

ASANSOL GIRLS' COLLEGE

(GOVT. SPONSORED)

Affiliated to The Kazi Nazrul University Dr. Anjali Roy Sarani, Asansol - 713304

Green Audit- Certificate

Date: 08/09/2023

AUDIT REPORT ON ENVIRONMENTAL AUDIT/

GREEN AUDIT

CERTIFICATE

This is to certify that the Environmental Audit/Green Audit Report of Asansol Girls' College, Asansol, Paschim Bardhaman is based on the original data collected during the period of 2022-'23. This has been independently assessed and is applicable to the service range of providing quality Education, Training and Mental Support to the students for their enriched future and career. Further, it is certified that the baseline data on environmental monitoring and energy management practices were prepared by internal College Environmental Committee of Asansol Girls' College, Asansol and submitted to us. The content of the baseline data on environment and energy of the study has been personally verified by the Expert Team constituted by the Kazi Nazrul University, Paschim Bardhaman including external expert members for validity and reliability. The data used in the study are original in nature and have not been presented or published elsewhere. Data & Photographs used in the report are taken by the Institutional Green Audit Team during preparing their Report of the concerned year.

sha ja challm

Dr. Asamanja Chattoraj

Professor

Department of Animal Science

Kazi Nazrul University

Asansol

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Dr. Amitava Basu

Principal

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DR. AMITAVA BASU

Principal, B. B. College Ushagram, Asansol, P Bardhaman West Bengal - 713303

Dr Apurba Ratan Ghosh

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Prof. A. R. Ghosh Environmental Science The University of Burdwan Burdwan

Prof. Asamanja Chattoraj Department of Animal Science KAZI NAZRUL UNIVERSITY (KNU) Asansol West Bengal-713 340, INDIA

Date: 08/09/2023

To
The Vice Principal
Asansol Girls' College
Asansol
Paschim Bardhaman
West Bengal

Ph: 0341-2257107 Mobile: 9434311497 Website: www.agc.ac.in e-mail: mail@agc.ac.in

Subject: Audit Report Submission by the University Audit Team

Sir

After verification of all the aspects in the College and necessary assessment of the report "Green Audit" submitted by your College for the academic year 2022-'23, we are hereby submitting the Reports on "Environmental or Green Audit" of your College for 2022-'23 in the attached sheet for your kind perusal and further necessary action at your end.

We request you to please acknowledge and oblige.

Thanks and regards,

Yours sincerely,

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Dr. Asamanja Chattoraj

Professor

Department of Animal Science

Kazi Nazrul University

Asansol

Paschim Bardhaman

Dr. Amitava Basu Principal B B College Asansol Paschim Bardhaman

DR. AMITAVA BASU Principal, B. B. College Ushagram, Asansol, P Bardhaman West Bengal - 713303 Dr Apurba Ratan Ghosh Professor & Head Deptt. of Environmental Science The University of Burdwan

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Prof. Asamanja Chattoraj Department of Animal Science KAZI NAZRUL UNIVERSITY (KNU) Asansol West Bengal-713 340, INDIA

Date: 23/08/2022

AUDIT REPORT ON ENVIRONMENTAL AUDIT/

GREEN AUDIT

CERTIFICATE

This is to certify that the Environmental Audit/Green Audit Report of Asansol Girls' College, Asansol, Paschim Bardhaman is based on the original data collected during the period of 2021-'22. This has been independently assessed and is applicable to the service range of providing quality Education, Training and Mental Support to the students for their enriched future and career. Further, it is certified that the baseline data on environmental monitoring and energy management practices were prepared by internal College Environmental Committee of Asansol Girls' College, Asansol and submitted to us. The content of the baseline data on environment and energy of the study has been personally verified by the Expert Team constituted by the Kazi Nazrul University, Paschim Bardhaman including external expert members for validity and reliability. The data used in the study are original in nature and have not been presented or published elsewhere. Data & Photographs used in the report are taken by the Institutional Green Audit Team during preparing their Report of the concerned year.

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Date: 23/08/2022

To The Vice Principal Asansol Girls' College Asansol Paschim Bardhaman West Bengal

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Green Audit- Report

Report of Environmental Audit/Green Audit

1.0 Introduction

The Environmental Audit or Green Audit is a systematic identification, quantification, recording, reporting and analysis of the different components of environmental diversity. The 'Environmental Audit'/'Green Audit' aims to assess the various parameters including energy parameters involved in environmental practices in and around the HE Institutional campus, actually, it means to impress the congenial and environment-friendly atmosphere for the all 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 including energy monitoring practices 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

Asansol Girls' College, after its establishment in 1950 gradually becomes a premier institution to cater the need of higher education for the women. Initially, it was started as an Intermediate College and during 1957-'58 it was recognized as a Degree College and reputed as a Government sponsored college in 1956. The new academic building started functioning in 1962. Now, it has a total campus area of 2.022 hectare and total green area of 1.459 hectare.

In accordance with the "Format of Green Audit - Questionnaire", Asansol Girls' College, Asansol prepared the report for the year 2022-'23, and the Audit is performed on 08th of September, 2023. Asansol Girls' College started on 1950 and recognised as Government sponsored college in 1956 and came under the affiliation of the University of Burdwan. Now, they came under the affiliation of the Kazi Nazrul University on 2015.

There are 20 UG departments and one PG subject, viz., Political Science. College was first accredited by NAAC in 2007 with B+ Grade and subsequently on 2016 with A Grade. The College has received Rs 2.0 cr through RUSA project on 2018. College has two Girls' Hostel for accommodating on an average 120 girl students coming from very distant places.

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 Environmental Committee. 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 the following:

- ➤ In general, all the departments, faculty and students are to some extent aware about the importance of maintenance of green campus, environmental protection and energy conservation at a general level to improve their efficiency, fairness and consistency.
- College installed solar panel before 2016 and now it is not working, college taking initiative to make it function.
- ➤ The Institute is following some practices such as maintaining an ecogarden with medicinal plants, introducing plastic free zone, etc., in the campus.
- All biodegradable and non-biodegradable wastes are disposed with the help of local Municipality. College is dependent on Asansol Municipal Corporation for disposing their solid wastes including chemical, biological wastes, etc.
- College does not follow any regulatory disposal method of disposal of e-waste.
- > The College has taken some measurements to implement the Green Policy with applicable standards.
- College celebrates 'No Vehicle Day' on first Saturday of every month.
- ➤ College maintains generation of e-notice approx. 80% for academic/administrative purposes.
- > College maintains Plantation Programmes on regular basis.

GREEN AUDIT WORKING FORMAT

5.0 Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit in 2022-23. 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 different initiatives to make aware among the stakeholders through different forms; College has conducted some activities for green environment through plantation.
	that it produces from college staff	The College is following the methods to
	recycled cardboard produced in or	College intends to prepare a composting pit for composting the all organic wastes, green wastes, etc., collected from hostel kitchens, gardens, and canteen.
		Waste boxes of different colours are maintained for collection of decomposable and non-decomposable waste and finally wastes are safely disposed by Asansol Municipal Corporation. Also computer wastes and electrical wastes are taken care of.
proportion of waste that is recycled & minimize the	such as cultural Events, internal and external seminars and conferences,	
	Promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives Dispose all waste, whether solid or	
	ensure that it is not released directly to the environment	or otherwise, and ensures that it is not released directly to the environment.
	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.	

Control objective	Control(s)	Audit Observation
Green initiatives	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.	before 2016
	Give preference to the most energy efficient and environmentally sound appliances available, this includes only using energy-saving light bulbs	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	
	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 on' the appliances when not required.
	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 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 of when not in use, and is generally configured in power saving mode when such option is available	
	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.	Microbiology, Chemistry and Geography is quite enough and equipment are running on standby mode when not in use
1	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.
s stantable transport		with available local transport bus

Control objective Minimize the use of	Control(s)	Audit Observation
Minimize the use ounsustainable transport	Reduce the proportion of travel of College business carried out in private transport and eliminate unnecessary and inefficient use of College vehicles. Promote car sharing Learner business.	College has no pool car/sharing car service, <i>etc.</i> , or separate College Vehicle.
Minimiza access	Promote car sharing I car pool among the students and faculty members	sharing/car pool among the
Minimize consumption o water,	dripping taps and showers as quickly as possible.	s Regular checking and maintenance of pipelines are done to control water wastage.
	water consumption	Practised as much as possible.
	Encourage a decrease in water usage among staff, students and conference guests	students and conference guests for
	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. Stored water is provided by local Municipality.
	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	drinking water to all the stakeholders.
	Install Water recycling mechanism, such as rainwater harvesting system	Rainwater harvesting system be improved.
	college staff have a minimal detrimental impact on the environment, i.e. are biodegradable and 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	No pesticides are used.
	N N N N	No toxic chemicals are included in the syllabus of practical curriculum of the Kazi Nazrul University. Most of the wastes generated are vater-soluble. Measure has been taken to minimize chemical wastes to drainff using sock pit.

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.	
	Establish a Garden in the campus	College maintains greenery and safe environment all round.
	Encourage the faculties and students to plant trees in the garden.	NSS and students of different departments are taking part.
The state of the s	Conduct environmental awareness workshops as a part of the program.	
	Conduct events such as plant trees to spread environmental awareness among the students	
	Reduce the rate at which the College contributes to the depletion and degradation of natural resources.	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	marks in the University Syllabus
	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 spacious rooms is well-equipped with sunlight and fresh air.
		of January 2022 and conducted
	Require that every staff and student member recognizes their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice	awareness programmes to motivate
	Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings	

6.0 Recommendations

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

Criteria	Recommendations
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	 The College should install Effluents Treatment Plant (ETP) and Sewage Treatment Plant (STP), in particular, for chemical wastes. Advanced Composting system may be developed for bio-wastes. College may go for partnership with Asansol Municipal Corporation in monitoring of disposal of solid wastes through providing outreach program. Disposal of chemical wastes, e-wastes through licensed agents Proposal of vermicomposting may be initiated for use in the College garden itself along with other manures.
Reduce energy consumption, especially of energy derived from fossil fuels,	 Use energy efficient lighting fully in and around the campus; outdoor lighting be managed and followed in the order of eco-friendly system. Generation of solar electricity be functioning. More 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	 Maintenance of PUC (Pollution under control) certificate may be utilised fully. Maintenance of PBR year wise for different locations. Choice-plantation, fruit-plantation, artificial nesting, etc., be followed to maintain attract birds and other animals within the campus. Possibility of preparing a butterfly park/garden be maintained by the students.
Proper cleaning of water storage Tanks	 Proper initiative for cleaning the water tanks on regular basis considering the health & hygiene of the all stakeholders. Wastage of water be managed carefully.
Project-based learning on Environment related subjects	1. Creation of opportunity 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 '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 8th of September 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: 08/09/2023

Place: Asansol Girls' College, Asansol

College Principal with Seal

Wice-Principal Asansol Girls' College

Achattany Dr. Asamanja Chattoraj

Professor

Department of Animal Science

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Dr Apurba Ratan Ghosh

Professor & Head

Deptt. of Environmental Science The University of Burdwan

Burdwan

Report of Green Audit

1.0 Introduction

Green Audit or Environmental Audit is a systematic identification, quantification, recording, reporting and analysis of components of environmental diversity within an academic institute. The 'Green Audit' aims to analyze environmental practices followed within and outside the College campus, which can provide an eco-friendly ambience for the stakeholders. Objectives are to ensure good health and good environment for the inhabitants. Presently, Green audit is a requirement of evaluation process by NAAC (National Assessment and Accreditation Council) which is a self-governing organization of India which declares the Institutional Grade.

1.1 About the College

Asansol Girls' College started on 1950 as an Intermediate College. During 1957-'58 it was considered as a Degree College and famed as a Government sponsored College in 1956. It was affiliated under The University of Burdwan till 2015, and then came under newly established Kazi Nazrul University, Paschim Bardhaman during 2015. In this period of assessment, it is running 20 UG courses and one PG Course in Political Science. College was shifted in its new academic building in 1962. It has a total campus area of 2.022 hectare and a total green area of 1.459 hectare.

In 2007 for the first time College was accredited by NAAC and obtained B+ Grade, during Second Cycle they awarded with A Grade on 2016. During 2018, College has received Rs 2.0 cr under RUSA project. College has two Girls' Hostel, one under the financial assistance of UGC and one by College itself for accommodating the girl students.

2.0 Executive Summary

In accordance with the Format of Green Audit and Evaluation Plan of Asansol Girls' College, Asansol, Paschim Bardhaman, West Bengal for the year 2021-'22 this Audit is conducted in the month of August 2022. The objectives of this audit was to make sure that the management and monitoring practices so far followed in the campus and outside the campus are in accordance with the green management. This audit was is conducted to measure the

adequacy of the monitoring practices under the control framework of Environment Sustainability.

The rapid urbanization and economic development in this area and adjacent areas have led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus inside and outside of the College which will lead for sustainable development and be the spokesman of the region. Asansol Girls' College, Asansol is seriously concerned and believes that there is an urgent need to address these local problems and redress the conditions. Being an old traditional built institution of higher learning for the women in particular, the College has initiated 'The Green Campus' program few years back.

3.0 Significant Observations

- 1. College has constituted 'College Environmental Committee' and has taken efforts for sustainable development on the College campus.
- 2. College has formed the team of faculty and student as members of College Environmental Committee which work to maintain the biodiversity on the campus and also participate in preventing pollution in and around the campus.
- 3. Some of the best practices such as campus cleaning, maintaining tree plantation, introducing plastic free zone, *etc.*, are followed in the campus.
- 4. College installed a solar panels long back, which is not functioning right now. They are dependent on WBSEDCL.
- 5. College is maintaining the disposal of all solid wastes through Asansol Municipal Corporation.
- 6. College has conducted Environmental Awareness programmes and workshop for faculty and students, and involved the students in maintaining the cleanliness of the campus.
- 7. Students are aware to maintain the Biodiversity Register to some extent.
- 8. College follows rainwater harvesting process for groundwater recharge application.
- 9. Chemistry, Zoology and Microbiology departments are spacious.
- 10. College maintains 'No Vehicle Day' on first of Saturday of every month.

4.0 Statement of Assurance

In our professional judgement, as far as possible and appropriate audit procedures were completed and evidence gathered to support the accuracy of the conclusions reached and contained in this report. The conclusion is based on a comparison of the situations as they existed at the time of the audit with the established criteria. The methodology used included the physical inspection of the campus, review of the relevant documentation and interviews.

GREEN AUDIT WORKING FORMAT

5.0 Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit in Year 2021-'22. The framework also lists the 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 taken some measures to reduce the absolute amount of waste that it produces from the departments, staff offices, Hostels <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 is taking the advantages of waste management provided by local Asansol Municipal Corporation (AMC). Formal MoU be maintained for long-term basis and periodical monitoring.
	Compost, or cause to be composted, all organic waste, green waste and unrecycled cardboard produced in or collected from kitchens, gardens, offices and rooms.	The College has placed different bins for disposal of wastes in different corners of the building inside the campus. Food-wastes from Canteens and Hostel kitchen and the fallen dead leaves from the garden are disposed through AMC. Un-recycled wooden materials, cardboards etc., 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.	Safe disposal methods should be adopted for electrical wastes, printer cartridges etc.
	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.

Control objectives	Control(s)	Audit Observations
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	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 few specific arrangements for events, such as Cultural Events, International and National seminars and Conferences, where significant recyclable wastes are likely to be produced, in order to both minimize the waste produced and maximize what is recycled (reversely
	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 some incentives
D. I	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, liquid or otherwise, through AMC.
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.	Solar Panels are not functioning. For maintaining all other properties College is dependent on energy-purchasing consortium. College maintains 47% of e-notice for academic/ administrative purposes in a month and paper is of 53%.
	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 WB State Electricity Board.
	Look into the possibility of on-site micro-generation of renewable electricity.	The College will have to take initiative to run the SOLAR PANNELS in collaboration with WBSEDCL.
	appliances available, this includes only using energy-saving light bulbs	The College is using LED, CFL as much as feasible.
consumption, especially of energy derived from cossil fuels	through visible reminders, incentives and information to increase awareness.	Misuse of electricity be controlled by turning off the appliances when not required. But regular monitoring system is to be strengthened.

Control objectives	Control(s)	Audit Observations
	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	general following 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 year-wise.
Minimize the use of unsustainable transport	bicycle and pedestrian routes, public transport services and car share schemes to staff and students.	The College is connected through rail, bus services; usually, most of them avail bus 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	No, the College does not promote 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.	Misuse and wastage of water from sources are to be 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 the reduction 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.

Control objectives	Control(s)	Audit Observations
	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	Aqua guards at the strategic locations for the students.
	Install Water recycling mechanism, such as rain water harvesting system	Rainwater harvesting system is existing. Proper drainage system should be maintained for drain off the waste water.
	Ensure that all cleaning products used by the University/Institute staff have a minimal detrimental impact on the environment, i.e., 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. College should develop a proper drainage system for Hostel and canteen waste water.
	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 gardens.
	Dispose the chemical waste generated from the laboratories in a scientific manner	Proper disposal system of toxic and hazardous chemicals by department of Chemistry 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 is maintaining a medicinal plants' garden. Students are aware to handle Biodiversity Register.
	Encourage the faculties and students to plant trees in the garden.	College conducts tree plantation programmes through students and staff members on year-wise in different occasions. Choice-plantation, fruit-plantation like palm, dates etc., may be encouraged depending on the suitability of the region.

Control objectives	Control(s)	Audit Observations
E	Reviews periodically the list of trees planted in the garden periodically	Periodical maintenance of plant be followed.
Ensure that environmental awareness is created	Conduct environmental awareness workshops as a part of the program.	
Ensure that environmental awareness is created	Create awareness of environmental sustainability and takes actions to ensure environmental sustainability. Reduce the rate at which the	College conducts seminars and awareness programmes to ensure environmental sustainability. College is not directly or
	University/Institute contributes to the depletion and degradation of natural resources	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 ENVS paper as per University guidelines for students of all streams are mandatory.
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	New constructions be followed in compliance with green standard in near future.
	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 framed a College Environmental Committee on 2021 and conducted so far one meeting. College may take initiative to form Bio-circle or Eco-circle organization for better environmental management.
	the appropriate representatives of	Environmental Committee is constituted by the representative from all such sections to maintain the campus.

Control objectives	Control(s)	Audit Observations
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 one Coordinator, but no Green Officer as such in the Environmental Committee.
	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 frame the environmental policy. College campus is declared as 'Plastic Free Zone' celebrate 'No Vehicles Day' every first Saturday of the month.
	Ensure that the Environmental Policy is enforced regardless of whether its requirements exceed the mandate of the law	Initiative should be 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 this year 2021-2022.

6.0 Recommendations

Following the audit, several recommendations were made to the management.

Criteria	Recommendations	
Maximize the proportion of waste that is recycled & minimize the quantity of non-recyclable refuse	 The College should go for ISO 9001:2015 Certification. The College should install Effluents Treatment Plant (ETP). Chemical wastes and bio-wastes should be disposed properly. College may go for partnership with Asansol Municipal Corporation in monitoring of disposal of all types of wastes through providing outreach program. Disposal of e-wastes through licensed agents be followed. Composting may be developed. 	
Reduce energy consumption, especially of energy derived from fossil fuels,	 Use energy efficient lighting fully in and around the campus; outdoor lighting be managed and followed in the order of eco-friendly system. Generation of solar electric power from solar panels be functional. More number of Energy and flow meters be installed for monitoring energy and water consumption. 	
Maintenance of Campus and biodiversity	 PUC (Pollution under control) certificate for all the vehicles entering the campus to be made mandatory and to be checked properly. Continuation of maintenance of PBR year-wise for different local areas be practised as an outreach program. Choice-plantation, fruit-plantation, artificial nesting, etc., be followed. 	
Proper cleaning of water storage Tanks	Proper cleaning the water tanks on regular basis considering the health & hygiene of the all stakeholders be followed. Reuse of discharged wastewater through proper treatment be followed.	
Project-based learning on Environment related subjects	1. College should follow and introduce an opportunity 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 '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 report of the year 2021-22 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

Report was prepared based on the 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: 23/08/2022

Place: Asansol Girls' College, Asansol

Signed by College Principal with Seal

Vice-Principal
Asansol Girls' College

Alatan Dr Asamanja Chattoraj

Professor

Department of Animal Science

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