

CHAPTER-2

METHODOLOGY





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Background of Dr. Harisingh Gour Vishwavidyalaya Green Audit preparation.

This is the first green audit of Dr. Harisingh Gour Vishwavidyalaya. It is the first attempt to prepare such a pioneering document about the compilation of the environmental status of the University. The green audit report would help the University grab a good point for NAAC accreditation. The Department of Botany has taken the responsibility to prepare the Green Audit Report of the University.

The Green Audit of Dr. Harisingh Gour Vishwavidyalaya report includes the data regarding the use of resources and highlights the biodiversity status of the University. The resource utilization of Water and Electricity, Solid waste generation, E-waste, Hazardous waste, Noise and Air monitoring, wastewater generation etc., on the university campus are studied through this Green Audit process. Besides these observations, the report also includes information about the social responsibility taken by Dr. Harisingh Gour Vishwavidyalaya in Sagar.

The audit process was carried out using all the secondary and relevant data collected from various sources, such as engineering, Garden etc. A broad reference work was carried out to clear the idea of green auditing. Different case studies and methodologies were studied, and the following methodology was adopted for the present audit.

The methodology of the present study is based on onsite visits, personal observations, and questionnaires survey tools. Initially, based on data requirements, sets of questionnaires were prepared. The prepared questionnaires were then sent to all the departments of the University, and the filled questionnaires were collected. The generated data is subsequently gathered and used for further analysis. From the outcome of the comprehensive study, a final report is prepared.

Survey by Questionnaire:

Baseline data for green audit report preparation collected by questionnaire survey method. The questionnaires prepared to conduct the green audit in the university campus is based on the guidelines, rules, acts and formats prepared by the Ministry of Environment, Forest and Climate Change, New Delhi, Central Pollution Control Board and other statutory organizations. The guidelines format, which is applicable for the university campus, was taken into considerations. Most of the guidelines and formats are based on broad aspects, and some of the issues or formats were not applicable for University campuses. Therefore, combinations, modifications and restructuring were done using these guidelines and formats, and sets of questionnaires were prepared to collect the information regarding solid waste, energy, water, hazardous waste, and e-waste.



Onsite visit and observations:

Dr. Harisingh Gour Vishwavidyalaya has a vast built-up area comprising various departments, administrative buildings, teachers and staff quarters, student hostels, guest houses, sports complexes, and health centres. All these amenities have different kinds of infrastructure as per their requirement. The internal audit team visited all these buildings, and the present condition was checked with the help of the questionnaires, observation, and the information provided by the concerned person. Personal observations were also made during the onsite visit.

For the data compilation purpose, the University Departments and support services were grouped into various sections like Science buildings, Arts & Humanities buildings, Hostels, Teacher colony, Administrative buildings,

Based on the School of Studies and Layout of the University, the following group were made:

Table-1: Details of the buildings grouped for Green Audit

Name of the buildings	Departments/ sections/ service/facilities
School of Biological Sciences (SBS)	Botany, Zoology, Microbiology and biotechnology
School of Applied Sciences (SAS)	Anthropology, Criminology & Forensic Science, General & applied Geography
School of Chemical Sciences (SCS)	Chemistry
School of Commerce and Managment (SCM)	Commerce, Bussines management
School of Educational Studies (SES)	Education, Yoga education, Adult education, Physical education.
School of Engineering and Technology (EAT)	Pharmaceutical Sciences, Applied Geology
School of Arts and Information Sciences (AIS)	Communication & Journalism, Libraray and Information Science, Fine Arts & Performing Arts, and Music
School of Humanities and Social Sciences (HSS)	Political Science and Public Administrative, History, Ancient Indian History, Culture and Archaeology, Psychology, Economics, Sociology, and Philosophy
School of Languages (SOL)	English and European language, Sanskrit, Hindi, Urdu and Persian, and Linguistics
School of Law (SAL)	Law
School of Mathematics and Physical Sciences (MPS)	Computer Applications, Mathematics and Statistics and Physics
Others	University Library, Hostels, teachers residency, University Health, University engineering Department, Security buildings, EMRC, Administrative buildings, University Press, and Canteen.



After collecting secondary data, the green audit team took the reviews related to each environmental factor. The data were tabulated, analyzed and graphs were prepared using the computer. Interpretations were made by evaluating the data obtained from observation and questionnaire. The Environmental Management Plan (EMP) was prepared for the next academic year for better environmental sensitization. Finally, all the information was compiled in the form of the Green Audit Report.

Data analysis and final report preparation

Proper analysis and presentation of data produced from work is a vital element. In case of a green audit, the filled questionnaires of the survey from each group were tabulated as per their modules in Excel spreadsheets. The tabulated data is then used for further analysis. A graphical representation of the results was made to give a quick idea of the status. The overall outcomes were interpreted, incorporating all the primary and secondary data, references, and interrelations. Final report preparation was done using this interpretation.