

शिक्षक शिक्षा महाविद्यालय, आरंगाबाद

College of Teacher Education, Aurangabad

12th March 2024

NOTICE

Formation of Green Audit Team

We are delighted to announce the formation of **Green Auditing Team**. This initiative underscores our commitment to environmental sustainability and our determination to integrate eco-friendly practices into every aspect of our operations.

The Green Auditing Team will be responsible for evaluating our college's environmental impact and recommending actionable strategies to minimize our ecological footprint. The team's focus will include improving energy efficiency, reducing waste, enhancing recycling efforts, and ensuring compliance with environmental regulations.

Team:

1) Dr. Khan Shahnaz Bano (Principal),

2) Dr. Badrul Islam,

3) Mrs. Syeda Hajera Nousheen,

4) Dr. Shaheen Parween.

Principal Dr. Khan Shahnaz Bano MANUU CTE Aurangabad. (MS) प्रयानाचार्य / Principal मौलाना आज्ञाद नेशनल उर्यू यूनिवर्सिटी Maulana Azad National Urdu University शिक्षक शिक्षा महाविद्यालय, औरंगाबाद (महा.) College of Teacher Education, Aurangabad (M.S.) Maulana Azad National Urdu University, College of Teacher Education Aurangabad. (Maharashtra)

Green Audit Report 2024

Convener

Dr. Khan Shahnaz Bano Principal MANUU CTE Aurangabad.

Prepared by

Dr. Rana Saeed

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1. Executive Summary

Eco campus is a concept implemented in many educational institutions, all over the world to make them sustainable because of their mass resource utilization and waste discharge in to the environment. Waste minimization plans for the educational institute are now mandatory to maintain the cleanliness of the campus. To find out the environmental performance of the educational institutions and to analyze the possible solutions for converting the educational campus as eco-campus the conduction of Green Auditing of institution is essential. The green auditing of College of Teacher Education, Maulana Azad National Urdu University, Aurangabad, enables to assess the life style, action and its impact on the environment. This is the first attempt to conduct green auditing of this college campus. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity and fossil fuel, quality of soil and water, vegetation, waste management practices and carbon foot print of the campus etc. Initially a questionnaire survey was conducted to know about the existing resources of the campus and resource consumption pattern of the students and staffs in the college. In order to assess the quality of water and soil, water and soil samples were collected from different locations of the college campus and analyzed for its parameters. Collected data was grouped, tabulated and analyzed. Finally a report pertaining environmental management plan with strength, weakness and suggestion on the environmental issue of campus are documented.

2. Introduction

About College

MANUU, College of Teacher Education, Aurangabad District is one of the pioneer institutions for B.Ed education in the state of Maharashtra.MANUU, College of Teacher Education, Aurangabad under the School of Education & Training was established in the year 2014 to meet the ever-increasing needs of the Secondary & Higher Secondary Teachers especially for Maharashtra. The College is running BEd course - regular as well as through distance mode. The institution at present is runnig under the efficient stewardship of the Principal Dr. Khan Shahnaz Bano.

The fundamental aim of the college is to promote and develop the Urdu language and also to impart sound learning to young urdu knowing under circumstances congenial to their all-round development. It encourages the students to aim at excellence not only in academic pursuits, but also in every aspect of human endeavour to achieve perfection. The students are prompted to strive for academic excellence so that in course of time they may take up suitable careers for the betterment of their lives and also of their families and society at large. The various co-curricular activities of the college especially the extension programmes provide them with a rare social consciousness that motivates them to reach out to their fellowmen particularly the needy and the marginalised.



2.1 Vision Statement of the College

To provide access to quality education through Urdu as medium of instruction, while adhering to the inclusive policy.

To create self-reliant and liberated young students specially women with traditional cultural values and moral integrity, who will be agents of social transformation in their families and society.

2.2 Mission of the College

To empower socially, economically, educationally and culturally marginalized sections of the society so that they are brought into the mainstream, and thereby contribute to the socio-economic development of the nation through formal and non-formal modes of education delivery.

To develop values of self-respect, tolerance, discipline, hard work and patriotism. To promote learning that will contribute to women empowerment by enabling women to become self-reliant.

2.3 Members of Auditing Team

S.No	Name of the Members
1	Dr. Khan Shahnaz Bano (Principal)
2	Dr. Badrul Islam
3	Mrs. Syeda Hajera Nausheen
4	Dr. Shaheen Parween

2.4 Course offered by the College

S.No	Courses
1	B.Ed (Regular)
2	B.Ed (Distance)
3	Diploma in School Leadership (Distance)

2.5 The student and faculty strength of the college is listed below:

Number of Students	100
Number of Teachers	8
Number of Non teaching staff	4
Total	112

2.6 Physical Structure

The college is located in Latitude 19.910321 and Longitude 75.340729Aurangabad, Maharashtra. The built-up area of the college is 1502.69 square meters and open space for gardening & parking 1038square meters.

Principaløs Cabin	1
Office	1
Classrooms	6
Library	1
Staff rooms	7
Psychology Laboratory	1
Science Laboratory	1
Computer Laboratory	1
Play ground	1

3. OBJECTIVES OF GREEN AUDIT

The main aim objectives of this green audit is to assess the environmental quality and the management strategies being implemented in MANUU, College of Teacher Education Aurangabad. The specific objectives are:

- To assess the quality of the water and soil in the MANUU, College of Teacher Education campus
- > To monitor the energy consumption pattern of the college
- To quantify the liquid and solid waste generation and management plans in the campus.
- ➤ 4 To assess the carbon foot print of the college
- ➢ 5 To impart environment management plans to the college
- > Providing a database for corrective actions and future plans.
- To assess whether extracurricular activities of the Institution support the collection, recovery, reuse and recycling of solid wastes.
- To identify the gap areas and suggest recommendations to improve the Green Campus status of the College

4. TARGET AREAS OF GREEN AUDITING

Green audit forms part of a resource management process. Although they are individual events, the real value of green audit is the fact that they are carried out, at defined intervals, and their results can illustrate improvement or change over time. Eco-campus concept mainly focuses on the efficient use of energy and water; minimize waste generation or pollution and also economic efficiency.

All these indicators are assessed in the process of õGreen Auditing of this educational institute . Eco-campus focuses on the reduction of contribution to emissions, procure a cost effective and secure supply of energy, encourage and enhance energy use conservation, promotes personal action, reduce the instituteøs energy and water consumption, reduce wastes to landfill, and integrate environmental considerations into all contracts and services considered to have significant environmental impacts. Target areas included in this green auditing are water, energy, waste, green campus and carbon footprint.

4.1 Auditing for Water Management

Water is a natural resource; all living organisms depend on water. While freely available in many natural environments, in human settlements potable (drinkable) water is less readily available. Groundwater depletion and water contamination are taking place at an alarming rate. Hence it is essential to examine the quality and usage of water in the college. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water.

4.2 Auditing for Energy Management

Energy conservation is an important aspect of campus sustainability which is also linked with carbon foot print of the campus. Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation. It is therefore essential that any environmentally responsible institution examine its energy use practices.

4.3 Auditing for Waste Management

Human activities create waste, and it is the way these wastes are handled, stored, collected and disposed of, which can pose risks to the environment and to public health. Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems. Solid waste can be divided into three categories: bio-degradable, non-biodegradable and hazardous waste. Bio-degradable wastes includes food wastes, wastes from toilets etc. Nonbiodegradable wastes include what is usually thrown away in homes and schools such as plastic, tins and glass bottles etc. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals, acids and petrol. Unscientific management of these wastes such as dumping in pits or burning them maycause harmful discharge of contaminants into soil and water supplies, and produce green house gases contributing to global climate change respectively. Special attention should be given to the handling and management of hazardous waste generated in the college.Bio-degradable waste can be effectively utilized for energy generation purposes through anaerobic digestion or can be converted to fertilizer by composting technology. Non-biodegradable waste can be utilized through recycling and reuse. Thus the minimization of solid waste is essential to a sustainable college. The auditor diagnoses the prevailing waste disposal policies and suggests the best way to combat the problems.

4.4 Auditing for Green Campus Management

Trees play an important ecological role within the urban environment, as well as support improved public health and provide aesthetic benefits to cities. In one year, a single mature tree will absorb up to 48 pounds of carbon dioxide from the atmosphere, and release it as oxygen. The amount of oxygen released by the trees of the campus is good for the people in the campus. So while you are busy studying and working on earning those good grades, all the trees in campus are also working hard to make the air cleaner for you.

4.5 Auditing for Carbon Footprint

Burning of fossil fuels (such as petrol) has an impact on the environment through the emission of greenhouse gases into the atmosphere. The most common greenhouse gases are carbon dioxide, water vapour, methane, nitrous oxide and ozone. Of all the greenhouse gases, carbon dioxide is the most prominent greenhouse gas, comprising 402 ppm of the Earthøs atmosphere. The release of carbon dioxide gas into the Earthøs atmosphere through human activities is commonly known as carbon emissions. Vehicular emission is the main source of carbon emission in the campus, hence to assess the method of transportation that is practiced in the college is important.

4.6 Carbon foot print analysis

1 Total number of vehicles used by the stakeholders of the college.(per day)-----9

2 No of cycles used--- 0

3 No of two wheelers used (average distance travelled and quantity of fuel and amount used per day)-----9

4 No of cars used (average distance travelled and quantity of fuel and amount used per day)----- 0

5 Amount of fuel used---60 litre

6 Number of LPG cylinders used---1

5. METHODOLOGY ADOPTED

A team was organized to audit. Members of Auditing Team were taken from the faculties of the college. The methodology adopted to conduct the Green Audit of the Institution had the following components.

6. Energy, waste management and Carbon foot print analysis Survey

With the help of teachers and students, the energy consumption, pattern and waste generation, disposal and treatment facilities of the college has been assessed by the Auditing team. The monitoring was conducted with a detailed questionnaire survey method.

6.1

S.No	Parameters	Response Remarks
1	Source of water	Commercial
2	Number of water tanks	One
3	Capacity of tank	50000 ltr
4	Any water wastage/why?	No
5	Use of waste water	-
6	No of water coolers	01
7	Rain water harvest available?	No
8	No of units and amount of water	-
	harvested	
9	Any leaky taps	No
10	Amount of water lost per day	-
11	Any water saving techniques followed ?	Rain water are drained into the parterre for the plants

6.2 Energy Audit

Room No. /	Electrical device/	Number	Power	Time usage per day
name				(hr/day)
	1) Computer	1		
Dringing	2) Tube Light	1		
Principal Cabin	3) Fan	3	3 Phase	
Cabin	4) Cooler	1		
	5) Printer	1		
	1) Computer	3		
	2) Tube Light	1		
Office	3) Bulb	1	3 Phase	
	4) Cooler	2		
	5) Printer	3		
	1)Computers	3		
	2)Tube Light	7		
Staffroom	3)Fans	7	3 Phase	
	4)Cooler	3		
	5)Printer	3		
	1)Computers	1		
	2)Tube Light	3		
Library	3)Fan	6	3 Phase	
	4)Cooler	1		
	5)Printer	1		
Classrooms	1) Tube Light	8	3 Phase	
Classicollis	2) Fans	8	51 hase	

6.3 Waste generated in the college?

E waste	Remark
Hazardous waste	No
Solid waste	Paper
Dry leaves	Biofertilizer
Liquid waste	No
Glass	No
Unused equipment	No
Napkins	Proper Disposal (Corporation Waste Collects)
Others	-
Do you use recycled paper in the college?	Yes
Any waste management methods used ?	Rough papers and Used papers recycled

Any suggestion to reduce the use of fuel: We should parsimoniously use of fuel. College will follow No Vehicle Day on any day of every month to saved fuel. Various awareness programme will be helpful to motivate for optimize sustainable use of available resources.

7. AUDIT STAGE

Green auditing in MANUU, CTE, Aurangabad began with the assessment of the status of the green cover of the Institution followed by waste management practices and energy conservation strategies etc. It was monitored that different facilities at the college, determined different types of appliances and utilities (lights, taps, toilets, etc.) as well as measuring the usage per item identifying the relevant consumption patterns (such as how often an appliance is used) and their impacts. The staff and learners were interviewed to get details of usage, frequency or general characteristics of certain appliances.

Data collection was done in the sectors such as Energy, Waste, Greening, Carbon footprint and Water use. College records and documents were verified several times to clarify the data received through survey and discussions.

7. 1Waste management Practices adopted by the college

For the last few years, college is following zero organic waste protocol throughout the campus. The food waste generated by the students and staffs are taken by them to their own home, so that, minimum waste is generated inside the campus.

8. Green Audit Report

Total Number of Plants

Table 6. List of plants in the campus

Coconut (Cocos nucifera) Cactus (Cactaceae) Cury Leaves (Murraya koenigii) Custard Apple (Annona squamosa) Guava (Psidium guajava) Mango Tree (Mangifera indica) Neem (Azadirachta indica) Rose (Rosa Rubigenosa) Sappota (Manilkara zapota) Tulsi (Lamiaceae)

9. SUGGESTIONS AND RECOMMENDATIONS

Water Management

The water sources are safe in terms of contamination. The students are taking back the food waste as per the zero waste management strategy of the college.

9.1 Energy management

The energy audit recommend to avoid the use of more energy consuming electrical appliances and to replace with more environment friendly and energy efficient appliances.

9.2 Green Campus

In order to increase the carbon credit and greenery of the campus, it is recommended to plant more indigenous and evergreen / fruit trees inside the campus. Kitchen gardening should be encouraged.

9.3 Waste Management

Try to avoid the use of plastic in the campus, and to encourage the use of biodegradable materials as alternatives. Try to achieve the goal of plastic free campus. Leaf litter from the campus can be effectively used for aerobic/ vermi composting, so that the composted material can also be used as good manure.

The green audit report on environment must reach the public so that it would success in reducing the environmental issues and its popularization among stakeholders.







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