

GREEN AUDIT REPORT

2022-23



Shri Shivaji Mahavidyalaya, Barshi

District: Solapur 413 411.



Audit Co-ordinator
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1) INTRODUCTION:

The green audit aims to analyze environmental practices within and outside the College campus, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of institutional environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Green audit is helpful 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 green auditing of Shri Shivaji Mahavidyalaya, Barshi 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 available infrastructure, greening indicators like consumption of energy in terms of electricity and fossil fuel, sources and utilization of water, vegetation and waste management practices of the campus etc.

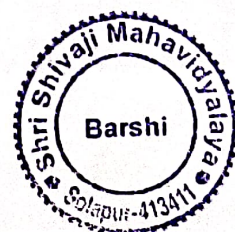
2) NEED FOR GREEN AUDITING:

Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in common areas. Now, it is necessary to check whether our processes are consuming more than required resources? Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

3) GOALS OF GREEN AUDIT:

College has conducted a green audit with specific goals as:

1. Identification and documentation of green practices followed by college.
2. Identify strength and weakness in green practices.
3. Analyze and suggest solution for problems identified.
4. Assess facility of different types of waste management.



5. Increase environmental awareness throughout campus
6. Identify and assess environmental risk.
7. Motivates staff for optimized sustainable use of available resources.
8. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

4) Report:

A) LAND USE SYSTEM:

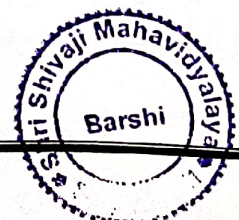
Shri Shivaji Mahavidyalaya, Barshi. District Solapur is located at **Latitude: 18.228422, Longitude: 75.682573**. The college area has total **18 Acres** of land. The total buildup area of college is 13855.13 sq mtrs which includes academic and administrative building, computer laboratory, toilet, classroom, common room, auditorium etc. T

he remaining area 13 acres includes Shivshakti play ground, parking, garden, plantation cover etc.

Table 1: Land use data

Sr. No.	Type of area	Area
1	Built-up area	13855.13 sq mtrs
2	Green cover	5 acres

Inner view of college campus

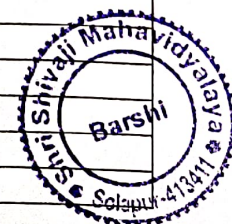


Bird view of Shivshakti Ground, Eight lane 300 meter track, Indoor stadium



B) DETAILS OF PLANTS IN COLLEGE CAMPUS:

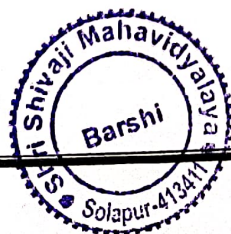
Sr. No.	Name of the plants	Common name
1	<i>Anthocephalous kadamba</i>	Kadamb
2.	<i>Mimusops elegans</i>	Bakula
3.	<i>Terminalis belerica</i>	Behada
4.	<i>Terminalia arjuna</i>	Arjun
5.	<i>Ravanella madagaskarensis</i>	Traveller palm
6.	<i>Cycas rumphi</i>	Cycas
7.	<i>Areca catechu</i>	Supari
8.	<i>Caryota urens</i>	Fish tail palm
9.	<i>Livistona chinensis</i>	Fan palm
10.	<i>Roystonea regia</i>	Royal palm
11.	<i>Mascarena lagenicaulis</i>	Champagne Palm
13.	<i>Wodyetia bifurcata</i>	Foxtail palm
14.	<i>Putrnjiva roxburghi</i>	Putranjiva
15.	<i>Azadirechta indica</i>	Kadulimb
16.	<i>Polyalthia longifolia</i>	Ashok
17.	<i>Lantena camera</i>	Tantan
18.	<i>Tinospora cordifolia</i>	Gulvel
19.	<i>Quisqualis indica</i>	Madhumalati
20.	<i>Allamanda catharitea</i>	Almand
21.	<i>Pyrostegia venusta</i>	Flame plant
22	<i>Thunbergia grandiflora</i>	begal clock vine
23.	<i>Aristolochia littoralis</i>	Calico Flower
24.	<i>Thuja occidentalis</i>	Thuja



25	<i>Plumeria pudica</i>	Top chafa
26	<i>Syzygium campanulatum</i>	Christina
27.	<i>Solenostemon scutellarioides</i>	Coleus
28.	<i>Caesalpinia pulcherima</i>	Shankasur
29.	<i>Tamarindus indicus</i>	Chinch
30.	<i>Clitoria ternatea</i>	Gokarn
31	<i>Aloe vera</i>	Korphad
32.	<i>Opuntia</i>	Nivdung
33.	<i>Ficus bengalensis</i>	Vad
34	<i>Ficus religiosa</i>	Pimpal
35.	<i>Emblika officinalis</i>	Avala
36.	<i>Adathoda zeylanica</i>	Adulsa
37.	<i>Butea monosperma</i>	Palas
38.	<i>Nyctanthus artabotrys</i>	Parijatak
39.	<i>Dalbergia sisso</i>	Shisam
40.	<i>Sapindus mukorossi</i>	Ritha
41.	<i>Acacia nilotica</i>	Subabhal
42.	<i>Acacia catechue</i>	Kat
43.	<i>Bauhinia variegata</i>	Caesalpiaceae
44.	<i>Bauhinia racemosa</i>	Aapata
45.	<i>Eugenia jambolana</i>	Jambhal
46.	<i>Cleistocactus winteri</i>	Monkey tail cactus
47.	<i>Epiphyllum</i>	panphuti
48.	<i>Bryophyllum</i>	panphuti
49.	<i>Rhoeo</i>	rhio
50	<i>Ficus tsjella</i>	piparni

C) ROOF TOP SOLAR PANELS:

Roof top solar water heaters are installed in the hostel building.



Details of Solar Cells Used for Water Heating and Solar Panels

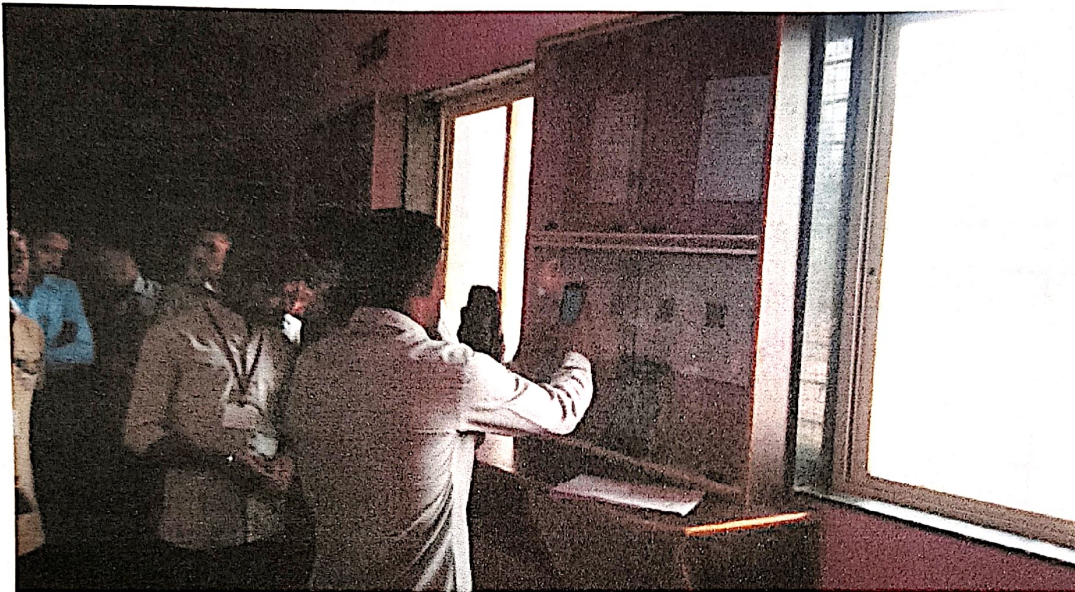
Sr. No.	Building and Solar system	No. of Solar Panels
1	Ladies hostel, solar panel	58
2	Ladies hostel, Solar Cells for Water Heating	7500 litre
3	Library Building, solar panel	16
4	Science Building, solar panel	54




D) LIBRARY:

The college library is partially automated and it has a collection of over 66,645 books and a subscription of about n-list 6000+ e- journals and 3100000+ e-books and Internet browsing for student and staff. Software for administration. Digital attendance software, 760 GB recording devices as audio book and e-Granthalaya software. Unused books collected in store house and sold to the vendor.

QR CODE Technology for student.



n-list screenshot



SHRI SHIVAJI MAHAVIDYALAYA, BARSHI
Y.C.CENTRAL LIBRARY
BARSHI, DIST.-SOLAPUR-Ph.222382


(Local/LAN based Connectivity)

Login Information

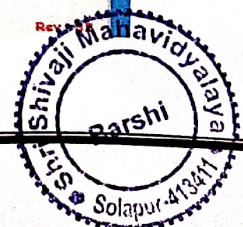
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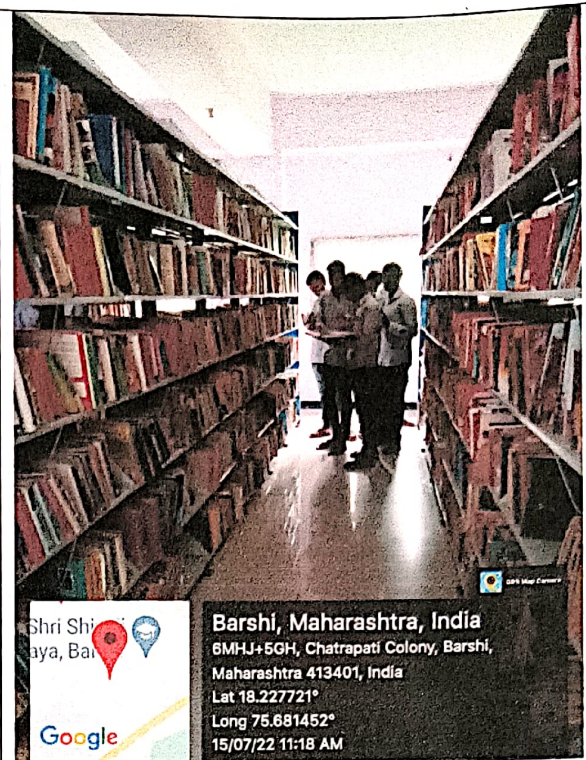
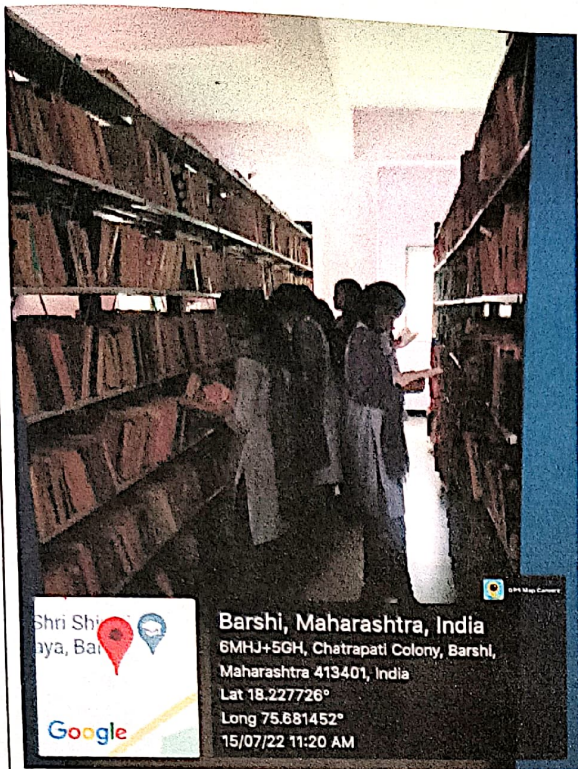
Design and Developed by
National Informatics Centre
Government of India

<http://e-granthalaya.nic.in>
[Email: rkmatola@nic.in](mailto:rkmatola@nic.in)



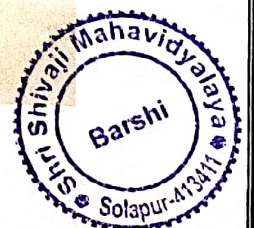
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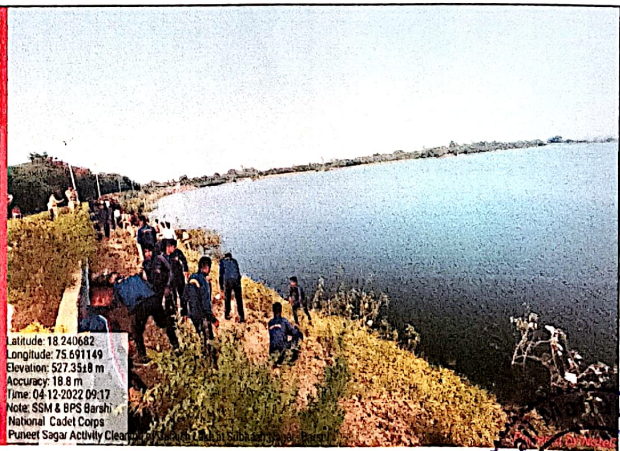
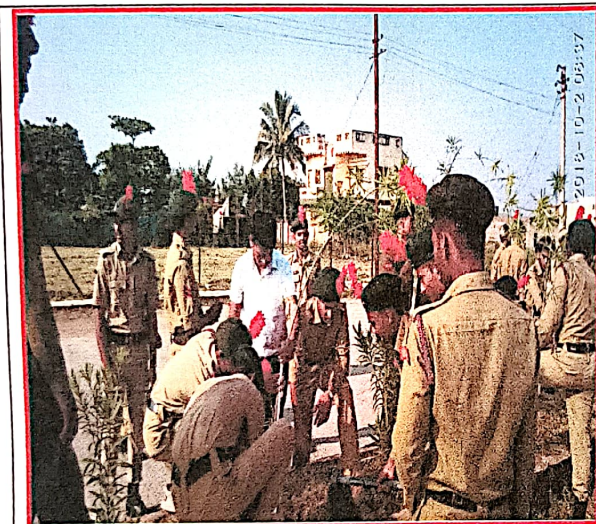
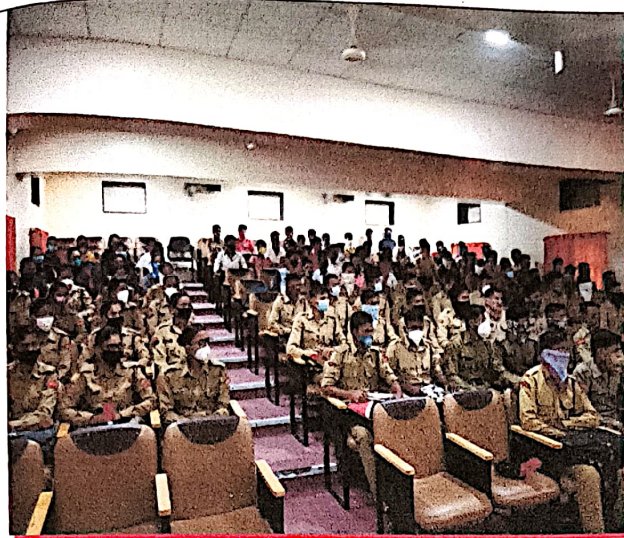




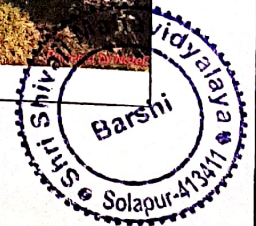
E) Awareness programs and outreach activities:

The college has auditorium which can accommodate 150 students and is used to organize events like department functions, club activities etc. The college has also conducted various outreach activities so as promote environmental awareness.



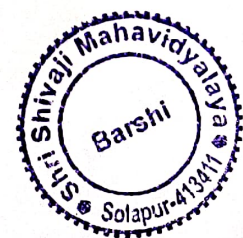
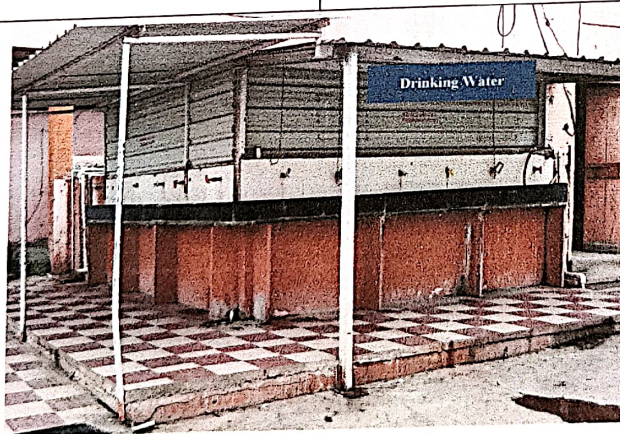
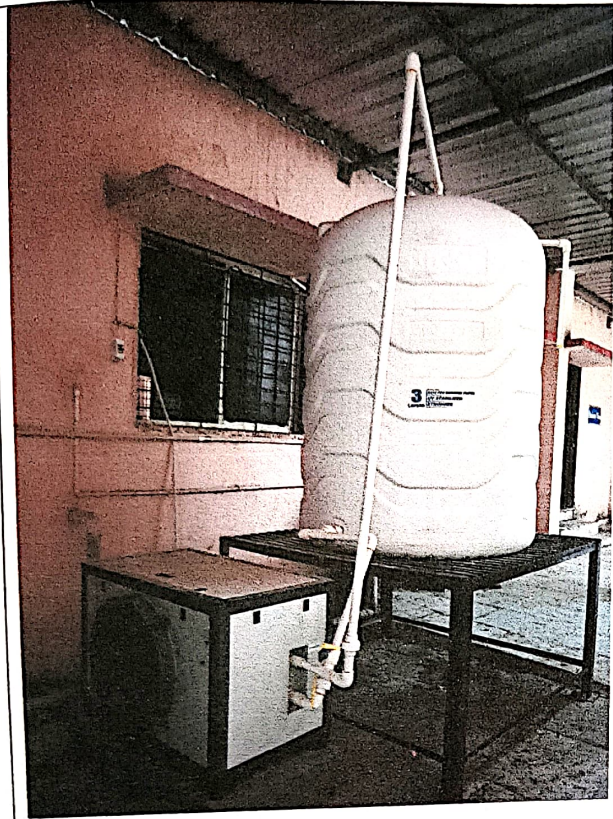


Programs for environment protection



F) RO PLANT:

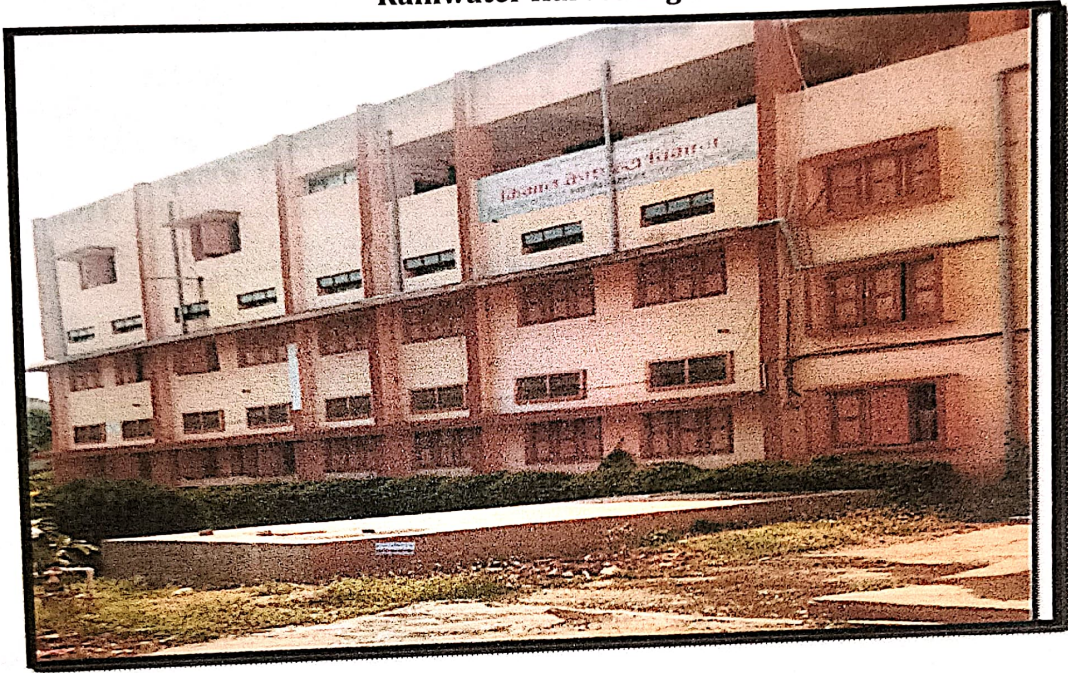
RO plant is provided inside the campus to supply drinking water to the entire campus.



G) RAINWATER HARVESTING:

The rainwater harvesting strengthens the water supply to the campus as well as enhance water level of wells and bore in the campus through ground water recharging process.

Rainwater Harvesting Tank



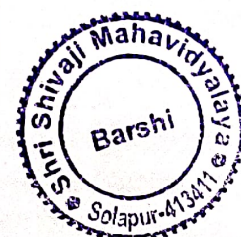
Rainwater Harvesting Collection for Laboratory Purpose



5) Water Management

The source of water used in the College is wells and bore. This well and bore recharging with harvested rainwater from the roof. A total of 3000L of water is pumped out from the well every 2 days. Wastage of water from the campus is utilized for the greenery.

Sr. No.	PARAMETERS	Response
1	Source of water	Well and Boer
2	No of Wells	2
3	No of motors used	3
4	Horsepower-Motor	1HP- 2
5	Depth of well-Total	40 feet
6	Water level	30 feet
7	Number of water tanks in campus	2
8	Capacity of tank	3000L
9	Quantity of water pumped every day	3000L
10	Any water wastage/why?	Nil
11	Water usage for gardening	500L/day
12	Waste water sources	Cleaning of hands and RO
13	Use of waste water	Gardening
14	Rainwater harvest available?	yes
15	Any leaky taps	Nil
16	Amount of water lost per day	Nil
17	Any water management plan used?	Yes
18	Any water saving techniques followed?	Nil
19	Are there any signs reminding peoples to turn off the water?	Yes




6) Waste management

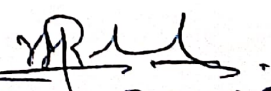
Waste management is important for an ecofriendly campus. In college different types of wastes are generated, its collection and management are very challenging. The following data provide the details of the waste Generated and the disposal method adopted by the college

Table 5. Different types of waste generated in the college and their disposal

Types of waste	Particulars	Disposal method
E-Waste	Computers, electrical and electronic parts	Buy-back policy
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc.	Direct selling
Solid wastes	Damaged furniture, paper waste,	Reuse after maintenance energy conversion
Waste water	Washing, urinals, bathrooms	Soak pits and drainage line of Municipal Corporation
Glass waste	Glass waste of Science department	Sold to vendor
Sanitary Napkin	Ladies hostel	Napkins burned in incinerators


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Range Forest Officer
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