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