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Hanuman Shikshan Prasarak Mandal, Sonpeth's

LATE RAMESH WARPUDKAR ARTS, COMMERCE & SCIENCE COLLEGE, SONPETH. DIST. PARBHANI 431516 (MS)

NAAC Accredited Grade 'B' with 2.03 CGPA (Validity: 02 March 2020)

(Affiliated to: Swami Ramanand Teerth Marathwada University, Nanded) Web: www.warpudkarcollege.com Email:lrwcsonpeth@gmail.com. Mob. 09423779000

Criterion 7- Institutional Values and Best Practices 7.1: Institutional Values and Social Responsibilities

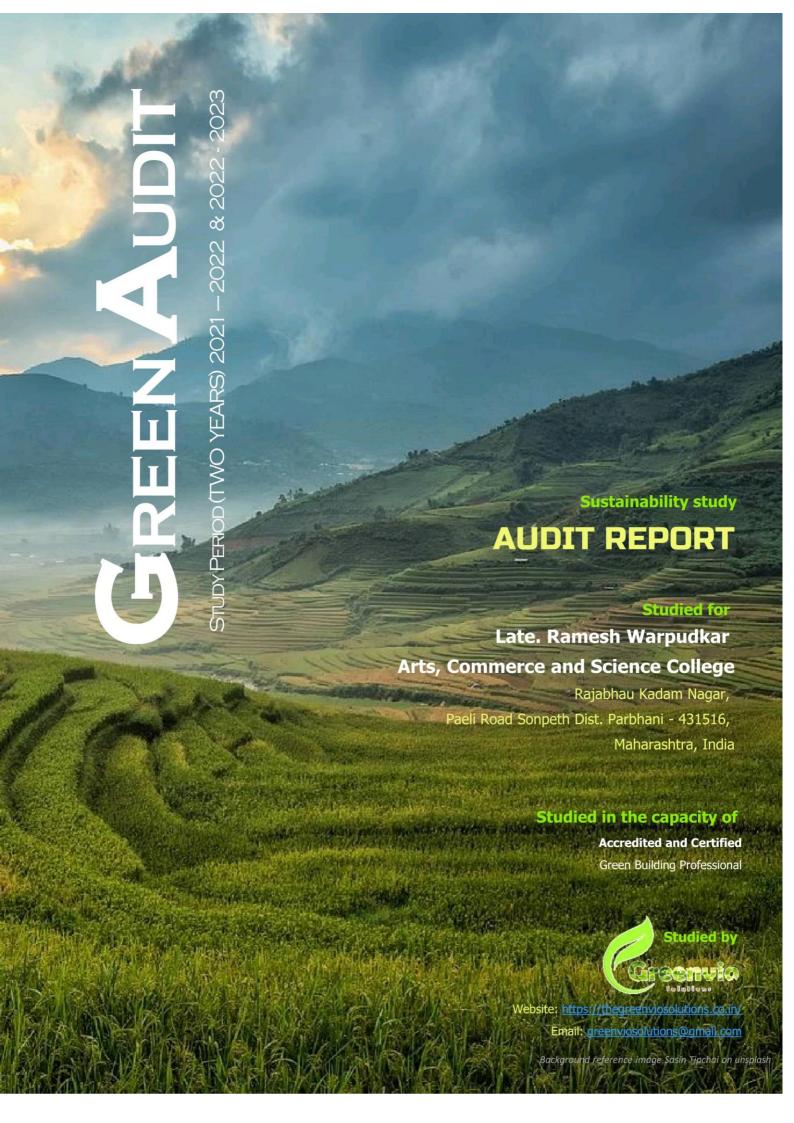


1. GREEN AUDIT / ENVIRONMENT AUDIT
2. ENERGY AUDIT

3. CLEAN AND GREEN CAMPUS INITIATIVES
4. BEYOND THE CAMPUS ENVIRONMENTAL PROMOTION ACTIVITIES

GREEN AUDIT REPORT





Disclaimer

The Audit Team has prepared this report for the **Late. Ramesh Warpudkar Commerce and Science College** located at *Rajabhau Kadam Nagar, Paeli Road Science Dist. Parbhani - 431516, Maharashtra, India* based on input data submitted by the Institute 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 internal team. 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.

Greenvio Solutions

Developing Healthy and Sustainable Environments

We are an Environmental and Architectural Design Consultancy firm
Sustainable Academe is our department for conducting Audits

Palghar District, Maharashtra- 401208

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Introduction



About the Institute

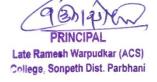
The Late Ramesh Warpudkar ACS College, Sonpeth is in the service of the vicinity since 1994. The town Sonpeth literally means a 'Store of Gold'. The town had a significant status in the region of Nizam of Hydrabad. After independence, the town lost its administrative importance and remained neglected. This college is 80 Kms. away from district place and away from highway which resulted in slowing down its progress. Before the establishment of the college, the students of the region had to go to the district place for their higher education. The journey of the institute began with 50 students in 1994, today nearly 2000 students are studying in this campus.

About the Green practices audit

The details of the <u>environmental activities</u> conducted as part of the extension initiatives by the Institute are documented below:

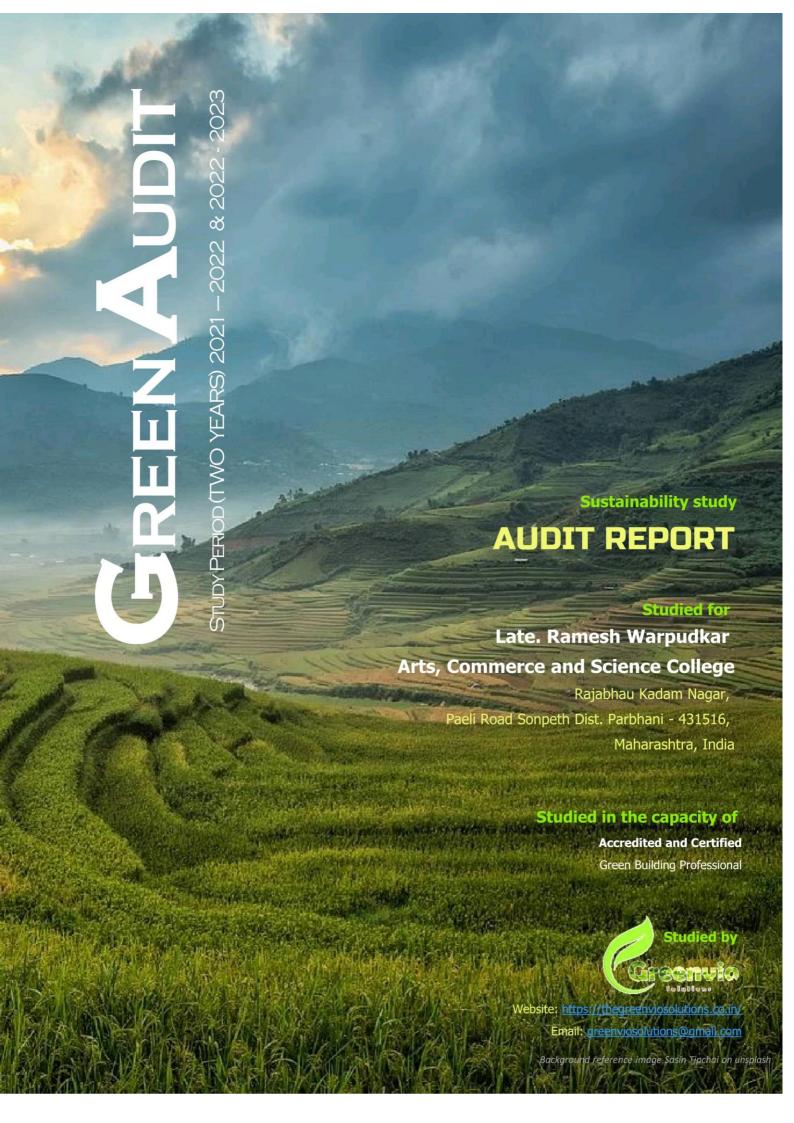
S. No.	Activity	Date
1	One student one plant scheme	07/01/2021
2	Tree Plantation	25/3/2021
3	Vermicomposting	-
4	Tree Plantation	23/7/2022
5	Vermicomposting	-

Table 1: Details of the environmental initiatives undertaken by Institute









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The Audit Team has prepared this report for the **Late. Ramesh Warpudkar Arts, Commerce and Science College** located at <u>Rajabhau Kadam Nagar, Paeli Road Sonpeth</u> <u>Dist. Parbhani - 431516, Maharashtra, India</u> based on input data submitted by the Institute analysed by the team to the best of their abilities.

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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 is 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.

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Acknowledgement

The Audit Assessment Team extends its appreciation to the **Late. Ramesh Warpuura Arts, Commerce and Science College, 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 extended are due to everyone from the Management.

Our heartfelt thanks extended to the Chairperson of the entire process **DR. V.D. Satpute**, (Principal) for the valuable inputs.

We are also thankful to Institute's Task force who have played a major role in data collection.

- ⇒ Faculty members Mr.S. M. Devraye. Assistant Professor (Special mention for the excellent coordination)
- Non-teaching staff members Mr. D.M. Sontakke, Lab. Attendant
- ⇒ Admin staff members Mr. R.R. Kale, Jr. Clerk

We appreciate the cooperation of 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 Institute

The Late Ramesh Warpudkar ACS College, Sonpeth is in the service of the vicinity since 1994. The town Sonpeth literally means a 'Store of Gold'. The town had a significant status in the region of Nizam of Hydrabad. After independence, the town lost its administrative importance and remained neglected. This college is 80 Kms. away from district place and away from highway which resulted in slowing down its progress. Before the establishment of the college, the students of the region had to go to the district place for their higher education. The journey of the institute began with 50 students in 1994, today nearly 2000 students are studying in this campus.

1.2 About the departments of the Institute

The College has departments such as Arts, English, Marathi, Hindi, Economics, Geography, History, Political Science, Physical Education, Public Administrator, Sociology.

1.3 Assessment of the Institute

1.3.1 Affiliations

The technical course provided by the College are affiliated to the **S.R.T.M.**, a a state public university of Maharashtra State.

1.3.2 Certification

The College has received the following Certification of **AISHE** – The All India Survey of Higher Education code with the code being C-7402.

1.3.3 Accreditation

The College received a 'B' grade with a CGPA of 2.03 in the 'First' cycle of accreditation awarded by the National Assessment & Accreditation Council (NAAC) in 2015.

The College is due to enter its Second cycle of NAAC.



1.4 Statements of the Institute

1.4.1 Vision

The Institute proposes "Reaching to the unreached."



1.4.2 Mission

The Institute adheres and focuses towards <u>"To offer opportunities of the empowerment to the rural learners by imparting quality higher education within the capacities."</u>

1.4.3 Objective

It is the objective of the College:

- To strive for imparting higher education to rural masses in general and girls in particulars
- ☐ To seek socio-cultural transformation of rural youth
- To inculcate the values like national integration, patriotism, liberty, equality, fraternity humanity and tolerance among youth
- To nurture the quality of socio and civil responsibilities among the students
- To create youth capable to be employed



Senpeth Pin-431516 *

2. Overview

2.1 Summarised Populace analysis for 2022-2023

2.1.1 Students data

The data (shared by the Institute) shows there were **548 students.**

2.1.2 Staff data

S. No.	Туре	Male	Female	Total
1	Admin staff	07	00	07
2	Teaching staff	20	03	23
3	Non-Teaching staff	08	00	08
Total Staff Members		35	03	38

Table 1: Staff data of the Institution for 2022-2023

The staff data shows the Institute premises had **38 Staff Members.**

2.2 Summarised Populace analysis for 2021-2022

2.2.1 Students data

The data (shared by the Institute) shows there were **579 students.**

2.2.2 Staff data

S. No.	Туре	Male	Female	Total
1	Admin staff	07	00	07
2	Teaching staff	20	03	23
3	Non-Teaching staff	08	00	08
Total Staff Members		35	03	38

Table 2: Staff data of the Institution for 2021-2022

The staff data shows the Institute premises had 38 Staff Members.



3. Research

3.1 Site area

The Institute is spread over 2 acres.

Senpeth Pin 431516

3.2 Institute Infrastructure

3.2.1 Establishment

The Institute was established on 1994.

3.2.2 Spatial Organisation

- The Institute is located in a rural area.
- The campus is a clustered organization spread in built and open spaces.
- There is a pollution free and healthy environment.
- There are ample shaded areas with covered walkways etc.
- The rural set-up invites a pollution free ambience with plantations all over.

3.3 Operation and Maintenance of the premises

The interview session was held with the staff regarding the operation and working hours. The Institution is open from Monday to Saturday with the timings being 08:30 am to 16:00 hours.





4. Evidence



Plate 1: Site for compost pit - There could an awareness banner for sensitization of stakeholders



Plate 2: Different colored dustbins - This is a good practice and should be continued



5. Documentation



5.1 Green Practices Audit

The increasing global warming and climate change have made us realise that apart from the enormous strategies the individual small efforts need to be taken by individuals and Educational Institutes as the younger generations are the future of the world and once they are taught about these practices only then can we assume a better future.

5.1.1 Green practices

We observed the following points during the Site investigation and data verification of the premises; these are common for all the Buildings on the premises.

- Waste management All the laboratories, classrooms, and cabin corridors are having dust bins.
- **Social awareness** The Institute has taken up awareness drives on various social issues for rural upliftment and regeneration in the Institute and surrounding villages. ■
- ⇒ Fresh environment The Institute provides an eco-friendly ambience with fresh air and soothing environment which helps to maintain a physical and mental balance. This kind of a space it a must for an educational institute is inviting and gives the stakeholders an opportunity to explore indoor and outdoor learning to a great extent.

5.1.2 Community development

The details of **extension initiatives** under various heads in Institute are documented below:

S. No.	Туре	Since	Coordinator name
1	National Service Scheme (NSS)	1996	Dr. B.V. Andhale, Dr. A. K. Fajge

Table 3: Details of the extension initiatives by the Institute

The details of the *environmental activities* conducted as part of the extension initiatives by the Institute are documented below:

S. No.	Activity	Details	Туре	Date	
	Academic year 1 2021-22				
1	One student one	To aware students about importance of plants	Physical	07/01/2021	



	plant scheme				
2	Tree Plantation	To aware students and people in the society about importance of plants	Physical	25/3/2021	
3	Vermicomposting	Solid waste management, & aware students about importance of earthworm in agriculture	Physical	-	
	Academic year 2 2022-23				
4	100 Mg 200 Mg				
4	Tree Plantation	To aware students and people in the society about importance of plants	Physical	23/7/2022	

Table 4: Details of the environmental initiatives undertaken by Institute





5.2 Waste Audit

Waste is an inevitable part of our lives. Over the years the aw ing sent to the landfills. The audit provides an approximation of the types of was location of waste collections, disposal techniques used, waste segregation methodologies adopted, and waste management strategies that are implemented in addition to the newer ways that can be adopted aiming to make the premise clean and sustainable.

5.2.1 Waste produced

	-		
S. No.	Туре	Current Disposal	Proposed disposal
1	Solid waste (Toilets)	Stored in underground tanks	TREATED – Biogas plant can be initiated
2	Organic waste (Regular)	Used for Vermicomposting	CONTINUE with current practice
3	Liquid waste (Toilets, wash basins)	Drained in underground	TREATED - Sewage treatment plant can be initiated
4	Chemical waste from laboratories		NEUTRALIZE before letting into storm water drain
5	Toxic waste from laboratories		DISPOSE in a pit that is 20' deep located away from main building
6	E-waste	Stored and daily handover to municipal	TREATED – Tie-up with e-waste recycling firms
7	Plastic waste	authority further procedure.	TREATED – Tie-up with Bisleri's Bottles for change program or firm that is into clean fuels.
8	Bio-waste (Sanitary)		
9	Medical waste (Pharmacy etc.)		Tie-up with local government for dedicated bio-waste handover
10	Construction waste and reuse (Only if applicable)	If possible it is reused unless used to level grounds etc.	CONTINUE with current practice

Table 5: Details of the waste management practices adopted by the team

There are medium sized bins in indoor areas and large sized bins in outdoor areas used to dispose Paper, Plastic, waste stationery, cloth waste. Furthermore, these are colour coded and documented with each type of waste.



5.3 Water Audit

Water is one of the basic needs. Pure drinking water is a resource that needs to be preserved efficiently. A water audit helps to identify the sources of water consumption, and the water requirement by the premises is met by these sources. The effective usage of water without any wastage should be a mandatory practice. Understanding the techniques as per site context to increase water conservation in terms of awareness and practice can be identified and executed as part of this exercise.

5.3.1 Water availability and consumption

5.3.1.1 Source of Primary water supply

The Institute requires water from the Local Municipality for drinking water purposes. <u>There</u> are two overhead tank with capacity of 500 litres each and 4 overhead tanks with capacity of 100 litres each.

5.3.1.2 Source of Secondary water supply

The Institute uses the following sources of water supply for secondary usages such as watering plants, kitchen, toilets, and wash basins and other spaces. There are two tube wells available.

5.3.1.3 Source of Tertiary water supply

The tertiary source of water is the source of water harvesting; the project at present is practiced through well recharging (Ground water table recharge).

5.3.1.4 Source of Reusing waste water

This initiative is not practiced at present. Since the campus **is located in RURAL premises**, the system is not an urgent requirement.

5.3.2 Areas of water usage

Based on the inventory done and data shared by the staff it was found that the premise has the facilities such as taps for indoor-outdoor areas, water cooler, toilets for general and specially abled etc.



5.4 Health and Hygiene Audit

The hygiene is a part and parcel of our daily life. It is extremely essential to keep the surroundings clean in the same manner as we would want our houses to be.

Educational Institutes have a bigger role to play in order to affect the young minds in the positive manner through better hygienic practices.

5.4.1 Facilities available

The Institution has washroom facility, hand wash, drinking water and dustbin facilities.

5.4.2 Hygiene aspects

The current practices are fine.





6. Suggestions



Section-wise suggestions related to premises

The following suggestions are to be considered as a <u>first priority</u> for implementation. These should be executed within the next 2.5 years from the date of the Report submission. The Institute can execute a plan after discussion with Project Head.

6.1 Green practices audit

- Increase the plantations on the premise There can be provision for more plantations on the premise maybe even a Kitchen garden facility.
- Environmental awareness There can be various slogans in local and national language 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.
- Government initiatives The Institute can take up initiatives such as Swachh Bharat Abhiyan, cleanliness drives in the Institute and surrounding villages also activities such as the capacity building of locals in surrounding villages by Institute students.
- Increase the green awareness practice This should be in terms of the physical and virtual events which will be beneficial for all stakeholders in the shared premises.
 (Basically the frequency of the lectures should be increased)
- Documentation Improve and increase the documentation and visibility/ reflectance of the environment related events on the website, social media handles
- Increase the organic farming practices The premises can have an organic farming facility in terms of farms, kitchen, terrace gardens the produce can be directly utilised in the premises.



6.2 Waste Audit

- Organic compost pit maintenance methodology The Institute can recheck the current methodology as it can yield better results in terms of quantity if it is well maintained with the following strategies:
 - The sanitary pad incineration dust can be sent to the compost pit
 - There should be a balance of brown and green waste material
 - Shred the materials before adding them to pit
 - Add twigs
 - Stir occasionally
 - Add water in less quantity to avoid the smell
 - Keep ample air circulation to avoid the smell
 - Regular monitoring and maintenance.
- ⇒ Tie up with Bisleri International regarding their 'Bottles for change program' also with 'Thereco' for their waste management.
- Invite companies such as 'Thaely' and 'Recharkha' to undertake skill development workshops.

6.3 Water Audit

- Signages Messages about avoiding water wastage should be placed at locations.
- Rain water bunds There should be landscape beautification project undertaken to appropriate channelize the rain water through bunds and similar facilities.

6.4 Health and Hygiene Audit

- → Programmes As part of cleanliness programme the initiative of Swachh Bharat Abhiyan of Govt. of India is undertaken during various occasions.
- Signboards − The Institute should have multiple signboards about 'No smoking' and 'Healthy premises' at every nook and corner of the Institute.
- Compound wall The compound wall should have awareness messages about 'No Smoking' and 'No Tobacco'
- Toilet hygiene There should be facilities such as potpourri, camphor tablets in the toilet to avoid smell and health related issues.







7. Compilation

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.

- 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
- 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
- Images on site by Coordinators of the both teams
- Icon images used by https://www.vecteezy.com/free-vector/security-camera-icon and https://www.vecteezy.com/free-vector/electric-car-icon

