



**CHANDRAPAL DADSENA GOVT. COLLEGE PITHORA, DISTRICT
MAHASAMUND (CHHATTISGARH)-493551**

Registered Under section (2F) & (12B) of UGC act

Affiliated to pt. Ravishankar Shukla University Raipur, C.G. Phone No.07707-299373

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CERTIFICATE

This is to certify that Environment Audit at Chandrapal Dadsena Govt. College Pithora Dist.-Mahasamund was conduct on date 05/08/2022

The institute has submitted necessary data and credential for scrutiny. It is found the college is trying its best to reduce pollution and carbon, emission. The college also has 100% rain water harvesting system to recharge underground water level.

Date- 05/08/2022


Range Assistant Pithora ✓
पिथोरा, पश्चिम

ENVIRONMENTAL AUDIT REPORT

CHANDRAPAL DADSENA GOVT. COLLEGE PITHORA, DIST-
MAHASAMUND

SESSON 2021-2022



AUDITED BY:
FOREST DEPARTMENT PITHORA
DIST- MAHASAMUND (C.G.)

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वन-परिक्षेत्र अधिकारी
पिथौरा परिक्षेत्र

GREEN/ENVIRONMENTAL AUDIT REPORT

CONTENTS

- 2 ACKNOWLEDGEMENTS
2. DISCLAIMER
3. CONTEXT
4. CONCEPT
5. INTRODUCTION
6. OVERVIEW OF INSTITUTE
7. AUDIT OBJECTIVES & SCOPE
8. AUDIT PARTICIPANTS
9. EXECUTIVE SUMMARY
10. AREA OF IMPROVEMENTS
11. ENVIRONMENTAL AUDIT - QUESTIONARE
 - 11.1. WASTE MINIMIZATION AND RECYCLING
 - 11.2. GREENING
 - 11.3. ENERGY CONSERVATION
 - 11.4. WATER CONSERVATION
 - 11.5 ENVIRONMENTAL LEGISLATIVE
 - 11.6 GENERAL PRACTICES
12. BEST PRACTICES FOR ENVIRONMENT 26
13. RECOMENDATION 29
14. CONCLUSION 30
15. ANNEXURE – PHOTOGRAPHS OF ENVIRONMENT CONSIIOUSNESS

Shree
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Principal

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ENVIRONMENTAL AUDIT REPORT

1. ACKNOWLEDGEMENT

Forest Department Pithora Green/Environmental Audit thanks the management of Govt. College Pithora Dist- mahasamund for assigning this important work of Environmental Audit. We appreciate the co-operation to our team for completion of study

Our special thanks are due to:

| | |
|---|---------------------------------------|
| Principal of the college | Dr. S.S. Tiwari (In-charge Principal) |
| IQAC in-charge and Ass. Prof. of commerce | Mr. Jitendra Kumar Patel |
| IQAC member and Ass. Prof. of Political Science | Dr. S. S. Diwan |
| Environment Audit coordinator | Dr. Shruti Jha |
| Energy Audit coordinator | Mrs. Pratima Chandrakar |

All teaching, Non-teaching and Supporting staff of college for giving us necessary inputs to carry out this very vital exercise of Green Audit (Environment Audit). We are also thankful to other staff member who were actively involved while collecting the data and conducting field measurements.


Chandrapal Dadsena
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ENVIRONMENTAL AUDIT REPORT

2. DISCLAIMER

Forest Department Pithora Environment Audit Team has prepared this report for Chandrapal Dadsena (CPD) Govt. College Pithora Dist Mahasamund based on input data submitted by the representatives of college complemented with the best judgment capacity of the expert team.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express 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.

If you wish to distribute copies of this report external to your organisation, then all pages must be included.

Forest Department Pithora its staff and agents shall keep confidential all information relating to your organisation and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies. Forest Department Pithora Environment Audit team staff and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.

Report by: Forest Department Pithora


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3. CONTEXT

Environment Audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the College Management. The concept, structure, objectives, methodology, tools of analysis, objectives of the audit are mentioned below.

4. CONCEPT

The term 'Environmental audit' or 'Green audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations/Institutions believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environmental Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

"A management tool comprising a systematic, periodic, documented, and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

The outcome of Environment Audit should be established with concrete evidence that the measures undertaken and facilities in the institution under green auditing.


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5. INTRODUCTION

A Nation's growth starts from its educational institutions, where the ecology is thought as a prime factor of development associated with environment. Educational institutions now a days are becoming more sensitive to environmental factors and more concepts are being introduced to make them eco-friendly. To preserve the environment within the campus, various viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the energy savings, recycle of waste, water reduction, water harvesting etc. The activities pursued by colleges can also create a variety of adverse environmental impacts. Environmental auditing is a process whereby an organization's environmental performance is tested against its environmental policies and objectives. Environment audit is defined as an official examination of the effects a college has on the environment. As a part of such practice, internal environmental audit (Green Audit) is conducted to evaluate the actual scenario at the campus.

Environment audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. Green auditing and the implementation of mitigation measures is a win-win situation for all the college, the learners and the planet. It can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of green impact on campus. Environment auditing promotes financial savings through reduction of resource use. It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers. Thus, it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.

Environmental Management Systems (EMS) is very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the world have started adopting compatible environmental

management systems either voluntarily or for promoting standards by external certification. International environmental standards do not suit the existing Indian educational system. Hence EHS Alliance has developed a compatible system by developing locally-applicable techniques. A very simple indigenized system has been devised to monitor the environmental performance of educational institutions. It comes with a series of questions to be answered on a regular basis.


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Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance.

This innovative scheme is user-friendly and totally voluntary. The environmental monitoring system helps the institution to set environmental examples for the community and to educate young learners. It can be adapted to urban and rural situations.



**ECO
FRIENDLY**

6. OVERVIEW OF INSTITUTE

Chandrapal Dadsena Government College Pithora was established in the year 1989 in the Mahasamund District. It was named after well-known freedom fighter Late Chandrapal Dadsena. The institution is situated in the rural area. Pithora is a tehsil falling under Mahasamund district. It consists mainly of two sections: the interconnected teaching and administrative block, the library and another is science building. There are two garden one is front of college and another is botanical garden n which is within the science building.


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S. S. S.
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Principal
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The landscaped grounds of CPD are widely admired for their beauty. In addition, there are cricket, running, long jump and high jump etc. fields.



College imparts education to Undergraduates in the following

Departments:

- ❖ Department of English
- ❖ Department of Hindi
- ❖ Department of Chemistry
- ❖ Department of Mathematics
- ❖ Department of Physics
- ❖ Department of Zoology
- ❖ Department of Botany
- ❖ Department of Sociology
- ❖ Department of Political Science
- ❖ Department of Commerce
- ❖ Department of History
- ❖ Department of Economic
- ❖ Library

COURSE OFFERED

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Commerce
- Master of History
- Master of Hindi
- Master of English


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- Master of Political Science
- PGDCA

7. OBJECTIVES AND SCOPE

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
 - Improving environmental standards
- Benchmarking for environmental protection initiatives
 - Sustainable use of natural resource in the campus.
 - Financial savings through a reduction in resource use
 - Curriculum enrichment through practical experience
 - Development of ownership, personal and social responsibility for the College campus and its environment
 - Enhancement of College profile
 - Developing an environmental ethic and value systems in young people

8. AUDIT PARTICIPANTS

On behalf of Institute:

| Name | Designation |
|--------------------------|---------------------|
| Dr. S. S. Tiwari | Principal In-charge |
| Dr. S. S. Diwan | Assistant Professor |
| Dr. Shruti Jha | Assistant Professor |
| Mr. Jitendra Kumar Patel | Assistant Professor |

Auditor:

Forest Department Pithora, Environment Audit Team


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9. EXECLUSIVE SUMMARY

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.

10. AREAS OF IMPROVEMENT

- ❖ Environment Policy to be adopted by the College Campus.
- ❖ Water Meter should be installed and maintain the inventory of ground water extraction resource bore well.
- ❖ Stack height of DG set should be as per DG Rules
- ❖ Storage of chemicals like; paints, gums resins, oils, lubricants, acids etc. in designated place and safety/warning signs should be displayed.
- ❖ Internal inspection system should be developed for various aspects of environment available in campus
- ❖ Waste Management plan should be prepared for the campus.
- ❖ Display of environment awareness posters should be there in the prominent areas of campus


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ENVIRONMENTAL AUDIT REPORT

11. ENVIRONMENTAL AUDIT QUESTIONNAIRE

11.1 WASTE MINIMIZATION AND RECYCLING

| | | |
|----|---|---|
| 1. | Does your institute generate any waste? If so, what are they? | Yes, Solid waste, Canteen waste, paper waste, plastic waste, toiletry waste, Horticulture Waste, etc |
| 2. | How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify) | pits are there in campus, Reuse of one side printed Paper for internal communication. Sewage water is discharged to public Sewer. Domestic Waste is given to Municipal Corporation. Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste. |
| 3. | Do you use recycled paper in institute? | Yes, in academic evaluation works |
| 4. | Do you use reused paper in institute? | Yes |
| 5. | How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify. | Yes, NSS unit carried out numerous activities. Recycling campaigns, e waste management, Anti-plastic campaigns, sustainable goal awareness programme. |
| 6. | Can you achieve zero garbage in your institute? If yes, how? | Yes, as per new waste management rules all kind of waste is managed in an adequate manner without any deviation. |

11.2 GREENING THE CAMPUS

| | | |
|----|--|--|
| 1. | Is there a garden in your institute? | yes |
| 2. | Do students spend time in the garden? | yes |
| 3. | Total number of Plants in Campus | Approx 3000 |
| 4. | Suggest plants for your campus. (Trees, vegetables, herbs, etc.) | Sagwan, sal, senha, neem, palash, munga, kolyar, anaar, tulsi etc. |

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11.3 ENERGY

| | | |
|----|--|--|
| 1. | List few ways that you use energy in your institute. (Electricity, firewood, others). Using this list, try to think of ways that you could use less energy every day. | Electricity is saved by use of LED bulbs for Illumination. |
| 2. | How many CFL/LED bulbs has your institute installed? | 95 % of Total Conventional bulbs are replaced by LED Lights. |
| 3. | Are your computers and other equipment's put on power-saving mode? | Yes, In Practice |

11.4 WATER CONSERVATION

| | | |
|----|--|---|
| 1. | List uses of water in your institute | Basic usage of water in campus are; Drinking, Gardening, Kitchen & Toilets, and Others. |
| 2. | How does your institute store water? Are there any water saving techniques followed in your institute? | Water tank installed for storage of water. Avoid overflow of water-controlled valves are provided in water supply system. |
| 3. | If there is water wastage, specify why and How can the wastage be prevented / stopped? | No |
| 4. | Write down few ways that could reduce the amount of water used in your institute | By Following ways: 1. Close the taps after usage 2. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage 3. Water Conservation awareness for new students |
| 5. | Does your institute harvest rain water? | water harvesting system are available. |
| 6. | Is there any water recycling System. | No |

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11.5 ENVIRONMENTAL LEGISLATIVE COMPLIANCE

| | | |
|----|---|---|
| 1. | Are you aware of any environmental Laws pertaining to different aspects of environmental management? | Yes |
| 2. | Does your institute have any rules to protect the environment? List possible rules you could include. | They have banned single use plastic. Their environment policy includes awareness, and environmental conservation efforts through Green Society and Department of Environmental Sciences. All under graduates are studying the paper of Environmental Sciences, prescribed by UGC. |
| 3. | Does Environmental Ambient Air Quality Monitoring conduct by the Institute? | NA |
| 4. | Does Water and Wastewater Quality monitoring conducted by the Institute? | Yes |
| 5. | Is any warning notice, letter issued by state government bodies? | No |
| 6. | Does any Hazardous waste generate by the Institute? | No |

11.6 GENERAL

| | | |
|----|---|---|
| 1. | Are you aware of any environmental Laws pertaining to different aspects of environmental management? | Yes |
| 2. | Does your institute have any rules to protect the environment? List possible rules you could include. | Yes, there are some rules like e banned single use plastic. Their Environmental Policy includes awareness and environmental conservation. |
| 3. | Does housekeeping schedule in your campus? | yes |
| 4. | Are students and faculties aware of environmental cleanliness ways? If Yes Explain | Yes, periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by institute. |
| 5. | Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus? | yes |
| 6. | Does Institute participate in National and Local Environmental Protection Movement? | Yes, Swatch Bharat Abhiyan by students at campus. |

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ENVIRONMENTAL AUDIT REPORT

| | | |
|----|---|---|
| 7. | Does Institution conduct a green/environmental audit of its campus? | Yes, this is first environmental audit done by the College. |
|----|---|---|

12. BEST PRACTICE/INTIATIVE FOR ENVIRONMENT

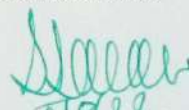
| | | |
|----|---|--|
| 1. | Tree Plantation Drives Two Drives Annually as well as Every Guest is honoured by Tree Plantation at Campus. | Yes, periodically the plantation drives by students and staff of campus. |
| 2. | Pollution Reduction Personal Vehicles (Students) not allowed at campus | Reduction in Air Pollution through vehicular emission. |
| 3. | E Waste Management Collection of e-waste by staff | E waste is sent to the authorized recyclers for adequate disposal |
| 4. | Solid Waste Management | Yes, different mechanisms for proper disposal and recycling of e-waste, plastic waste, biodegradable waste |
| 5. | Adoption of Village/society CSR | yes |
| | Water Conservation | Yes, water saving push taps fitted in the drinking water zone and the toilets to avoid the wastage. |

13. RECOMMENDATIONS

- Formation of Environment Policy and communicated to all faculties and other staff members.
- Environmental Monitoring
- Water monitoring need to be conducted
- Reduction in use of paper work by go digital system
- Water Meter should be installed at institute for monitoring of water consumption
- Increase in Environmental promotional activities for spreading awareness at campus
- As practically feasible avoid use of personal vehicles inside the campus

14. CONCLUSIONS

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The Chandrapal Dadsena Govt College Pithora has Environmental Committee for sustainable use of resources. Overall, 60% of college campus is for landscaping. The audit has identified several observations for making the campus premise more environmentally friendly. The recommendations are also mentioned with observations for campus team to initiate actions. The audit team opines that the


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overall site is maintained well from environmental perspective. There are no major observations but few things are important to initiate urgently are waste management records by monthly inventory of hazardous waste, water balance cycle and periodic inspection of buildings housekeeping and environment policy.

At
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| S.NO. | Local Name | Number of Trees |
|-------------------------|--------------|-----------------|
| 1 | | |
| 2 | Sagoan | 1963 |
| 3 | Senha | 153 |
| 4 | Neem | 74 |
| 5 | Palash | 268 |
| 6 | Beeja | 17 |
| 7 | Kasahi | 6 |
| 8 | Tendu | 118 |
| 9 | Aamtee | 1 |
| 10 | Bel | 90 |
| 11 | Semal | 6 |
| 12 | Babool | 3 |
| 13 | Pam Tree | 27 |
| 14 | Dumar | 1 |
| 15 | Dhanbahara | 6 |
| 16 | Peepal | 1 |
| 17 | Karanz | 1 |
| 18 | Rakt Chandan | 3 |
| 19 | Koriya | 10 |
| 20 | Bijara | 7 |
| 21 | Kata Ped | 4 |
| 22 | Mahaneem | 5 |
| 23 | Subabool | 3 |
| 24 | Seeta Vriksh | 5 |
| 25 | Amrood | 3 |
| 26 | Jamoon | 1 |
| 27 | Aawala | 10 |
| 28 | Munaga | 2 |
| 29 | Kolyar | 1 |
| 30 | Sal | 19 |
| 31 | Emali | 16 |
| 32 | Shishir | 3 |
| 33 | saja | 1 |
| 34 | Ber | 45 |
| 35 | Balasha | 1 |
| 36 | Anar | 2 |
| 37 | Karra | 16 |
| | Karan | 18 |
| Total Number of Trees - | | 2910 |

Page 8
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(Signature)
 Principal

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कार्यालय-प्राचार्य, चन्द्रपाल डडसेना शासकीय महाविद्यालय पिथौरा, जिला-महासमुन्द (छ.ग.)

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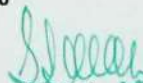
2020-21

| S.NO. | Local Name | Number of Trees |
|-------|--------------|-----------------|
| 1 | Sagoan | 1996 |
| 2 | Senha | 183 |
| 3 | Neem | 104 |
| 4 | Palash | 294 |
| 5 | Beeja | 28 |
| 6 | Kasahi | 6 |
| 7 | Tendu | 168 |
| 8 | Aamtee | 1 |
| 9 | Bel | 35 |
| 10 | Semal | 12 |
| 11 | Babool | 3 |
| 12 | Pam Tree | 27 |
| 13 | Dumar | 1 |
| 14 | Dhanbahara | 3 |
| 15 | Peepal | 1 |
| 16 | Karanz | 1 |
| 17 | Rakt Chandan | 3 |
| 18 | Koriya | 11 |
| 19 | Bijara | 7 |
| 20 | Kata Ped | 4 |
| 21 | Mahaneem | 11 |
| 22 | Subabool | 3 |
| 23 | Seeta Vriksh | 5 |
| 24 | Amrood | 1 |
| 25 | Jamoon | 1 |
| 26 | Aawala | 10 |
| 27 | Munaga | 2 |
| 28 | Kolyar | 1 |
| 29 | Sal | 19 |
| 30 | Emali | 16 |
| 31 | Shishir | 1 |
| 32 | saja | 1 |
| 33 | Ber | 15 |
| 34 | Balasha | 1 |
| 35 | Anar | 1 |
| 36 | Karra | 2 |
| 37 | Karan | 22 |

Total Number of Trees -

3000

range &
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