

CHANDIDAS MAHAVIDYALAYA

A Govt. Aided Degree College Affiliated to the University of Burdwan

UGC Accredited under section 2(f) & 12(B) [1979] * NAAC Accredited in 2016

KHUJUTIPARA, BIRBHUM, WEST BENGAL, INDIA- 731215

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Report of Green Audit / Environment Audit / Energy Audit

Year: 2018-2019 and 2019-2020



DEPARTMENT OF ENVIRONMENTAL SCIENCE
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From

Dr Apurba Ratan Ghosh
Professor

Ref. No.

11/06/2022

Date

To

The Principal
Chandidas Mahavidyalaya
Khujutipara
Birbhum
West Bengal

Sir,

In accordance with the application format of 'Green Audit' here, we have prepared the Audit Report of your Institution for the consecutive years 2018-2019 and 2019-2020 in the attached sheet as an Annexure-1.

We request you to please acknowledge and oblige.

Yours,

Dr Apurba Ratan Ghosh
Professor, Environmental Science
The University of Burdwan
Purba Bardhaman

Report of Environmental Audit/Green Audit

1.0 Introduction

The Environmental Audit and/or Green Audit can be referred as systematic identification, quantification, recording, reporting and analysis of the different aspects as well as components of environment and environmental components with their diversity. The 'Environmental Audit'/'Green Audit' aims to evaluate the various parameters involved in environmental practices in and around the HE Institutional campus; actually, it has some impacts on the congenial and environment-friendly atmosphere as well as stakeholders. It is formulated with an objective of looking after the practices performed by the authority within the institution, otherwise which may cause risk to the health of dwellers and the environment. Under the present format of AQAR and SSR Environmental Audit/Green audit is a mandatory factor as per requirement of National Assessment and Accreditation Council (NAAC) under the Criteria VII which is a self-governing organization of India which declares the Institutional Grade.

1.1 About the College

Chandidas Mahavidyalaya was established on 1972 at village Khujutipara, the birth place of 14th Century lyric poet Chandidas, who was famous for his *Vaishnava Padavali*. It was first accredited by NAAC in 2011 subsequently on 2016. The College has a lush green garden containing some very rare plants sprawling over a vast expanse of land inside the campus. In course of time, the institutional vision has widened and developed to establish the goals to provide higher education as well as quality education. Presently, there are 10 Honours subjects and 10 general subjects. One Girls-hostel is under construction.

2.0 Executive Summary

During the initial planning of the audit, an analysis was conducted in order to identify, evaluate and prioritize the risks associated with the environmental sustainability.

In accordance with the Format of Green Audit and Evaluation Plan, Chandidas Mahavidyalaya, Khujitipara, Birbhum, West Bengal has prepared it for the year 2018-'19 and 2019-'20. Audit was conducted in the month of May 2022. The College has initiated 'The Green Campus' program few years back.

The purpose of the audit is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. With this in mind, the specific objectives of the audit are to evaluate the adequacy of the management control framework of Environment Sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. The analysis was based upon an examination of the policies, manuals and standards that govern the environmental sustainability, on data analysis, and on the results of preliminary interviews with personnel considered key in the environmental management in the campus. The criteria and methods used in the audit were based on the identified risks. The methodology used included physical inspection of the campus, review of the relevant documentation, and interviews.

3.0 Significant Observations

1. College has a good green ambience covering 6.2 acres approx. with a green area of 10,000 sq.ft areas and has constituted "College Environmental Committee" working since 2018 and conducted so far 03 meetings during the years 2018-'19 and 2019-'20 following the Green Environmental policy and has taken efforts for maintaining greenery in the College campus.
2. College has formed the team of faculty and student as members of College Environmental Committee as well as "Eco-Club" which work to maintain biodiversity, campus cleaning, rainwater harvesting, *etc.*, and also participate in preventing pollution in and around the campus.
4. Some of the best practices such as campus cleaning, maintaining tree plantation, floral biodiversity register, and No Smoking Day, E-waste disposal by local DS Infotech, Bolpur, *etc.*, are followed in the campus.
5. College has installed the solar panels during the year 2017 in collaboration with WBREDA and now running satisfactorily.
6. College is maintaining the disposal of all sorts of wastes, e-wastes and hazardous chemicals wastes.
7. College has conducted Environmental Awareness programmes and workshop for faculty and students, and involved the students in maintaining the cleanliness of the campus.
8. All teaching and non-teaching staff members, students are advised to use recyclable materials for storing their food, water, *etc.*, to reduce the wastes.

However, after detailed paper examinations and physical verification it is noted that, some of the practices are required to be followed by the College in implementing the Green Policy of the institution and the applicable standards. In addition, certain processes could benefit from further review in order to improve their efficiency, fairness and consistency.

4.0 Statement of Assurance

As far as possible and appropriate audit procedures completed and evidence gathered to support the accuracy of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit with the established criteria.



GREEN AUDIT WORKING FORMAT

5.0 Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit for years 2018-'19 and 2019-'20. The framework also lists the combined findings and observations for every criterion.

Control objectives	Control(s)	Audit Observations
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	Reduce the absolute amount of waste that it produces from the Institute & Staff offices.	The College has used some controls to reduce the absolute amount of waste that it produces from the departments, staff offices <i>etc.</i>
	Make full use of all recycling facilities provided by City Municipality and private suppliers, including glass, cans, white, coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.	College has to take the advantages of waste management through Gram Panchayat. Formal MoU be maintained for long-term basis and periodical monitoring.
	Compost, or cause to be composted, all organic waste, green waste and un-recycled cardboard produced in or collected from kitchens, gardens, offices and rooms.	The College uses different colour bins for disposal of differently segregated wastes. Un-recycled cardboard produced in or collected from departments, gardens, offices and class rooms are disposed as solid wastes.
	Recycle or safely dispose of white goods, computers and electrical appliances.	Some safe disposal methods has been adopted for electrical wastes, e-wastes, printer cartridges <i>etc.</i>
	Use reusable resources and containers and avoid unnecessary packaging where possible	No, the College has not so far used reusable resources and containers and unnecessary packaging where possible.
	Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated	The College has limited scope of accessible and well-publicized collection points for recyclable waste.
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	Make specific arrangements for events, such as cultural Events, internal and external seminars and conferences, where significant recyclable waste is likely to be produced, in order to both minimize the waste produced and maximize what is recycled/reused	The College practices a few arrangements for events, such as Cultural Events, International and National seminars and Conferences, where significant recyclable wastes are likely to be produced.
	Promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives	The College has limited scope of reuse of items and waste recycling among staff, students



		and conference guests through training, posters and incentives.
	Dispose all waste, whether solid or otherwise, in a scientific manner and ensure that it is not released directly to the environment	Yes, the College disposes all wastes, whether solid or otherwise, but not released directly to the environment.
Reduce energy consumption, especially of energy derived from fossil fuels	Support renewable and carbon-neutral electricity options on any energy-purchasing consortium, with the aim of supplying all college properties with electricity that can be attributed to renewable and carbon-neutral sources.	College has installed Solar panels and maintaining carbon-neutral electricity options. For maintaining all other properties College is dependent on energy-purchasing consortium
	Appreciate that it is preferable to purchase electricity from a company that invests in new sources of renewable and carbon-neutral electricity	The College has no choice other than State Electricity Board.
	Look into the possibility of on-site micro-generation of renewable electricity.	Proposal of enhancement of production of Solar electricity has been initiated.
	Give preference to the most energy efficient and environmentally sound appliances available, this includes only using energy-saving light bulbs	The College is using LED (40%) as much as practicable. Atleast 30-50 % e-notice is generated for academic & administrative purposes.
Reduce energy consumption, especially of energy derived from fossil fuels	Encourage staff, students and conference guests to save energy through visible reminders, incentives and information to increase awareness. This particularly concerns turning off electrical appliances when not in use in both communal and residential rooms	Misuse of electricity is controlled by turning off the appliances when not required. All the stakeholders are aware and doing their best and practices 'switch off drill' to save electricity. But regular monitoring system is lacking.
	Ensures that all electronic and electrical equipment's, such as computers, are switched off when not in use, and is generally configured in power saving mode when such option is available	Students and all the members are used to follow this practice.
	If there are equipment's running on standby mode, reduce the energy consumption on standby mode or minimize the running of equipment's on standby mode	Some of the equipment's are running on standby mode.
	Purchase efficient and environmentally sound appliances in order to fulfill the commitments in section 2, and consider replacing old stock with 'greener', more efficient alternatives.	College is positive about increasing greenery by planting in front of the campus and maintaining plants as much as possible; cleanliness is maintained by the students.

		Tree plantation programmes are followed in different occasions on regular basis.
Minimize the use of unsustainable transport	Make available information about bicycle and pedestrian routes, public transport services and car share schemes to staff and students.	The College is connected through bus and train services, so all of them mostly avail bus/train services.
Minimize the use of unsustainable transport	Reduce the proportion of travel on the University/Institute business carried out in private transport and eliminate unnecessary and inefficient use of the University/Institute vehicles	College does not have any common bus services to all stakeholders.
	Promote car sharing / car pool among the students and faculty members	The College is promoting car sharing/car pool among the students and faculty members.
Minimize consumption of water.	Repair sources of water leakage, such as dripping taps and showers as quickly as possible.	Regular checking and maintenance of pipelines are done to control the water wastage. Misuse and wastage of water from sources are taken care of.
	Install appliances which reduce water consumption	Practised as much as possible.
	Encourage a decrease in water usage among staff, students and conference guests	College has taken some steps to encourage a decrease in water usage among staff, students and conference guests.
	Use an efficient and hygienic water storage mechanism is to minimize the loss of water during storage	College has a hygienic water storage mechanism to minimize the loss of water during storage.
	Minimize wastage of water and use of electricity during water filtration process, if used, such as RO filtration process and ensure that the equipment's used for such usage, are regularly serviced, and the wastage of water is not below the industry average for such equipment's used in similar capacity	Water filters with RO, aqua guards are installed at the strategic locations in the campus for the students.
	Install Water recycling mechanism, such as rain water harvesting system	Two harvesting pits are prepared to collect rain water from the Main building.
	Ensure that all cleaning products used by the University/Institute staff have a minimal detrimental impact on the environment, <i>i.e.</i> , are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations	Negligible amount of cleaning/washing liquids are used in the College and all the toilet cleaners are Eco-friendly.
	Minimize the use of fertilizers and pesticides in the University/Institutional gardens, opting for the use of compost produced on site wherever possible	Negligible amount of fertilizers and pesticides are used in the campus for maintenance of tree <i>etc.</i>

	Dispose the chemical waste generated from the laboratories in a scientific manner	Proper disposal system of toxic and hazardous chemicals from the laboratories is to be followed.
	Reduce the practice of burning plastic and other materials that emit the harmful gas on burning is prevented in the campus.	No such burning.
	Establish a Garden in the campus	College has a garden of medicinal plants within the Campus.
	Encourage the faculties and students to plant trees in the garden.	College conducts tree plantation programmes through students and staff members on regular basis and in different occasions. Choice-plantation, fruit-plantation like guava, mango, etc., may be planted within the campus.
	Reviews periodically the list of trees planted in the garden periodically	Periodical maintenance is followed.
Ensure that environmental awareness is created	Conduct environmental awareness workshops as a part of the program.	Environmental awareness programmes are organized for conservation of nature and natural resources, wildlife, and biodiversity. College celebrates World Environment Day, Ozone Day, etc.
Ensure that environmental awareness is created	Create awareness of environmental sustainability and takes actions to ensure environmental sustainability.	College conducts seminars and awareness programmes to ensure environmental sustainability, and involvement of students is encouraging.
	Reduce the rate at which the University/Institute contributes to the depletion and degradation of natural resources	College is not directly or indirectly participating in depletion and degradation of natural resources.
	Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service	Compulsory ENV5 paper of 50 marks (4 credits) in the syllabus as per University guidelines for all the students of all streams to develop Environmental Awareness.
Ensure that the buildings conform to green standards.	Review architecture of existing buildings and reviews ways, in consultation with experts, to reduce usage of energy for such buildings, offering greatest efficiency for energy and water usage, and reducing carbon emission	Proposal of new constructions would be in compliance with green standard.

Ensure that the Environmental Policy is enacted, enforced and reviewed	Establish the University/Institute Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy	College has an Environmental Committee and conducted so far three (03) meetings since 2018.
	Ensure that on the Nature Club/Environmental Committee there will be appropriate representatives of the relevant university departments and authorities – such as catering, gardening, maintenance, cleaning and finance	Environmental Committee is constituted by the representative from all such sections to maintain the campus.
Ensure that the Environmental Policy is enacted, enforced and reviewed	Ensure that on the Environmental Committee there will be the Green Officer from an external agency who is engaged in the profession of providing guidance on environmental impact	College has constituted “College Environmental Committee” headed by one Convenor.
	Ensure that the Environmental Committee will review the Environmental Policy on an annual basis, and will monitor progress and set measurable targets wherever possible	Environmental Committee has taken the responsibility to follow the environmental policy.
	Ensure that the Environmental Policy is enforced regardless of whether its requirements exceed the mandate of the law	Initiative has been taken to adopt the Green policy.
	Require that every staff and student member recognizes their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice	Members of the Environmental Committee are following the practices.
	Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings	First ‘Green Audit’ is conducted the year 2022.



6.0 Recommendations

Following the audit, recommendations were made to the management.

Criteria	Recommendations
Publication of Audit Report	Resolutions of the "College Environmental Committee" along with audit report be published in the College website.
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	<ol style="list-style-type: none">1. The College should go for ISO 9001:2015 Certification.2. The College should install Effluents Treatment Plant (ETP) and Sewage Treatment Plant (STP).3. Advanced Composting system may be developed for bio-wastes.4. College may go for partnership with local Panchayat in monitoring of disposal of solid wastes through providing outreach program.5. Disposal of chemical wastes, solid wastes through licensed agents6. Vermicomposts may be used in the College garden itself along with other manures.
Reduce energy consumption, especially of energy derived from fossil fuels	<ol style="list-style-type: none">1. Use energy efficient lighting fully in and around the campus; outdoor lighting be managed and followed in the order of eco-friendly system.2. Number of Energy and flow meters to be installed for monitoring of energy and water consumption building wise/department wise.
Maintenance of Campus and biodiversity	<ol style="list-style-type: none">1. PUC (Pollution under control) certificate for all the vehicles entering the campus to be made mandatory and to be checked by security.2. Continuation of maintenance of PBR year wise for different locations by students.3. Choice-plantation, fruit-plantation, artificial nesting, <i>etc.</i>, be strengthened to attract birds and other animals within the campus.
Proper cleaning of water storage Tanks	<ol style="list-style-type: none">1. Proper initiative for cleaning the water tanks on regular basis considering the health & hygiene of the all stakeholders.2. Wastage of water be managed carefully.
Project-based learning on Environment related subjects	<ol style="list-style-type: none">1. More number of projects be initiated to start with technical, skill-oriented and hands-on-training programmes for environmental monitoring.

7.0 Objectives and Scope

The purpose of this audit was to ensure that the Green Policy is followed and implemented in the campus, across all departments, administrative bodies and students.

8.0 Methodology

The methodology includes - preparation and filling up of questionnaire, screening of the report, physical interaction with the members in presence of Principal and the Members of the College Environmental Committee as well as Members of IQAC, record checking and review of the submitted documentations, interviewing key persons and data analysis, measurements and recommendations. It works on the several aspects of Environmental Audit and Green Audit including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity.

- a. In order to meet these objectives, this audit was based on report submitted by the College authority and reviewing of relevant documents as far as possible and interviews with authority, Coordinator and staff members physically.
- b. Review of the Documentations
- c. For the purpose of this audit the Green Policy of the institute was reviewed. Other relevant standards, Green audit framework *etc.*, was also considered.

Interviews

Interviews were conducted with the Principal, IQAC Coordinator, Coordinator of College Environmental Committee and also members of the Committee.

Physical Inspection

Physical inspection was made on 11th of May 2022 and report was prepared based on the physical verification and validation and interaction with the members of the College.


9.0 Declaration

I agree with all the recommendation and observations mentioned in this report.

Date: 11/05/2022

Place: Chnadidas Mahavidyalaya


Signed by
College Principal with Seal
Principal
CHANDIDAS MAHAVIDYALAYA
P.O.-Khujutipara
Dist.-Birbhum


Dr Apurba Ratan Ghosh
Professor, Environmental Science
The University of Burdwan
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Report of Green Audit / Environment Audit / Energy Audit

Year: 2020-2021 and 2021-2022

Date: 11/01/2023

To
The Principal
Chandidas Mahavidyalaya
Khujutipara
Birbhum
West Bengal

Ph:
Fax:
Website:
e-mail:

Subject: Audit Report Submission from Experts

Sir

After verification of all the aspects in the College and necessary assessment of the report on "Green Audit" submitted by your College for the periods of 2020-'21 and 2021-'22, we are submitting herewith the Audit Report on "Environmental or Green Audit" of your College for the periods 2020-'21 and 2021-'22 in the attached sheet for favour of your perusal.


We request you to please acknowledge and the receipt of the same.

Yours,


11.01.2023

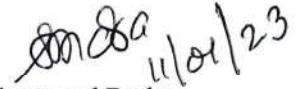
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11/1/23

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11/01/23

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Sripally
Purba Bardhaman

Principal
Vivekananda Mahavidyalaya
BURDWAN

Report of Environmental Audit/Green Audit

1.0 Introduction

The Environmental Audit or Green Audit can be referred as systematic identification, quantification, recording, reporting and analysis of the different aspects as well as components of environmental diversity. The 'Environmental Audit'/ 'Green Audit' aims to evaluate the various parameters involved in environmental practices in and around the HE Institutional campus, actually, it has some impacts on the congenial and environment-friendly atmosphere as well as stakeholders. It is formulated with an objective of looking after the practices performed by the authority within the institution, otherwise which may cause risk to the health of dwellers and the environment. Under the present format of AQAR and SSR Environmental Audit/Green audit is a mandatory parameter as per requirement of National Assessment and Accreditation Council (NAAC) which is a self-governing organization of India which declares the Institutional Grade.

2.0 Executive Summary

In accordance with the "Format of Green Audit: Questionnaire" of Chandidas Mahavidyalaya, Khujutipara, Birbhum for the periods of 2020-'21 and 2021-'22 the Audit is performed on 11th of January 2023. Chandidas Mahavidyalaya was established in 1972.

Chandidas Mahavidyalaya, Khujutipara, Birbhum, West Bengal is affiliated to the University of Burdwan since 1972 and obtained recognition by the University Grants Commission, New Delhi. Initially the College started with three-year B.A. General Courses like Bengali, English, Sanskrit, History, Philosophy, Economics and mathematics. Now, it is offering three-year Honours' Courses in number of subjects namely Bengali, English, History, Philosophy, Economics, Geography, Political Science, Sanskrit, Mathematics and B.Com. The College is running various Pass Course subjects also. College is maintaining about 45% green area inside the Campus. NSS unit has received an appreciation for community service like establishment of five large concrete dustbins at various places, also received appreciation trophy. College has conducted awareness campaigning like AIDS, Cancer, reproductive & Child health, etc.

The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the Institution. With this in mind, the specific objectives of the audit were to evaluate the adequacy of the management control framework of Environment Sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards.

The analysis was based upon a physical examination of the different sectors including labs etc., and standards that govern the environmental sustainability, on data analysis, and on the results of preliminary interviews with personnel considered key in the environmental management in the campus.

The methodology used included the physical inspection of the campus, review of the relevant documentation and interviews.

3.0 Statement of Assurance

This audit has been conducted in accordance with the report submitted by the College Administration. On the basis of the data and physical inspection audit procedure was completed and evidence gathered to support the accuracy of the conclusions reached

and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit with the established criteria.

4.0 Summary of Findings

The main findings of the audit show that, in general, all the departments, faculty and students are to some extent aware about the need for environmental protection at a general level. It was observed that College has installed solar panel and the electricity generated is distributed through power grid. It was also observed they are following some practices such as sock pits, maintaining an ecogarden with medicinal plants, introducing plastic free zone, *etc.*, are followed in the campus. All biodegradable and non-biodegradable wastes are safely disposed with the help of local Municipality.

On detailed review, it was observed that the college has already taken some measurements to implement the Green Policy with applicable standards. In addition, college is taking care of to improve their efficiency, fairness and consistency.

GREEN AUDIT WORKING FORMAT

5.0 Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit in 2020-'21 and 2021-'22.

The framework also lists the findings and observations for every criterion.

Control objective	Control(s)	Audit Observation
Green initiatives	Maintenance of green environment	College has taken some initiatives to make aware among the stakeholders through different forms; College is maintaining green environment through plantation programmes every year, clean and smoking free campus, green campus, etc.
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	Reduce the absolute amount of waste that it produces from college staff offices.	The College is following the method to reduce the wastes through proper disposal system.
	Compost, or cause to be composted, all organic waste, green waste and un-recycled cardboard produced in or collected from kitchens, gardens, offices and rooms.	College has prepared a composting pit for composting the all organic wastes, green wastes, etc., collected from kitchens, gardens, and canteen.
	Recycle or safely dispose of White goods, computers and electrical appliances.	Waste boxes of different colours are maintained for collection of decomposable and non-decomposable waste and finally wastes are safely disposed by local Panchyat. All electronics wastes and electrical wastes are disposed through DS Infotech, Bolpur.
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	Make specific arrangements for events, such as cultural Events, internal and external seminars and conferences, where significant recyclable waste is likely to be produced, in order to both minimize the waste produced and maximize what is recycled/reused	College tries to use biodegradable materials as much as possible; maintaining plastic as well as smoking free campus.
	Promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives	Yes, the College has taken some initiative to promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives.
	Dispose all waste, whether solid or otherwise, in a scientific manner and ensure that it is not released directly to the environment	Yes, the College disposes all waste, whether solid or otherwise, and ensures that it is not released directly to the environment.
Reduce energy consumption, especially of energy derived from fossil fuels	Support renewable and carbon-neutral electricity options on any energy-purchasing consortium, with the aim of supplying all college properties with electricity that can be attributed to renewable and carbon-neutral sources.	Yes, the College has installed solar grid power having a capacity of 10 KW and the electricity generated is contributed via power grid.

Control objective	Control(s)	Audit Observation
Green initiatives	Appreciate that it is preferable to purchase electricity from a company that invests in new sources of renewable and carbon-neutral electricity	The College has no choice other than WBSEDCL.
	Look into the possibility of on-site micro-generation of renewable electricity.	College has installed solar grid power of 10 KW capacity.
	Give preference to the most energy efficient and environmentally sound appliances available, this includes only using energy-saving light bulbs	The College has furnished fully with LED as much as practicable.
Reduce energy consumption, especially of energy derived from fossil fuels	Provide energy efficient heating systems, with adjustable controls for individual heating appliances wherever possible, and ensure that comprehensible instructions are available to staff and students on the use of heating controls	Considering the local climate heating system is not necessary.
	Encourage staff, students and conference guests to save energy through visible reminders. Incentives and information to increase awareness. This particularly concern turning off electrical appliances when not in use in both communal and residential rooms	Misuse of electricity is controlled by turning on' the appliances when not required. MCP is fixed in every floor of the building.
	Monitor and understand the importance of different sources of college energy consumption, and set appropriate and measurable targets for a reduction in certain areas of consumption and/or in the overall consumption of energy.	The College is intended to follow the bests to put the main switch off when there is no need of electricity.
	Ensures that all electronic and electrical equipment such as computers, are switched off when not in use, and is generally configured in power saving mode when such option is available	It is now practised.
	Laboratory space & status of equipment either running on standby mode, reduce the energy consumption on standby mode or minimize the running of equipment's on standby mode.	Laboratory space in the Physics, Chemistry, Zoology and Geography is quite enough and equipment are running on standby mode when not in use.
	Purchase efficient and environmentally sound appliances in order to fulfill the commitments in section 2, and consider replacing old stock with 'greener, more efficient alternatives.	College has a positive attitude about increasing greenery by planting in front of the premises. College has proposed to prepare one playground inside the Campus surrounded by fruit trees or canopy trees.
Minimize the use of unsustainable transport	Make available information about bicycle and pedestrian routes, public transport services and car share schemes to staff and students.	The College is located in the centre place of the locality with available bus and train services, so all of the members mostly avail

Control objective	Control(s)	Audit Observation
Minimize the use of unsustainable transport	Reduce the proportion of travel on Collegebusiness carried out in private transport andeliminate unnecessary and inefficient use ofCollege vehicles.	public transport. No College vehicle.
	Promote car sharing I car pool among the students and faculty members ,	College does not promote car sharing/car pool among the students and faculty members.
Minimizeconsumptiono f water,	Repair sources of Water leakage, such as dripping taps and showers as quickly as possible.	Regular checking and maintenance of pipelines are done to control water wastage.
	Install appliances which reduce water consumption	Practised as much as possible.
	Encourage a decrease in water usage among staff, students and conference guests	Yes, College encourages the staff, students and conference guests for decrease in water usage.
	Use an efficient and hygienic water storage mechanism is to minimize the loss of water during storage	Yes, college has a hygienic water storage mechanism to minimize the loss of water during storage as stored
	Minimize wastage of water and use of electricity during water filtration process. If used, such as RO filtration process and ensure that the equipment's used for such usage. are regularly serviced, and the wastage of water is not below the industry average for such equipment's used in similar capacity	College has installed appropriate machinery for supplying the safe drinking water to all the stakeholders. College has six Aqua Guard installed in different locations.
	Install Water recycling mechanism, such as rainwater harvesting system	Rainwater harvesting system is functional.
	Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. are biodegradableand non-toxic. even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations	Negligible amount of washing liquids are used in the College and all the toilet cleaners are Eco friendly.
	Minimize the use of fertilizers and pesticides in college grounds, opting for the use of compost produced on site- wherever possible	Organic fertilizers are used in the College. No pesticides are used.
	Dispose the chemical waste generated from the laboratories in a scientific manner	No toxic chemicals are included in the syllabus of practical curriculum of the University of Burdwan. Most of the wastes generated are water-soluble.Measure has been taken to minimize chemical wastes to

	drain-off using sock pit.
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Control objective	Control(s)	Audit Observation
	Reduce the practice of burning plastic and other material that emits harmful gas on burning is prevented in the campus.	No such burning.
	Establish a Garden in the campus	College has renovated the existing adjacent pond and greenery environment allround.
	Encourage the faculties and students to plant trees in the garden.	NSS and students of Botany and other departments are taking part.
Ensure that environmental awareness workshops environmental	Conduct environmental awareness workshops as a part of the program.	College is going to form an Eco club for monitoring this.
	Conduct events such as plant trees to spread environmental awareness among the students	Few programmes have undertaken in this regard.
	Reduce the rate at which the College contributes to the depletion and degradation of natural resources.	College does not directly or indirectly participate in depletion and degradation of natural resources.
	Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service	Compulsory ENVS paper of 100 marks in the University Syllabus for all the students of all streams to develop Environmental Awareness (80 written + 20 Project).
Ensure that the buildings conform to green standards.	Review architecture of existing buildings and reviews way, in consultation with experts, to reduce usage of energy for such buildings, offering greatest efficiency for energy and water usage, and reducing carbon emission	All building with big rooms is well-equipped with sunlight and fresh air. College has taken some actions for face-lifting.
Ensure that the Environmental Policy is enacted, enforced and reviewed	Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy	College has proposed to form an Environment Committee. Eco-Club only for students is working since 2019.
	Require that every staff and student member recognizes their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice	College is trying to create awareness programmes to motivate the students.
	Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings	Last Green Audit was conducted on 2019-2020. Present Report is based on data of the session 2020-'21 and 2021-'22.

6.0 Recommendations

Considering the audit, following recommendations were made to the management.

Criteria	Recommendations
Publication of Audit Report	Resolutions of the "College Environmental Committee" along with audit report be published in the College website.
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	1. The College should go for ISO 9001:2015 Certification. 2. Advanced Composting system may be developed for bio-wastes. 3. College may go for partnership with local Panchayat in monitoring of disposal of solid wastes through providing outreach program.
Reduce energy consumption, especially of energy derived from fossil fuels	1. Use energy efficient lighting fully in and around the campus; outdoor lighting be managed and followed in the order of eco-friendly system. 2. Number of Energy and flow meters to be installed for monitoring of energy and water consumption building wise/department wise.
Maintenance of Campus and biodiversity	1. PUC (Pollution under control) certificate for all the vehicles entering the campus to be made mandatory and to be checked by security. 2. Students be involved in maintaining Medicinal Gardens and PBR for local areas.
Proper maintenance of wastes	1. Total wastes including solid, liquid, <i>etc.</i> , wastes be managed carefully.
Project-based learning on Environment related subjects	1. More number of projects be initiated to start with technical, skill-oriented and hands-on-training programmes for environmental monitoring.
Use of Rainwater harvesting system	1. Judicial application of rainwater be initiated through rainwater harvesting.

7.0 Objectives and Scope

The purpose of this audit was to ensure that the Green Policy is followed and implemented in the campus, across all departments, administrative bodies and students.

8.0 Methodology

The methodology includes - preparation and filling up of questionnaire, screening of the report, physical interaction with the members in presence of Principal and the Members of the College Environmental Committee as well as Members of IQAC, record checking and review of the submitted documentations, interviewing key persons and data analysis, measurements and recommendations. It works on the several aspects of 'Green Audit' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity.

a. In order to meet these objectives, this audit was based on report submitted by the College authority and reviewing of relevant documents as far as possible and interviews with authority, Coordinator and staff members physically.

b. Review of the Documentations

c. For the purpose of this audit the Green Policy of the institute was reviewed. Other relevant standards, Green audit framework *etc.*, was also considered.

Interviews

Interviews were conducted with the Principal, IQAC Coordinator, Coordinator of College Environmental Committee and also members of the Committee.

Physical Inspection

Physical inspection was made on 11th January 2023 and report was prepared based on the physical verification and validation and interaction with the members of the College.


9.0 Declaration

I agree with all the recommendation and observations mentioned in this report.


Date: 11/01/2023

Place: Chandidas Mahavidyalaya
Khujutipara

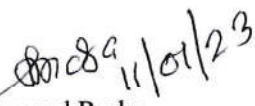
Signed by
College Principal with Seal


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