

Elion Technologies & Consulting Pvt Ltd

Certificate

This is to certify that Environment Audit at **Baba Educational Society Institute of Paramedical College of Nursing, Matiyari, Chinhat, Lucknow-226028** was carried out for the year **2022 - 23**.

The campus has supplied essential data and credentials for evaluation. It utilizes solar energy as a renewable energy and has implemented a rainwater harvesting system for recharging the groundwater level of the campus.

Audit Date – 04/07/2024
Valid Up to – 03/07/2025


Audit Officer

Certificate Number
ENV/2024/BESI

DR. ARCHANA CHOUHAN
PRINCIPAL

COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEVA ROAD
CHINHAT, LUCKNOW-226028

6.1.1.00

Elion Technologies & Consulting Pvt Ltd

Certificate

This is to certify that Green Audit at Baba Educational Society Institute of Paramedical College of Nursing, Matiyari, Chinhat, Lucknow-226028 was carried out for the year 2022 - 23.

The campus has submitted the necessary data and credentials for review. The actions and measures taken by the college have been verified. The college's efforts in environmental preservation and sustainability are acknowledged and praised.



Audit Date – 04/07/2024
Valid Up to – 03/07/2025




Audit Officer

Certificate Number
GA/2024/BESI

Elion Technologies & Consulting Pvt Ltd

Certificate

This is to certify that Energy Audit at Baba Educational Society Institute of Paramedical College of Nursing, Matiyari, Chinhat, Lucknow-226028 was carried out for the year 2022 - 23.

The campus administration has initiated measures to incorporate sustainable practices aimed at reducing energy consumption. These efforts include installing of solar power plant, use of BEE star rated appliances and transitioning to LED lights, all aimed at fostering energy efficiency across the campus.

Audit Date – 04/07/2024
Valid Up to – 03/07/2025

Certificate Number
EA/2024/BESI

Audit Officer



DR. ARCHANA CHOUDHAN

PRINCIPAL

COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
EG, MATIYARI DEVIYA ROAD
CHINHAT, LUCKNOW-226028



ENVIRONMENT AUDIT REPORT
FOR
BABA EDUCATION SOCIETY INSTITUTE
OF PARAMEDICAL COLLEGE



Elion Technologies & Consulting Private Limited

307, 3rd Floor, DDA Lal Market, H-Block

Vikas Puri, New Delhi-110018

Contact No: +91 9013923982,+91 9013890526

Web: www.elion.co.in.



Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATYARI DEVA ROAD
CHINHAT, LUCKNOW-228028



Table of Contents

Content	PageNo.
Acknowledgement	3
Site Information	4
Concept	5
Introduction	6
Overview of Campus	7
Audit Objectives	8
Executive Summary	9
Environmental Audit - Questionnaire	10
Recommendations	20
Photographic Evidences	21
Conclusion	31
References	32
Disclaimer	33


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Acknowledgement

Elion Technologies and Consulting Pvt Ltd thanks the management of Baba Educational Society Institute of Paramedical College of Nursing, Lucknow for assigning this important work of Environmental Audit. We appreciate the co-operation to our team for completion of study.

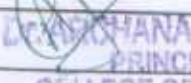
For giving us necessary inputs to carry out this very vital exercise of Environment Audit. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Site Information

Name of College	Baba Educational Society Institute of Paramedical College of Nursing
College Address	56, Deva Road, Matiyari, Chinhat, Lucknow. -226028
Execution Partner	ELION Technologies & Consulting Pvt Ltd
Communication Address	307, 3rd Floor DDA Lal Market H-Block Vikas Puri, New Delhi, 110018
Date of Audit	04 th July 2024
Year of Audit	2022 – 2023
Audit Participants from Site	Mr. RK Vajpayee Dr. Archana Chouhan Mrs. Smita Dr. NitinSoni Dr. Hemendra Pal Singh Dr. Manita Acharya Mr. Ankur Sharma Ms. Jyoti Shukla Mrs. Sanjana Ojha Mr. Manoj Mr. Sarvesh Chandra Mr. Ranjeet Mr. Darmender
Total College Area	2.54 Acres
Total Green Area	1.09 Acres.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Concept

The term 'Environmental audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations 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, documented, periodic 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 European Commission, in its proposed regulation on environmental auditing, has also adopted the ICC definition of Environmental Audit.


ANJANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Introduction

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.

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. 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 / or rural situations.


L. ROHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Overview of Campus

Baba Educational Society is registered under Societies Registration Act xxi of 1860 and also under disabled welfare department. It was established in July 1999 with the main objectives of providing education, medical and social services to the deserving population of the society.

Paramedical staff plays a very important role in helping the doctors in making accurate diagnosis and treatment of the patients. Paramedics along with the doctors are responsible for the proper functioning of any hospital. The field of Paramedical Sciences includes Physiotherapy, Pharmacy, Nursing, Optometry O.T. technician etc.

The hospital is named 'BABA HOSPITAL' after the name of SHIRDI SAI BABA so that the blessings of Sai Baba would always be with the hospital and to remind us to follow the path of his teachings.

List of courses offered by the institute:

- M.Sc. Nursing (2 years)
- B.Sc. Nursing (4 years)
- General Nursing and Midwifery (GNM) (3 years)
- Auxiliary nurse midwife (ANM) (2 year)


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Audit Objectives

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.
- Reduction in resource use.
- 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 university profile.
- Developing an environmental ethic and value systems in young people.



DARSHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Executive 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.


DR. ANSHU CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Environmental Audit

The areas of eco/environmental/green auditing to be followed/practiced by participating institutions:

- I. Waste Minimization and Recycling
- II. Greening
- III. Energy Conservation
- IV. Water Conservation
- V. Clean Air
- VI. Animal Welfare
- VII. Environmental Legislative
- VIII. General Practices


Is any Environmental Audit conducted earlier?
Yes (2021-2022)

What is the total permanent population of the Campus?

	Male	Female	Total
Students	00	637	637
Teachers	05	27	32
Non-Teaching Staff	42	08	50
Sub Total	47	672	719
Approximate Number of Visitors (Per day)			30
What is the total number of working days of your campus in a year?			280

Where is the campus located?

The campus is Located at 56, Deva Road, Matiyari, Chinhat, Lucknow, U.P.-226028


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




Which of the following are available in your campus?

1	Garden area	Yes
2	Playground	Yes
3	Kitchen	Yes
4	Toilets	Yes
5	Garbage Or Waste Store Yard	Yes
6	Laboratory	Yes
7	Canteen	Yes
8	Hostel Facility (Numbers)	Yes
9	Guest House	Yes

Which of the following are found near your campus?

1	Municipal dump yard	No
2	Garbage heap	No
3	Public convenience	Yes
4	Sewer line	Yes
5	Stagnant water	No
6	Open drainage	No
7	Industry – (Mention the type)	No
8	Bus / Railway station	Yes
9	Market / Shopping complex / Public halls	Yes


 ARCHANA CHOCHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



I - WASTE MINIMIZATION AND RECYCLING


1.	Does your institute generate any waste? If so, what are they?	Yes. Paper and residential (Solid and Water) waste.
2.	What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	150 Kg per day/ 4500 Kg per Month.
3.	How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others(specify)	Paper wastes are sending to scrap. Solid waste materials are disposed by Nagar Nigam Lucknow. Water wastes are disposed through sewer line.
4.	Do you use recycled paper in institute?	No
5.	Do you use reused paper in institute?	Yes
6.	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Periodically, our Nursing students are conducting health education program in community areas with posters, pamphlet, Role Play, Drama, etc. to spread the message of recycling.
7.	Can you achieve zero garbage in your institute? If yes, how?	It is under progress. Institute takes initiative to reduce the maximum paper waste by printing double side, using the waste paper for another print, doing correction in computer & taking print after correction, communication through social medias and software, etc. Also, we conduct program on prevention of solid and water waste. But Complete Zero garbage Not yet Achieved.

(Signature)
 DR. SHANU CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 56, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



II – GREENING THE CAMPUS

1.	Is there a garden in your campus?	Yes
2.	Do students spend time in the garden?	Yes
3.	Total number of Plants in Campus	370 trees and more than 9050 plants.
4.	Provide some names of trees and plants in the campus.	Ashok Pendula, Malti Bel, Rubber Plant, Ficusbenjamina, Plam Tree, Water Plam, Banana Tree, Gudhal, karutantra tree, Asparagus plant, Duranta plant, Rose, Asparagus plant.
5.	Is the university campus have any Horticulture Department?	No
	If yes, number of Staff working in Horticulture Department?	NA
6.	Number of Tree Plantation Drives organized by institute per annum.(If Any)	02 (World Environmental Day and Earth day)
7.	Number of Trees Planted in Last year.	300
	Survival Rate	92%
8.	Plant Distribution Program for Students and Community	Yes. During the day of World Environmental Day celebration, we do Plant Distribution Program for Students and Community. Also whenever we are celebrating any days, we always provide plants to our guest, in the replacement of Bouquets.
9.	Plant Ownership Program	NA


 DR. ANSHU CHOUHAN
 PRINCIPAL,
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



III – ENERGY

<p>1. List down ways that you use energy in your campus. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.</p>	<ol style="list-style-type: none"> 1. Electricity Supply from Distribution board. 2. Chemical energy <ul style="list-style-type: none"> • Diesel • LPG 3. Turn off lights, Fan, AC when not in use 4. Natural energy like solar energy must be used. 5. LPG should be used with keeping minimum level. 6. Waste water can be reused for other purpose like gardening
<p>2. Are there any energy saving methods, equipments, techniques employed in your campus? If yes, please specify. If no, suggest some</p>	<p>Yes.</p> <ol style="list-style-type: none"> 1. Electricity usage is limited. 2. Lights, Fan, AC, etc are switched off when not in use. 3. CSF/ LED lights are installed in many areas. 4. Natural energy like solar energy is used as much as possible. 5. We uses standby mode in computers. 6. We reduce water wastage by using minimum water. 7. Waste water is reused for other purpose like gardening. 8. Fuel usage is limited. 9. Paper wastage is reduced by printing double side and reusing the old paper. 10. LPG is used with keeping minimum level.

DR ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEVA ROAD
 CHINHAT, LUCKNOW-226028



3.	Give an estimate of number of lights installed in your campus along with numbers?	270
4.	Are any alternative energy sources employed/ installed in your campus? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.	Yes, We uses the solar energy for all street light with automatic off/on and hot water supply given to students 24X 7 by solar geyser water tank.
5.	Do you run "switch off" drills at campus?	Yes
6.	Are your computers and other equipment's put-on power-saving mode?	Yes/ Auto saving mode
7.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	Yes , 6 hours per day

IV - WATER CONSERVATION

1.	List all the uses of water in your campus?	<ol style="list-style-type: none"> 1. Drinking 2. Washing cloth 3. Bathing and Flushing 4. Cooking 5. Gardening
2.	How does your campus store water? (mention tanks with capacity) Are there any water saving techniques followed in your campus?	Water source is bore well. Institute have 4 Motor Pump (Vauna, Hindustan). Water is pumped from underground by motor pump to 11 water tanks, then distributed through pipeline to all buildings. Also Institute has 6 electro solar geyser water tank.
3.	If there is water wastage, specify why and how can the wastage be prevented/ stopped?	<p>There is no any Water leakage in any pipes, bathrooms, washbasin, etc. if any leakage occurs it will be repaired immediately.</p> <p>Maximum Waste water is used for gardening.</p>

Dr. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEVA ROAD
 CHINHAT, LUCKNOW-226028



4.	Locate the point of entry of water and point of exit of waste water in your campus. Entry- Exit-	1. Underground tube 2. Main gate drain line to Sewer line
5.	Write down few ways that could reduce the amount of water used in your campus?	<ul style="list-style-type: none"> All toilets are having dual flushing system. Signages are available in washroom for water conservation. Rejected water from AC and waste water are used for gardening Regular supervision for water leakage
6.	Record water use from the campus water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many liters of water have been used.	NA
7.	Does your campus harvest rain water? (Please explain the method and uses)	Yes
8.	Is there any water recycling System.	No

V - CLEAN AIR

1.	Are the Rooms in Campus are Well Ventilated?											
2.	Number of windows per room (aggregate value to be provided)	3:1										
3.	What is the ownership of the vehicles used by your institute? (Please Tick ✓ only one)	Yes <input type="checkbox"/> Operator-owned vehicles <input checked="" type="checkbox"/> Institute-owned vehicles <input type="checkbox"/> A combination of campus-owned and operator-owned vehicles										
4.	Provide details of institute-owned motorized vehicles?	<table border="1"> <thead> <tr> <th>Buses</th> <th>Cars</th> <th>Vans</th> <th>Other</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>4</td> <td>0</td> <td>7</td> </tr> </tbody> </table>	Buses	Cars	Vans	Other	Total	1	2	4	0	7
Buses	Cars	Vans	Other	Total								
1	2	4	0	7								

Dr. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING



No. of vehicles more than five years old	-	-	-	-	-
No. of Air conditioned vehicles	1	2	-	1	4
PUC done	✓	✓	-	✓	-
5. Specify the type of fuel used by your institute's vehicles:	Buses	Cars	Vans	Other	
Diesel	✓	✓	-	-	
Petrol	-	-	-	✓	
CNG	-	-	-	-	
LPG	-	-	-	-	
Electric	-	-	-	-	
6. Air Quality Monitoring Program (If Any)	Green Campus, plantation and program celebration like World Environmental Day, Earth Day, etc.				
7. Students suffer from respiratory ailments? (If Any)	No				
8. Details of Diesel/Gas Generator. (Rating & Make)	Kirloskar DG, and Generator -3				

VI – ANIMAL WELFARE

1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.) (if any)	There is no wild and domestic animal found in the campus. But, variety of birds and squirrels can be found which are not harmful to humans.
2. How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	NA
3. Does your campus have a Biodiversity Programme or a KARUNA CLUB?	NA
1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.) (if any)	NA


(Signature)
SHANU CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



2.	How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	NA
3.	Does your campus have a Biodiversity Programme or a KARUNA CLUB?	NA

VII - ENVIRONMENTAL LEGISLATIVE COMPLIANCE


1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your campus have any rules to protect the environment? List possible rules you could include.	Yes 1. No Smoking and Tobacco 2. No Plastic 3. Save Water 4. Save Energy 5. No splitting
3.	Does Environmental Ambient Air Quality Monitoring conducted by the Campus?	Yes
4.	Does Environmental Water and Wastewater Quality monitoring conducted by the Campus?	Yes
5.	Does stack monitoring of DG sets conducted by the Campus?	Yes
6.	Is any warning notice, letter issued by state government bodies?	NA
7.	Does any Hazardous waste generated by the Campus? If yes explain its category and disposal method.	NA
8.	Dose any Bio medical waste generated by the Campus? If yes explain its category and disposal method.	NA


 DR. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 68, MATIYARI BEWA ROAD
 CHINHAT, LUCKNOW-226028



VIII – GENERAL


1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your campus have any rules to protect the environment? List possible rules you could include.	Yes 1. No Smoking and Tobacco 2. No Plastic 3. Save Water 4. Save Energy 5. No splitting
3.	What is the housekeeping schedule of garden and common areas in your campus?	Yes
4.	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes. Regular awareness program on environmental cleanliness is conducted to students and faculty.
5.	Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. celebrated in your Campus?	Yes. We celebrates World Environment Day, and Earth Day, etc.
6.	Does Campus participated in National and Local Environmental Protection Movement?	No
7.	Does Campus has any Recognition/certification for environment friendliness?	No
8.	Does Campus using renewable energy?	No
9.	Does Institution conducts a green/environmental audit of its campus?	Yes
10.	Has the institution been audited/ accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	NAAC


Dr. ARSHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 58, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



Recommendations


- Environment Policy to be adopted by the Campus.
- Equipments when not in use shall be switched off and should not run in standby modes or ideal.
- Installation of water meter at bore well for monitoring of daily water consumption.
- Indoor Air quality monitoring shall be carried out.
- Awareness programmes shall be carried out for promoting environmental awareness in nearby areas.


Dr. ABISHAKA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Photographic Evidences





Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEVA ROAD
CHINHAT, LUCKNOW-226028




ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWAR ROAD
CHINHAT, LUCKNOW-226028




Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW Page 1248

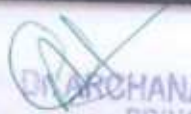







ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028





DIVYARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
59, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Conclusion

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. Overall, a large are of 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 university campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. There are no major observations but recommendation is made in this report which would further strengthen the goal to achieve 100% environment friendly campus.



DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



References

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Water [Prevention & Control of Pollution] Cess Act-1977 (Amended 2003) and Rules- 1978
- The Air [Prevention & Control of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981)
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices

End of Report


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Elion Technologies & Consulting Private Limited

Registered Office:
307, 3rd Floor, DDA Lal Market, H-Block
Vikas Puri, New Delhi, 110018
Phone No: 011-28541888, 9013890526
Email: support@elion.co.in
Website: www.elion.co.in


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
MATIYARI, CHINHAT, LUCKNOW-226028

DISCLAIMER

All information contained in this report is based on the data available and observations made during the audit. All recommendations made in this audit report should be duly evaluated by the management before implementation.

No warranty, guarantee, or representation, either expressed or implied, is made as to the correctness or sufficiency of any representation contained herein. This report may not address every possible loss potential, violation of any laws, rules or regulations, or exception to good practices and procedures. The absence of comment, suggestion, or recommendation does not mean the property or operation(s) is in compliance with all applicable laws, rules, or regulations, is engaging in good practices and procedures, or is without loss potential. No responsibility is assumed for the discovery and/or elimination of hazards that could cause accidents or damage at any facility that is subject to this report.



ENERGY AUDIT REPORT
FOR
BABA EDUCATION SOCIETY INSTITUTE
OF PARAMEDICAL COLLEGE



Elion Technologies & Consulting Private Limited

307, 3rd Floor, DDA Lal Market, H-Block

Vikas Puri, New Delhi-110018

Contact No: +91 9013923982, +91 9013890526

Web: www.elion.co.in.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Table of Contents

Content	Page No.
Acknowledgement	3
Site Information	4
Executive Summary	5
Chapter-01 Introduction	6
Chapter-02 Energy Consumption & Analysis	8
Chapter-03 Lighting System	9
Chapter-04 Air Conditioning	10
Chapter-05 Pumps & Motors	11
Conclusion	12
Disclaimer	13


SHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Acknowledgement

Elion Technologies and Consulting Pvt Ltd places on record it's thanks to Baba Educational Society Institute of Paramedical College of Nursing, Lucknow for entrusting the task of conducting energy audit study.


We acknowledge with gratitude the whole hearted support and cooperation extended by all team members while carrying out the study.


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Site Information

Name of College	Baba Educational Society Institute of Paramedical College of Nursing
College Address	56, Deva Road, Matiyari, Chinhat, Lucknow.-226028
Execution Partner	ELION Technologies & Consulting Pvt Ltd
Communication Address	307, 3rd Floor DDA Lal Market H-Block Vikas Puri, New Delhi, 110018
Date of Audit	04 th July 2024
Year of Audit	2022 – 2023
Audit Participants from Site	Mr. RK Vajpayee Dr. Archana Chouhan Mrs. Smita Dr. NitinSoni Dr. Hemendra Pal Singh Dr. Manita Acharya Mr. Ankur Sharma Ms. Jyoti Shukla Mrs. Sanjana Ojha Mr. Manoj Mr. Sarvesh Chandra Mr. Ranjeet Mr. Darmender
Total College Area	2.54 Acres
Total Green Area	1.09 Acres.


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Executive Summary

Baba Educational Society is registered under Societies Registration Act xxi of 1860 and also under disabled welfare department. It was established in July 1999 with the main objectives of providing education, medical and social services to the deserving population of the society.

Paramedical staff plays a very important role in helping the doctors in making accurate diagnosis and treatment of the patients. Paramedics along with the doctors are responsible for the proper functioning of any hospital. The field of Paramedical Sciences includes Physiotherapy, Pharmacy, Nursing, Optometry O.T. technician etc.

The hospital is named 'BABA HOSPITAL' after the name of SHIRDI SAI BABA so that the blessings of Sai Baba would always be with the hospital and to remind us to follow the path of his teachings.

List of courses offered by the institute:

- M.Sc. Nursing (2 years)
- B.Sc. Nursing (4 years)
- General Nursing and Midwifery (GNM) (3 years)
- Auxiliary nurse midwife (ANM) (2 year)

Electricity is supplied by Local Electrical Distribution Company at and is stepped down to 415V using a transformer of rating 63KVA.

The energy audit included detailed data collection, analysis of data and identification of specific energy saving proposals.


ARCHANA CHOUHAT
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Chapter 01: Introduction

M/S Baba educational society institute, Lucknow evinced interest in availing the services of Elion Technologies and Consulting Pvt Ltd for conducting energy audit of their premise.

Elion Technologies and Consulting Pvt Ltd team conducted the Detail Energy audit on 04th July 2024.

This report is on the energy audit carried out M/S Baba educational society institute, Lucknow. The detailed energy audit comprised of the following activities:

- Data collection of power consuming equipment's.
- A brief session on energy management was conducted to seek more inputs from the personnel engaged in operation and maintenance of electro mechanical services.
- Analysis of collected data.
- Discussion with the officials on the identified proposals.
- Discussion and reporting of the findings of energy audit with the Engineers and management staff.

All the identified energy savings proposals have been discussed with the executives concerned before finalizing the projects.

The contents of the report are based solely on the data provided by IIHMR, Bangalore officials during the energy audit.

The management should implement the suggestions made in the report after verifying requisite safety aspects.

Methodology for Energy Audit:

The following is a list of general procedure and information undertaken during the energy audit:


- General information of the site.
- Baseline energy description.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



- Past energy consumption bills which includes electricity bills.
- On site data collection
- Energy analysis of different sectors.
- Recommendation of energy conservation measures.

The primary goal of the energy audit was to identify sources and areas of potential energy savings and cost saving throughout the campus by measures of optimization, replacement, retrofitting, and on the other hand, to also provide recommendations on operational and maintenance practices improvements.


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Chapter 02: Energy Consumption Details

Following table below show the electrical utilities installed in the campus:

Rating of Transformer (in KVA)	63 KVA
Year of installation of the Transformer	2020-21
Rating of DG Set (in KVA)	Kirloskar DG, Generator (45 KVA, 30 KVA, 12 KVA)
Rating of Capacitor Bank (if present)	NA
Capacity of Solar Power Plant (if installed)	50 KVA

The main areas of energy consumption as observed during the audit are as follows:

- Air Conditioners
- Lighting
- Fans
- Motors & Pumps
- Desktops & Printers

The main sources of energy to meet the required consumptions are as follows:

- Electricity supply from Power Distribution Company.
- Backup power from DG Set.


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Chapter 03: Lighting System

Following is the summary of lights installed at various locations of the college campus:

Type of lights (LED/CFL/Conventional Bulb/Tube Light)	Location	Rating	Quantity	Number of Hours being turned on
LED Bulb	Academic Block	80 W	05	08
		12 W	13	05
	Administrative Block	12 W	02	05
	Hostel/ Mess	09 W	127	16
		12 W	04	16
Simulation Lab	09 W	04	18	
LED Tube Light	Academic Block	20 W	39	06
	Administrative Block	20 W	26	16
	Hostel/Mess	20 W	42	16
Tube Light	Academic Block	40 W	39	08
	Administrative Block	40 W	20	12
	Hostel/ Mess	40 W	93	16
Sodium Light	Campus	100 W	06	12
Concealed Light	Simulation Lab	12 W	134	06
	Administrative Block	12 W	82	08

Observation:

- Most of the lights used in the campus are LEDs. Campus has replaced all the conventional lights with energy efficient LED lights which is a good practice.
- Sticker to "SWITCH OFF LIGHT" and "SAVE ENERGY" are displayed in the rooms.

Recommendation:

- Regular cleaning of light fixtures to be done to get maximum lux level.

Dr. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 65, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226023



Chapter 04: Air Conditioning

Split, Ductable/VRV and Cassette Air Conditioners are used in facility for air conditioning. Following is the list of ACs present in the campus:

Type of AC (Windows/Split/Package and Location)	Capacity in Ton	Whether any star rating available	Set Temperature	Running Hours	Whether AC performance is satisfactory (Yes/No)
Split AC Director Office	2.5	05	22	NA	YES
Split AC Principal Office	1.5	05	24	NA	YES

Observation:

- All air conditioners are found to be functioning properly and well maintained.
- Regular servicing and maintenance of air conditioners are done with proper cleaning.

Recommendation:

- All doors to be kept closed while using the air conditioners and regular annual service of AC's should be carried out.
- Set Temperature of Air Conditioner shall be maintained at 26°C.
- A reduction in 1°C set point temperature, the energy cost comes down by 5%. By carefully selecting the seasonal temperature in different areas as per requirement considerable saving on account of power consumption can be achieved.
- Whenever Air Conditioners are replaced in future, BEE 5 star rated air conditioners shall be considered which are energy efficient.
- Installation of AC energy savers can be considered for air conditioners having longer running hours.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226023



Chapter 05: Pumps and Motors

Observation:

There are four water pumps installed across the campus. These pumps are strategically placed to ensure efficient water distribution and management throughout the Campus. All pumps and motors are functioning properly and well maintained.

Recommendation:

Proper maintenance and upkeep of pumps and motors to be done.


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
88, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




Conclusion

The energy audit performed at Baba Education Society Institute showcased commendable efforts towards sustainability within the college. The replacement of conventional lights with energy-efficient LED alternatives marks a significant stride in reducing energy consumption.

Despite these advancements, there remains untapped potential for further enhancing energy efficiency. The audit report likely contains specific recommendations aimed at maximizing sustainability efforts. Implementing these suggestions could significantly bolster the college's energy-saving initiatives, continuing the positive trajectory towards a more environmentally conscious campus.

End of Report


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Elion Technologies & Consulting Private Limited

Registered Office:
307, 3rd Floor, DDA Lal Market, H-Block
Vikas Puri, New Delhi-110018
Phone No: 011-28541888, 9013890526
Email: support@elion.co.in
Website: www.elion.co.in


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
50, MATIYARI DEVA ROAD
CHINHAT, LUCKNOW-226028

DISCLAIMER

All information contained in this report is based on the data available and observations made during the audit. All recommendations made in this audit report should be duly evaluated by the management before implementation.

Elion Technologies and Consulting is not liable for any damages incurred by the organization through implementation of the energy saving proposals either to it or to any third party getting impacted by the implementation of this report.

No warranty, guarantee, or representation, either expressed or implied, is made as to the correctness or sufficiency of any representation contained herein. This report may not address every possible loss potential, violation of any laws, rules or regulations, or exception to good practices and procedures. The absence of comment, suggestion, or recommendation does not mean the property or operation(s) is in compliance with all applicable laws, rules, or regulations, is engaging in good practices and procedures, or is without loss potential. No responsibility is assumed for the discovery and/or elimination of hazards that could cause accidents or damage at any facility that is subject to this report.



GREEN AUDIT REPORT
FOR
BABA EDUCATION SOCIETY INSTITUTE
OF PARAMEDICAL COLLEGE



Elion Technologies & Consulting Private Limited

307, 3rd Floor, DDA Lal Market, H-Block

Vikas Puri, New Delhi-110018

Contact No: +91 9013923982, +91 9013890526

Web: www.elion.co.in.



DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Table of Contents

Content	Page No.
Acknowledgement	3
Site Information	4
Overview of Institute	5
Introduction	6
Environment Setting	7
Green Audit	9
Recommendations/Suggestions	32
Annexure 1 – Indoor Gardening Details	34
Disclaimer	38


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Acknowledgment

Elion Technologies and Consulting Pvt Ltd places on record it's thanks to Baba Educational Society Institute of Paramedical College of Nursing, Lucknow for entrusting the task of conducting green audit study.

We acknowledge with gratitude the whole hearted support and cooperation extended by all team members while carrying out the study.


Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Site Information

Name of College	Baba Educational Society Institute of Paramedical College of Nursing
College Address	56, Deva Road, Matiyari, Chinhat, Lucknow.-226028
Execution Partner	ELION Technologies & Consulting Pvt Ltd
Communication Address	307, 3rd Floor DDA Lal Market H-Block Vikas Puri, New Delhi, 110018
Date of Audit	04 th July 2024
Year of Audit	2022 – 2023
Audit Participants from Site	Mr. RK Vajpayee Dr. Archana Chouhan Mrs. Smita Dr. NitinSoni Dr. Hemendra Pal Singh Dr. Manita Acharya Mr. Ankur Sharma Ms. Jyoti Shukla Mrs. Sanjana Ojha Mr. Manoj Mr. Sarvesh Chandra Mr. Ranjeet Mr. Darmender
Total College Area	2.54 Acres
Total Green Area	1.09 Acres.


 ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 56, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



Overview of Institute


Baba Educational Society is registered under Societies Registration Act xxi of 1860 and also under disabled welfare department. It was established in July 1999 with the main objectives of providing education, medical and social services to the deserving population of the society.

Paramedical staff plays a very important role in helping the doctors in making accurate diagnosis and treatment of the patients. Paramedics along with the doctors are responsible for the proper functioning of any hospital. The field of Paramedical Sciences includes Physiotherapy, Pharmacy, Nursing, Optometry O.T. technician etc.

The hospital is named 'BABA HOSPITAL' after the name of SHIRDI SAI BABA so that the blessings of Sai Baba would always be with the hospital and to remind us to follow the path of his teachings.

List of courses offered by the institute:

- M.Sc. Nursing (2 years)
- B.Sc. Nursing (4 years)
- General Nursing and Midwifery (GNM) (3 years)
- Auxiliary nurse midwife (ANM) (2 year)


Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226029



Introduction


Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyse environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students' better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. 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.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO₂ from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

Advantages of Green Audit:

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation. Some main advantages of green Audit are:

- It helps to shield the environment.
- Minimizing the waste and managing the cost.
- Authenticate conformity with the implemented laws.
- Minimizing the energy consumptions and focus on green and clean energy.
- Ambient Environmental Condition.
- Awareness and Training on Sustainability for Students.
- Awareness about environmental guidelines and duties.


Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
66, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Environment Setting

The land use around the campus is mix of commercial and residential use. Schools, Restaurants, Commercial complexes, restaurants, Industries etc are present around the campus.



Baba Educational Society Institute of Paramedical College of Nursing


ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Location of Baba Educational Society Institute of Paramedical College of Nursing


DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Green Audit

For Green Audit following 13 major areas (including their subsections) were covered and compliance/ initiatives under these areas were verified/ validated.


- a) Good Daylight Design and Ventilation
- b) Water Efficiency
- c) Wastewater Management
- d) Indoor Air Quality
- e) Energy Efficiency
- f) On-site Energy Generation
- g) Temperature and Acoustic Control
- h) Paper Waste Management
- i) E-Waste Management
- j) Canteen and Solid Waste Management
- k) Universal Access and Efficient Operation and Maintenance of Building
- l) Green Belt
- m) Green Programs (Green initiatives)

3.1 Good Daylight Design and Ventilation

- a) Corridors are wide with good ceiling height. All the corridors receive good daylight.
- b) Classrooms and Library have large windows. Adequate daylight is received through the windows during daytime.
- c) Classroom walls, corridors and other areas are white-washed, this enhances the daylight received.
- d) Curtains are provided on some of the windows to avoid glare.
- e) Stair cases receive daylight through windows provided at various levels.
- f) Laboratories are provided with exhaust fans to disperse heat, fumes and odours







DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEVA ROAD
CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEVIYA ROAD
CHINHAT, LUCKNOW-226028




DR. ARSHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
58, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
65, MATIYARI, CHINHAT ROAD
CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



3.2 Water Efficiency:

- a) Groundwater is the source of water supply in the campus.
- b) Approximately per day 6 hours Groundwater (Bore well) is running. Every day, above 10000 Lit. of water has been used. Institute have 4 Motor Pump (Varuna, Hindustan). Total water tank is 11. Also Institute has 6 electra solar geyser water tank.
- c) Groundwater is stored in an underground tank:

Location	Tank Capacity	Type (Underground/Overhead)
Water Tank Hostel Building - 5	1000 Lit. each	Over head
Simulation Lab Building -2	1000 Lit. each	Over head
Admin. Building- 2	500 Lit. each	Over head
Academic Block -2	500 Lit. each	Over head
Geyser Water Tank Hostel Building- 6	500 Lit. each	Over head

- d) RO filter with water dispensers are placed at every floor.
- e) Normally mops are used for floor cleaning and hose is used for cleaning once a week.
- f) For drinking water 8 Water Cooler are available in Institution. Water Cooler install areas are:

Location	No.
Hostel Building	2
Simulation Lab Building	1
Admin. Building	1
Academic Block	3
Canteen	1

- g) Sensor based water taps are provided in the washrooms.
- h) Dual flushing system is provided in the washrooms.
- i) Signages are provided in washrooms emphasizing water conservation.
- j) Water from air conditioning unit and reject water from water purifiers is used for watering plants and trees in the garden.
- k) Rain water harvesting system is available and rainwater is stored in a tank and reused further as and when required.

Dr. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEVA ROAD
CHINHAT, LUCKNOW-226028









3.3 Wastewater Management:

- a) Water treatment plant or water recycling plant is not available in the campus.

3.4 Indoor Air Quality;

Indoor Air Quality (IAQ) refers to the air quality within and around buildings and structures, as it relates to the health and comfort of building occupants. Some common indoor pollutant are listed as below:

- Molds and other allergens – This may arise from water seeping into the building envelope or skin, plumbing leaks, condensation due to improper ventilation, or from ground moisture penetrating a building part.
- Carbon monoxide – Sources of carbon monoxide are incomplete combustion of fossil fuels.
- Volatile organic compounds (VOCs) – VOCs are emitted by paints and lacquers, paint strippers, pesticides, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions



- etc.
- Carbon dioxide – Due to human respiration
- Particulate matter – Due to construction and maintenance activities


Major observations under indoor air quality are as below:

- a) Casette, Ductable and Split Air Conditioners are used in the classrooms, labs, seminar hall, offices etc.

Type Windows/Split/Package and Location	Capacity in Ton	Whether any star rating available	Set temperature
Split AC Director office	2.5	5	22
Split AC Principal office	1.5	5	24

- b) Indoor plants are present in the campus. Indoor plants can be plotted not only for the aesthetic appearance but also for health benefits. Refer Annexure 1 for details.
- c) Indoor air quality tests are not carried. It is recommended to get air quality tested once a year.
- d) Exhaust fans are provided in washrooms to dissipate heat and odour.




DR. AREHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
55, MATIYARI DEWA ROAD
CHINHATA, LUCKNOW-226028

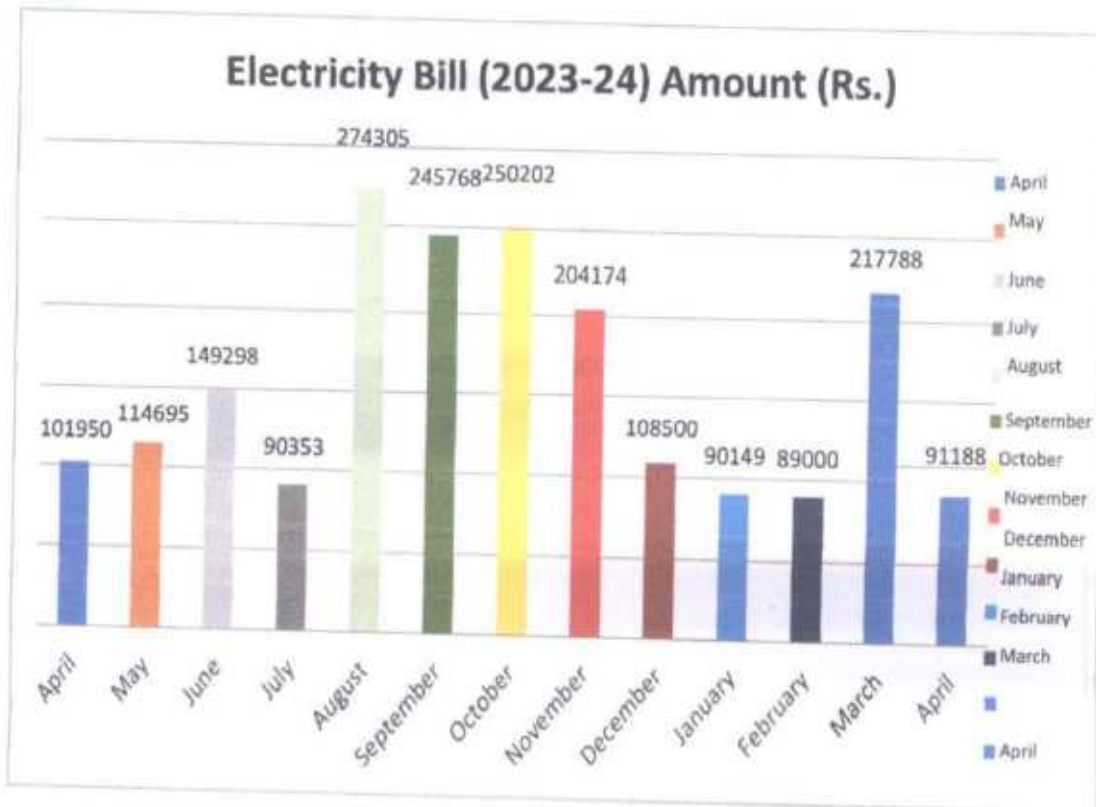


3.5 Energy Efficiency:

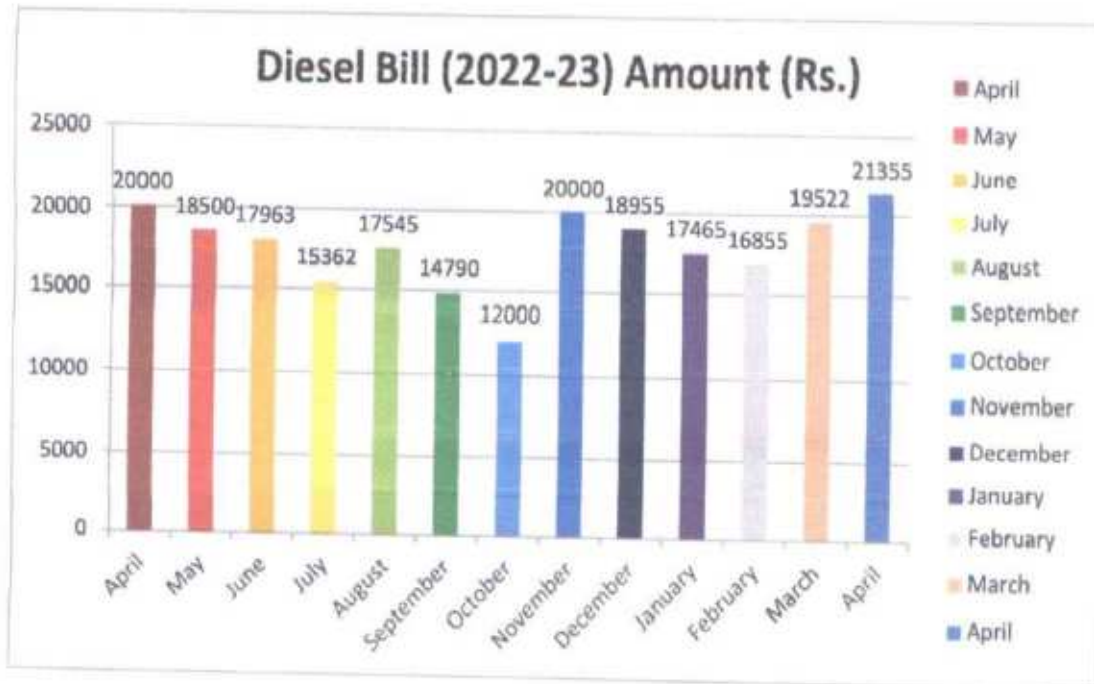
Power is supplied by Local Electrical Distribution Company. The major electricity consuming equipment installed in the campus are Air Conditioners, Water Coolers, Lighting, Desktop, Printers etc.

It was observed that:

- a) LED lights are installed in the entire campus.
- b) Campus has air conditioners which are in good working condition.




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
86, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW



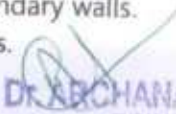
3.6 On Site Energy Generation (usage of LPG/ Natural Gas):

- a) LPG is used for cooking in canteen/pantry.
- b) Back Up diesel generator of capacity 82.5KVA is available in the campus.

DG Set name-	Capacity	Make	Year of Manufacture
Kirloskar DG,Generator	45 Kva	kirloskar	2010
	30 Kva		2016
	12 Kva		2003

3.7 Temperature and Acoustic Control

- a) The campus has done tree plantation all around the boundary walls.
- b) There is no noise pollution inside and around the campus.


DR. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 56, MATIYARI DENVA ROAD
 CHINHAT, LUCKNOW-226028




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEVA ROAD, LUCKNOW-226028





3.8 Paper Waste Management:

Being academic institution, waste paper is the main solid waste generated in the premises. The College has taken steps to minimize and avoid paper usage. It was observed that:

- Prints and photocopies are taken on both sides of the pages to avoid excess paper usage. Rather than photocopy, digitalization (scanning) is practiced.
- Internal notices and communications are through E-mail/Whatsapp.
- Faculty and administration staff uses old papers and envelops for internal usages as rough work, file markers, page separators etc.
- Old papers and answer sheets are kept in a separate storage room and disposed off as per college policy.



3.9 E-Waste Management:

- E-waste is disposed off or discarded after approval from committee and is disposed by certified vendors.

3.10 Solid Waste Management:

It was observed that:

- Wet waste and dry waste segregation is practiced in the premises. Separate bins are provided for wet biodegradable and dry recyclable waste.
- Compost pit is also available for composting of dry waste such as leaves, flowers etc.
- The daily waste is collected and disposed off through contractual vendors.
- Biodegradable waste is mainly generated in canteen.




3.11 Universal Access and Efficient Operation and Maintenance of Building:

It was observed that:

- a) College is easily accessible. Staircase and ramps are provided for staff and students.
- b) Since the access and staircases are wide and uncluttered, it is possible to have a safe evacuation during emergency.
- c) Fire extinguishers and Fire hose reel are provided for emergency. They are inspected and serviced by fire protection Service Company annually.
- d) Directional exit signages and floor markings are present on every floor of the campus.
- e) Regular Fire Safety Trainings is given to staff and students on annual basis.




DR. ARCHANA CHOUHAN
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW






DR. ARCHANA CHOUHARY
PRINCIPAL
COLLEGE OF NURSING
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



3.12 Green belt/ Landscaping:

- a) Large trees and plants are planted in the premises. Plantation also helps maintaining lower temperatures of the area.

3.13 Green Initiatives:

College is regularly celebrating important days such as Environment Day, Yoga Day, Earth Day etc as well as other cultural programs. Solar Power Plant are available in the Campus.





ARCHANA CHOUDHARY
PRINCIPAL

COLLEGE OF NURSING

BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Recommendations/Suggestions

For Improving Energy Consumption:

- a) Every classroom and lab with central switch board can have a diagram linking location of a tube light, fan etc. with corresponding switch. This will ensure that correct fitting is switched on/ off and can save time & unnecessary operation.
- b) Installation of automatic lights with sensors can be considered.
- c) Standard Operation Procedures (SOPs) should be prepared and followed for green purchasing. Equipment with star rating, using eco-friendly materials; with safe disposal policy to be preferred. Policy of returning equipment at the end of life span to the supplier to be preferred.
- d) For purchasing new electronic appliances, star rating provided by Bureau of Energy Efficiency (BEE) should be considered. The equipment which has maximum star ratings could be purchased, which will consume less energy, ensure environmental sustainability and also operate at low cost.
- e) Usage of light reflectors is recommended as the reflectors can spread light to relatively large areas.
- f) If possible, computers should be switched off from main power connections.
- g) Notices/signages can be put up/displayed near switches and on notice boards, informing students and staff to switch off all electricals when not in use.
- h) Control sensors can help to reduce consumption by automatically dimming lights when people are not around, and keeping blinds open to use natural light & reduce energy consumption.
- i) Raise awareness:
 - Encourage students to help in monitoring energy consumption & implement corrective actions
 - Integrate energy education into classroom learning.

Water Conservation:

- a) Provide information on water usage and savings to students/ staff through notices, screen savers in computer labs.
- b) Dry sweep or use a sponge broom when possible, instead of using a hose to clean floors, sidewalks, or other hard surfaces.
- c) Minimize/ reduce water usage by installing water saving faucets such as pressmatic taps, tap aerators, jet sprays etc.
- d) Installation of waterless urinals can be considered to reduce water consumption.
- e) Water balance diagram can be prepared to quantify the water consumption by installing water meters at key points. Based on data gathered, appropriate measures can be taken to reduce the water consumption.




Paper and other Solid Waste Reduction:

- a) Inventories of all solid waste generated in the premises must be maintained.
- b) Enhance recycling. This can be done by creating a group where students can recycle books, personal clothes and other material to needy students. This can be an initiative under green program.
- c) Standard Operating Procedures (SOP) for Solid and E-waste management and for recycling of waste should be prepared & practiced. The SOP's may include collection, segregation and reuse of different types of wastes, if any (e.g. biodegradable waste for composting). This will help in safe disposal of waste to recycle agencies.
- d) Training as well as awareness programs should be organized on segregation of biodegradable waste and recycling of waste. Efforts should be taken to inform students about recycling options and signs should be posted on appropriate bins indicating what could be dumped in each bin.
- e) The college can introduce online app, which can be useful for conducting internal exams, assignment/ reports submission. This system can also be used for displaying important notices, timetables.
- f) Paper usage shall be monitored to understand the impact of digitization in the facility.

Others:

- a) Environmental advisory committee could be formed. The discussions/ information sharing among different departments can generate lot of ideas and awareness on green issues.
- b) Maintain minutes of meetings of environmental committees; evaluate the effectiveness of various environmental programs conducted by the institutes. Set annual targets for Green Initiatives & monitor them closely. Create 'Green Champions'.
- c) Since each student uses computer lab, the screen savers can be set up for creating environmental awareness. (Ergonomics, water conservation etc.). Short 30 second pop up can be displayed on computer screens when they are on standby mode. Or wallpapers informing students about environment conservation can be created.
- d) Consider detailed energy audit (energy consumption, thermal emission, visual comfort) and water audit.
- e) Adopt environmentally responsible purchasing policy, and work towards creating and implementing a strategy to reduce environmental impact of its purchasing decision.


Dr. ARCHANA CHOUHAN
PRINCIPAL




COLLEGE OF NURSING

BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA [Page] 33
CHINHAT, LUCKNOW-226028







Annexure 1 – Indoor Gardening Details


Indoor plants are commonly used for their aesthetics benefits but they also have vital role reducing airborne pollution. The right choice of plants can be an excellent way of improving indoor air quality and general health. Local landscape contractor can be contacted for supply and rotation of these plants.

Plants	VOC it removes	Indoor source of VOC's	Plant care
 Aloe Vera	Formaldehyde, Trichloroethylene and Benzene	Chemical based cleaners and paints	Easy to grow with enough sunlight
 Bamboo Plant	Formaldehyde, Trichloroethylene and Benzene	Paints, Plastics, Wood products etc.	Thrives under low light conditions as well as easy to maintain
 Chinese Evergreen	Benzene	Paints	Low maintenance plant that prefers low light conditions.






 ARCHANA CHOZHAN
 PRINCIPAL
 COLLEGE OF DISTANCE
 EDUCATION
 BABA EDUCATIONAL SOCIETY
 56, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028




 <p>English Ivy</p>	<p>Formaldehyde, Benzene, Air borne fecal matter particles</p>	<p>Wood, Paper products, Air borne fecal – matter particles from pests</p>	<p>Easy to maintain</p>
 <p>Janet Craig</p>	<p>Formaldehyde, Benzene and Trichloroethylene</p>	<p>Paints, Plastics, Wood products etc.</p>	<p>Medium to low light tolerant plant. Requires little water for growth.</p>
 <p>Golden Pothos or Devils Ivy</p>	<p>Formaldehyde, Cleanses air</p>	<p>Exhaust fumes, carpeting materials, panelling and furniture products made with particle board</p>	<p>Extremely easy to maintain under low to bright light conditions. Fast growing and grows well under Fluorescent light.</p>
 <p>Mass Cane</p>	<p>Formaldehyde, benzene and trichloroethylene</p>	<p>Paints, Plastics, Wood products etc.</p>	<p>Medium to low light tolerant plant. Requires little water for growth.</p>


 DR. ARCHANA CHOUHAN
 PRINCIPAL
 COLLEGE OF NURSING
 BABA EDUCATIONAL SOCIETY
 55, MATIYARI DEWA ROAD
 CHINHAT, LUCKNOW-226028



 <p>Snake plant</p>	<p>Formaldehyde and trichloroethylene</p>	<p>cooking fuels, wood products, facial tissues, personal care products and waxed papers</p>	<p>Drought resistant and Tolerates a variety Of light conditions. Hard to damage or kill.</p>
 <p>Peace Lily</p>	<p>Formaldehyde, benzene and trichloroethylene</p>	<p>Paints, Plastics, Wood products etc.</p>	<p>Relatively easy to maintain. Survives in low light conditions.</p>
 <p>Red-edged Dracaena</p>	<p>Formaldehyde and trichloroethylene</p>	<p>cooking fuels, wood products, facial tissues, personal care products and waxed papers</p>	<p>Drought resistant and Tolerates a variety of light conditions. Hard to damage or kill.</p>
 <p>Spider Plant</p>	<p>Formaldehyde, benzene, carbon monoxide and xylene</p>	<p>cooking fuels, wood products, Printing</p>	<p>Easy to maintain under medium to bright light condition.</p>



 <p>Parlor Palm</p>	Purifies indoor air	-	Easy to maintain
--	---------------------	---	------------------


DR. ARSHANA CHOUHAN
PRINCIPAL
COLLEGE OF ARTS AND SCIENCES
BABA EDUCATIONAL SOCIETY
56, MATIYARI DEWA ROAD
CHINHAT, LUCKNOW-226028



Elion Technologies & Consulting Private Limited

Registered Office:

307, 3rd Floor, DDA Lal Market, H-Block

VikasPuri, New Delhi-110018

Phone No: 011-28541888, 9013890526

Email: support@elion.co.in

Website: www.elion.co.in

DISCLAIMER

All information contained in this report is based on the data available and observations made during the audit. All recommendations made in this audit report should be duly evaluated by the management before implementation.

No warranty, guarantee, or representation, either expressed or implied, is made as to the correctness or sufficiency of any representation contained herein. This report may not address every possible loss potential, violation of any laws, rules or regulations, or exception to good practices and procedures. The absence of comment, suggestion, or recommendation does not mean the property or operation(s) is in compliance with all applicable laws, rules, or regulations, is engaging in good practices and procedures, or is without loss potential. No responsibility is assumed for the discovery and/or elimination of hazards that could cause accidents or damage at any facility that is subject to this report.