

Green Audit Report (2023-24)

Executive Summary

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will lead for sustainable development.

Seth Shree Kedarnath Modi Rajkiya Mahavidhalya Gudha, Jhunjhunu, Rajasthan is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the trends. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology included: physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit were based on the identified risks.

1. Introduction

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyse environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Green audit is assigned to the criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India.

1.1 About the College

Seth Shree Kedarnath Modi Rajkiya Mahavidhalya Gudha, Jhunjhunu is the premier institute of higher education and learning in Shekhawati region of Rajasthan. The college is committed to provide quality education and glorious service to the nation. This institute faithfully conforms to NAAC's guidelines and its vision, mission and innovative initiatives in its pursuit of excellence.

Seth Shree Kedarnath Modi Rajkiya Mahavidhalya Gudha, Jhunjhunu presently affiliated to the Pandit Deendayal Upadhyaya Shekhawati University, Sikar was established on 01 Oct 2013. The college was earlier affiliated to University of Rajasthan, Jaipur. The College is situated at the bottom of Aravali hills in Gudha Chief Trustee Mr. Kishan kumar Modi of Mani Modi Foundation, Calcutta, constructed and handed over the college building to Govt. of Rajasthan in the memory of his revered father Mr. Kedarnath Modi Presently the college is running in a grand building of 27 rooms.

More than 650 students were enrolled for regular study along with non- collegiate students in the session 2023-24 outreaches to the widest range of rural youth. Maximum students are from rural background, remotely inhabited and first generational learners. Giving appropriate emphasis on curricular and co-curricular activities, the college attempts to develop all rounded personalities through teaching, well-equipped labs, sports, NSS, IT training with computer skill, Career counseling of students along with cultural and academic activities.

2. Objectives of the Study

The main objective of the green audit is to promote the Environment Management and Energy Conservation in the College Campus. The purpose of the audit is to identify, 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:

- To introduce and aware students to real concerns of environment and its Sustainability.
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.

- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requiring high cost.
- To bring out a status report on environmental compliance.

3. Methodology

In order to perform green audit, the methodology included different tools such as physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- Water management
- Energy Conservation
- Waste management
- Green area management

4. Observations and Recommendations

4.1 Water Use

This indicator addresses consumption, water sources, irrigation, rain water, appliances 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) Observations

The study observed that Tube well is major source of water in college campus. Water is used for drinking purpose, toilets and gardening. waste water from RO water purifier is used for gardening purpose. During the survey, loss water is observed, neither by any leakages nor over flow of water from overhead tanks. The data collected from all the departments is examined and verified. Rain water harvesting units are also functional for recharging ground water level to underground water-harvesting tanks well connected by PVC pipes from roof top of the main building impressed the inspecting committee members

b) Recommendations

Minimize wastage of water and use of electricity during water filtration process, if used, such as RO filtration process and ensure that the equipment's used for such usage are regularly serviced.

- Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. they are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations.
- Gardens should be watered by using drip/sprinkler irrigation system to minimize water use.

4.2 Energy Use and Conservation

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

a) Observations

Energy source utilized by the campus is electricity only. Total average energy consumption is determined as less than 1000 Units/month. The entire campus including common facility centers are equipped with LED lamps and LED tube lights. Besides this, photovoltaic cells are also installed in the campus as an alternate renewable source of energy. The Solar power generated is supplied to Ajmer Vidhyut Vitran Nigam Limited, Rajasthan. Computers are set to automatic power saving mode when not in use.



Solar Panels at Roof Top

b) Recommendations

- Support renewable and carbon-neutral electricity options on any energy purchasing consortium, with the aim of supplying all college properties with electricity that can be attributed to renewable and carbon-neutral sources.
- Installation of LED lamps instead of CFL and replacing the old tube lights with the new LED tubes..
- 5-star rated Air Conditioners, Fans and CFLs should be used.
- Cleaning of tube-lights/bulbs to be done periodically, to remove dust over it.

4.3 Waste Generation

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. and recycling. Furthermore, solid waste often includes waste material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus.

a) Observations

Waste generation from tree droppings and lawn management is a major organic 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 are reused for writing and printing in all departments and recently both side printing is carried out as per requirements. The solid waste is collected by the municipal corporation and disposed by their methods. A big bio waste pit hole was dug by college students to prepare fertilizer from gardening green waste

b) Recommendations

- Reduce the absolute amount of waste that is produced from college staff offices.
- Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated.
- Vermicomposting should be adopted on campus.

4.4 Green Area

This includes the plants, trees, medicinal plants such as neem Tulsi, Anwla, Giloy, etc 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 programmes. To make campus as a natural habitat, water pots, and grain pots are hung on trees different kinds of birds in enhance the green beauty of college campus by their chirpings the botanical names of all the plants are affixed to help strangers Two botanical gardens and nomenclature of plants cast an indelible impact on the members of inspecting team

a) Observations

Campus is located in the vicinity of many trees (species) to maintain the bio-diversity. Various tree plantation programs are being organized at college campus and surrounding villages through Ranger and NSS (National Service Scheme) unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various types of indigenous species of ornamental and Medicinal wild plant species.



b) Recommendations

- Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
- Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The

Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy.

- Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- Indoor plantation to inculcate interest in students, Bonsai can planted in corridor to bond a relation with nature.

5. Conclusions

Considering the fact that the institution is predominantly a co-educational college, there is significant environmental research both by faculty and students. The environmental awareness initiatives are substantial. The installation of solar panels and rain water harvesting system are noteworthy. Besides, environmental awareness programmes initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development.

As part of green audit of campus, we carried out the environmental monitoring of campus including Illumination and Ventilation of the class room. It was observed that Illumination and Ventilation is adequate considering natural light.



Ten Commandments Of Sustainability

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Energy & Green Audit Report

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Acknowledgement

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- ❖ Smt. Saroj Nainiwal, Co-ordinator IQAC
- ❖ Team of colleagues

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Rain Water Harvesting

Rainwater harvesting (RWH) is the collection and storage of rain, rather than allowing it to run off. Rainwater is collected from a roof-like surface and redirected to a tank deep pit (well, shaft, or borehole), or a reservoir with percolation, so that it seeps down and restores the ground water.



आओ बचाएं वर्षा
जल और सजाएं
अपना कल।

