

Disclaimer

The Audit Team has prepared this report for the **Bharatiya Shikshan Prasarak Sanstha`s Kholeshwar Mahavidyalaya** located at <u>Parli Road, Ambajogai Taluka.</u> <u>Ambajogai Dist. Beed 431517</u> based on input data submitted by the College analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole depending on the decision taken by the Hon'ble Management and College. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a period of time and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

The Report is prepared by the Team of Greenvio Solutions under their brand and department – Sustainable Academe as Consultancy firm with the Project Head - Ar. Nahida Shaikh who has completed audits of multiple Institutes including Technical, State University, Private University and Single Faculty Colleges for a total of more than 45 lakhs+ sq. ft. of Built-up area audited till date Pan India as an Accredited and Certified Green Building Professional-Architect. Green Building consultancy is her forte and she is one of the most sought after names when it comes to providing excellent quality services within the stipulated time frame.

The Study is conducted in capacity of Accredited & Certified Green Building Professional with extensive experience.

Greenvio Solutions

Developing Healthy and Sustainable Environments

We are an Environmental and Architectural Design Consultancy firm

<u>Sustainable Academe</u> is our department for conducting Audits

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Acknowledgement

The Audit Assessment Team thanks the **Bharatiya Shikshan Prasarak Sanstha`s Kholeshwar Mahavidyalaya, Maharashtra** for assigning this important work of Green Audit. We appreciate the cooperation extended to our team during the entire process.

Our special thanks are due to **Dr. Surendraji Alurkar Sir,** President; **Shri. Nitinji Shete Sir,** Secretary; **Shri. Chandrakantji Mule Sir,** Joint Secretary and everyone from the Management.

Our heartfelt thanks to Chairperson of the entire process **Dr. Mukund Devarshi Sir, Principal** for his valuable inputs.

We are also thankful to **College's Task force the faculty members** who have collected data required **Prof. Rahul Chavan,** Assistant Professor for the inventory and data collection.

We highly appreciate the assistance of **Office Superintendent**, **Accountant** and the **entire Teaching**, **Non-teaching and Admin staff** for their support while collecting the data.

Sustainable Academe

Brand of Greenvio Solutions, Palghar District, Maharashtra- 401208



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1. Introduction

1.1 About the College

The College is run by Bhartiya Shikshan Prasarak Sanstha, Ambajogai established on 28 June 1951. The Sanstha has rich tradition of Quality education of 60 years. The college was started by the Sanstha in June 1972 and it has created a good tradition of quality education in the course of 51 years of its existence.

The college offers a number of Undergraduate; Post graduate courses in Arts, Science and Commerce faculties and UGC sponsored Career Oriented Courses. The objectives of the College are documented as follows:

- □ To make available various courses at UG and PG level for the students.
- ⇒ To Equip The Students For Global Competency By Providing Them With Knowledge & Necessary Skills.
- → To cultivate moral values among the students this for us includes Human rights, Social justice, secularism, democracy etc.
- ⇒ To develop all-round personality of the students by providing proper facilities and suitable healthy atmosphere.
- To create awareness of modern technology among the students.
- ⇒ To make available various skill-oriented courses to students so that they will get the
 job or become self-employed.
- ⇒ To contribute in social awakening and social change through education.

1.2 Populace analysis for Academic year 2021-22

1.2.1 Students data

The student data (shared by the College) shows there were a total of **385 Boys and 440 Girls** students thus **a total of 825 students** in the premises.

1.2.2 Staff data

The staff data shows the premises had a total of **62** Staff Members.



1.3 Total College Area & College Building Spread Area

The **total site area is 1.7 Acres,** a new building is under construction; the site is designed for a total of 887 footfalls.

1.4 Timeline of activities for Green Building Study Audit

- Discussion with the College
- Allotment and Initiation by the College
- Process discussion with team
- Data submitted by College
- Submission of the Report

1.5 MoU's and Collaborations

The College has extended its educational connect by being associated with reputed Colleges. The details of the recent collaborations are documented below.

- Yashwantrao Chavan College, Ambajogai
- Arts & Commerce Mahila Mahavidyalaya, Ambajogai
- Vasundhara Mahavidyalya, Ghatnandur
- Panditguru Pardikar Mahavidyalya, Sirsala
- Swami Ramanandteerth Mahavidyalya, Ambajogai.



2. Audit inferences 2021-22

As the College had undergone a renewal for the Academic year 2021-22, a data collection process for verification purposes were asked to be submitted. The report has been prepared based on the inputs provided for immediate action for improvement in this subject.

2.1 Positive points that are implemented as per previous Report

The College has increased the number of awareness programs through NSS and Unnat Bharat Abhiyan. The reports of the same were shared for reference purposes.

Similarly, initiatives have begun to name all the plantations in the premises in local language and scientific terminology.

2.2 Implementations proposed for this year

The following points are listed as value addition to the existing premises, are should be considered as <u>first priority</u> for implementation under section wise study. These have to be <u>implemented in the next 1.5 years of the submission of the Report.</u> Owing to the excellent practices adopted at present, the numbers of recommendations are less for this section.

2.2.1 Additional Facilities

- Route maps for all places on the premises.
- Land can be properly utilized to grow different flowering plants.

2.2.2 Green Audit

- **Environmental awareness -** There can be various artworks on the compound wall giving the message of saving the environment through the joint efforts of the students and staff thereby making the student socially and environmentally responsible citizens.
- QR codes on the plants mentioning scientific names The practice of having the codes with details of each plant and tree will provide awareness among the staff and students.



2.2.3 Water Audit

■ Waterless urinals - There can be the provision of waterless urinals as a Green Building initiative in the premise, either the existing ones can be replaced with such a facility or new toilets can be constructed in this manner.

2.2.4 Waste Audit

- Dustbins at every 100m There should be a dustbin at every 50-100 in the open spaces
- → Twin Dual Litter Dustbin Bins There should be more number of dual litter dustbins at various locations in areas such as Canteen, and open spaces. This would inculcate the awareness of waste segregation among students.
- Material of the dustbin The current plastic dustbins should be replaced with ecofriendly material.
- Include better plastic/ E-waste management measures The College can celebrate one day of every month as a 'Plastic/ E-waste awareness day' The stakeholders (Students and staff members) can be asked to bring plastic/ E-waste which can be further given to an NGO for recycling or better purpose.
- → Plastic management for localities The can be frequent cloth/ paper bags distribution in local schools, slums, colleges, medical, police stations.
- → Documentation Improve and increase the documentation and visibility/ reflectance of the environment related events on the website, social media handles

2.2.5 Hygiene Audit

- → Pest control program The College should practice pest control programs with appropriate sanitation facilities through an appropriate agency.
- Practice Green chemistry
- ⇒ **Signboards** The College should have multiple signboards about 'No smoking' and 'Healthy premises' at every nook and corner of the College.
- Compound wall The compound wall should have awareness messages about 'No Smoking' and 'No Tobacco'



3. Inferences as Consolidated study

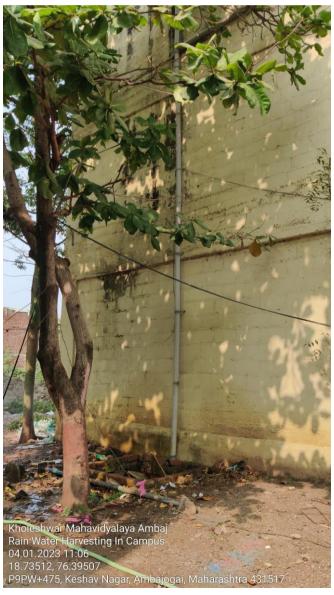
These are to be considered as <u>second priority</u> for implementation, once the section wise recommendations are implemented. The following recommendations should be <u>implemented within the next 2.5 years from the date of the Report submission.</u>

- → Articles and Documentation The premises has multiple features which add to the beauty of the nature and improve the environment in the premises, it is thus suggested to have an article written every month as guided by the Team based on the MoU.
- Scope for executing multiple dense forests (Green zones) in the premises based on the prototype − This can be executed after the Carbon sequestration study has been completed. The Miyawaki technique can be undertaken for this purpose.
- → Determination of Plastic (orange) zones The study and execution can be undertaken through a pilot project where the waste plastic can be collected through areas within 5 km of the premises and a product can be developed.
- Social welfare The College can undertake an activity under the NSS/ NCC to prepare a prototype of Solar panels at a low-cost for the rural areas/ villages that are adopted under rural development programmes.





Environmental awareness campaign by naming the plantations in the premises



Water management practices in the College



4. References

The study is based on the data collected, analysed, rechecked, and confirmed through multiple modes. For the quality study, some standards/ notes have been referred to. These are listed and noted below. However, no direct references have been used anywhere. These are used as a base to analyse and study the data collected.

National references

- ⇒ Uniform Plumbing Code India, 2008
- ⇒ IGBC Green Existing Buildings Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
- ⇒ IGBC Green Landscape Rating system, March 2013

International references

- ⇒ BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST Canada
- ⇒ Used only for understanding Universal design Universal Accessibility Guidelines for Pedestrian, Non-motorized vehicle and Public Transport Infrastructure Report guidelines by Samarthyam (National center for Accessible Environments) an initiative supported by Shakti Sustainable Energy Foundation and www.umassd.edu
- ⇒ The city of Cheyenne, Streetscape/ Urban Design elements Wyoming Planning Association, Gillette, Wyoming, United States
- ⇒ Streetscape elements Chapter 6 on San Francisco
- ⇒ American lung association https://www.lung.org/
- ⇒ Study related to air pollution https://www.airgle.com/
- ⇒ Exploring the light pollution https://education.nationalgeographic.org/
- ⇒ Accessibility study https://www.washington.edu/



