

GREEN AUDIT REPORT

Govt. Bangur College, Didwana

Nagaur (Raj.)

Pin Code - 341303

Green Audit Certificate

This is to certify that Govt. Bangur College, Didwana, Nagaur, Rajasthan has conducted 'Green Audit' on March 1st, 2022 to assess the Green initiative planning, efforts, activities implemented in the College campus like plantation, waste management, conservation of solar energy and various environment awareness activities. This Green Audit is also aimed to assess the impact of green initiative for maintenance of the campus eco-friendly. The activities and measures carried out by college have been physically verified based on the report submitted and was found to be satisfactory. The efforts taken by the faculty and students towards environment and sustainability are highly appreciated and commendable.

Place: Didwana

Date: 01-03-2022



Dr. Sohan Chaudhary
(Social Activist)



(Sh. Pawan Kumar Sharma)
Principal

Smt. Son Devi Bangur Govt. Girls Sr. Sec. School,
Didwana, Nagaur (Raj.)



(Sh. Sharwan Manda)
Principal

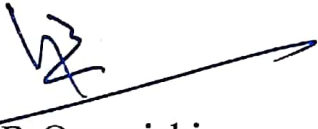
Govt. Bangur Sr. Sec. School, Didwana,
Nagaur (Raj.)

Govt. Bangur College, Didwana



Energy Audit Report 2021-22

Submitted by


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Executive Summary

Eco Friendly 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 Govt. Bangur College, Didwana, Nagaur, 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. 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.

Introduction

Govt. Bangur College, Didwana, Nagaur (established in 1969) imparts affordable and student centric education. The relations with community have ensured that BCD has its own unique identity and stellar reputation. Regionally, it is the most esteemed and oldest Govt. college, Our most vital and distinctive contribution is that we cater to rural youth. The setting and community around the college ensures that youth are inspired to take on higher education. When they enter BCD, they recognize that their histories, experiences and future are considered a crucial part of the brick and mortar of the college.

There is a strong role of faculty in nurturing the curiosity of minds. It needs qualified teachers, but also ones that have well understanding of the surroundings and culture of the place that the college inhabits. We do have highly motivated students. The combination of both means that the college successfully organizes and participates in various cultural and community initiatives throughout the year. Our alumni are settled in reputed positions and roles all over India. They have earned laurels and bought prestige to the institute.

Govt. Bangur College, Didwana,, Nagaur is a part of the Thar Desert. It is located in the western part of Rajasthan. it has a harsh and adverse climatic conditions, therefore plantation and environmental conservation have their own importance. Tree plantation is done every year by the college staff and students. There are Rohida trees in the garden of the college which are maintained by NSS, NCC and NGO Live Lions Club Didwana from time to time. There are different types of trees in the college campus which is look after by the student and staff.



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

No of students	4480
No of teachers	23
No of Non-teaching staffs	10

Physical Structure

The college is located in about 30 acres of land.

Departments	11
Laboratories	09
Conference halls	01
Libraries	Main library+ Department libraries
Auditorium	01

Objectives of Green Audit

The main aim objectives of this green audit are to assess the environmental quality and the management strategies being implemented in BCD, College, Didwana. The specific objectives are:

1. To assess the quality of the water and soil in the Govt. Bangur College, Didwana campus.
2. To monitor the energy consumption pattern of the college.
3. To quantify the liquid and solid waste generation and management plans in the campus.
4. To impart environment management plans to the college.
5. Providing a database for corrective actions and future plans.
6. To assess whether extracurricular activities of the Institution support the collection, recovery, reuse and recycling of solid wastes.
7. To identify the gap areas and suggest recommendations to improve the Green Campus status of the BCD, College.

TARGET AREAS OF GREEN AUDITING

Auditing for Water Management

Water is a natural resource. All living organisms depend on water. 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. Fluoride problem in the region is debatable. Roof top rain water harvesting techniques used in the college and hostel campus.

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.

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 include food wastes, canteen waste, wastes from toilets etc. Non-biodegradable 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 may cause harmful discharge of contaminants into soil and water supplies, and produce greenhouse 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.

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. campus of BCD is full of the various types of trees sustaining in the region.

Audit Stage

Green auditing in Govt. Bangur College, Didwana began with the assessment of the status of the green cover of the Institution followed by waste management practices and energy conservation strategies etc. The team monitored different facilities at the college, determined different types of appliances and utilities (lights, taps, toilets, etc.) and 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 and Water use. College records and documents were verified several times to clarify the data. The environment samples including water, soil were from various location of the campus were collected and analyzed.

Green Audit Report

Water Quality assessment

Water supply for drinking purposes in the college campus is provided by P.H.E.D. and the department has regular monitoring of water quality assessment. The samples were collected, preserved and analyzed by the P.H.E.D. in the region. The major parameters analyzed include dissolved oxygen, acidity, alkalinity, chloride, hardness, pH, conductivity, total dissolved solids and salinity.

1	Source of water	Tank
2	No of Tanks	3
3	No of motors used	3
4	Capacity of Tank	60000L, 60000L, 20000L

Soil Quality assessment

Soil samples monitored from different locations of the campus for the basic parameters. Soil is conducive for plantation which sustains in the semi-arid environment in this region.

Waste management

Waste management is important for an eco-friendly campus. In a college different types of wastes are generated, its collection and management are very challenging.

Waste management Practices adopted by the college for the last few years, college is following zero organic waste protocol throughout the campus. Vegetable waste and other leaf litters were used to feed in the vermi-compost pit and the resulting vermin-cast is used as manure in the garden.

Green Campus

Total number of plant species identified 50

Total number of tree species in campus 15

Total number of plants in the campus 850

Total number of trees in the campus 200

Routine Green Practices Every year college celebrates World Environment Day, World Water Day and Ozone Day in the campus. The main focus of these programs was to provide awareness to the students about the importance of the environment, its conservation and sustainable use of environmental resources. The programmes are conducted through seminars, poster presentation, quiz competition debates etc.

S. no.	Name of Capability Enhancement Program
	PLANTATION AND CLEANLINESS DURING SESSION : 2021-22
01.	Plantation program on August Kranti.
02.	Plantation and seminar on the vision and values of Mahatma Gandhi
03.	Cleanliness of College Campus and Hostel Campus.
04.	Cleanliness program followed by career centered guidance under NSS.
05.	NSS volunteers Planted 21 plants and cleaned the premises of college.
06.	NCC volunteers under the leadership of principal and in-charge faculty cleaned Vatika areas
07.	Share the importance of human –nature relationship in program organized by IQAC.