

GREEN AUDIT

STUDY PERIOD (TWO YEARS) 2022 – 2023 & 2023 - 2024

Sustainability study
AUDIT REPORT

Studied for
Ashoka Education Foundation's
Ashoka Business School

Rane Nagar, Nashik,
Maharashtra 422009

Studied in the capacity of
Accredited and Certified GBP



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Disclaimer

The Audit Team has prepared this report for the **Ashoka Education Foundation's Ashoka Business School** located Rane Nagar, Nashik, Maharashtra 422009 based on input data submitted by the Institute analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole depending on the decision taken by the internal team. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a period of time and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

The Report is prepared by the Team of Greenvio Solutions under their brand and department – Sustainable Academe as Consultancy firm with the Project Head - Ar. Nahida Shaikh who is as an Accredited and Certified Green Building Professional-Architect. Green Building consultancy is her forte and she is one of the most sought after names when it comes to providing excellent quality services within the stipulated time frame.

The Study is conducted in capacity of Accredited & Certified Green Building Professional with extensive experience.

Ar. Nahida Abdulla

Greenvio Solutions

Developing Healthy and Sustainable Environments

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our department for conducting audits

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Acknowledgement

The Audit Assessment Team extends its appreciation to the **Ashoka Education Foundation's Ashoka Business School, Maharashtra** for assigning this important work of Green Audit. We appreciate the cooperation extended to our team during the entire process.

Our special thanks are extended are due to everyone from the Management.

Our heartfelt thanks are extended to the Chairperson of the entire process **Dr. Sarita Dhawale**, (I/c Director) for the valuable inputs.

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

- ➔ Teaching staff member – **Dr. Leena Gorhe**, Assistant Professor
- ➔ Non-teaching staff member – **Mr. Sachin Lokhande**
- ➔ Admin staff member - **Mr. Vishal Sonkamble**

Sustainable Academe

Brand of Greenvio Solutions, Palghar District, Maharashtra- 401208

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1. Introduction

1.1 About statements of the Institute

1.1.1 Vision

The Institute proposes "To be a premiere educational center of excellence fostering managerial competencies of global standards for holistic advancement of students and create professional leaders contributing to the socio-economic development of the nation."

1.1.2 Mission

The Institute adheres "To provide a platform for learners to hone their competencies through experiential learning by imparting professional leadership skills driven by committed educators."

1.2 Assessment of the Institute

The Institute was established in 2012.

1.2.1 Affiliations

The courses provided by Institute have received affiliation through **Savitribai Phule Pune University**

1.2.2 Certification

The Institute has received the following Certifications

- **AISHE** – The All India Survey of Higher Education code is C-41439
- **ISO** – Received the ISO 9001:2015 Certification

1.2.3 Approval

The courses by the Institute have received approval through **All India Council for Technical Education (AICTE), New Delhi** and the Institute is a NAAC accredited campus.

2. Overview

2.1 Summarised Populace analysis for 2023-2024

2.1.1 Students data

The data (shared by the Institute) shows there were **246 students**.

2.1.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	07	04	11
2	Teaching staff	05	06	11
3	Non-Teaching staff	06	07	13
Total Staff Members		18	17	35

Table 1: Staff data of the Institution for 2023-2024

The staff data shows the Institute premises had **35 Staff Members**.

2.2 Summarised Populace analysis for 2022-2023

2.2.1 Students data

The data (shared by the Institute) shows there were **240 students**.

2.2.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	07	04	11
2	Teaching staff	05	07	12
3	Non-Teaching staff	06	07	13
Total Staff Members		18	18	36

Table 2: Staff data of the Institution for 2022-2023

The staff data shows the Institute premises had **36 Staff Members**.

3. Research

3.1 Campus area

The **site spread over 0.5 acres of land.**

3.2 About the Green Building Study Audit

It is a systematic study of the aspects which make the Institution sustainable and healthy premises for its inhabitants.

3.3 Analysis of the Green Building Study Audit

The procedure included detailed verification as follows:

- ➔ Investigation
- ➔ Technical
- ➔ Observations
- ➔ Inferences

3.4 Strategy adopted for Green Building Study Audit

The strategies included data collection from the admin department, actual inventory, investigation to check the operation and maintenance, analysis of the data collection, and preparation of the Report.

4. Investigation

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Evidence documents for Site visit of external audit team


Audit team headed by external expert - Ar. Nahida Abdulla
Accredited & Certified Green Building Professional, ISO IA (IMS)
Audit objective: Green Building up gradation of the premises


Audits covered: Green audit Energy audit Environment audit

Institute: Ashoka Business School, Nashik Date: 24 APRIL 2024

Document objective: Inferences of the Site visit

Observations (Positive aspects)	Suggestions (Improvement aspects)
Green Audit	
<ul style="list-style-type: none"> - Cleanliness is very well undertaken & maintained - Dustbins & water initiatives/ eco-friendly initiatives undertaken 	<ul style="list-style-type: none"> - Water management & documentation of waste management facilities can be undertaken
Energy Audit	
<ul style="list-style-type: none"> - Approx 80-85% of energy requirement met through solar in premises, which is a good practice 	<ul style="list-style-type: none"> - Smart & ecosystems (sensor based) can be utilized & undertaken
Environment Audit	
<ul style="list-style-type: none"> - Zones dedicated to green area improvisation are available at multiple spaces 	<ul style="list-style-type: none"> - Documentation & reflectance can be increased


 Signature & round seal
 Name: Dr. Santa Dhawale
 Designation: HC Director
For the said Institute


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 Name: Ms. F. A. Shaikh
 Designation: Project Coordinator
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Plate 1: Evidence files related to inferences of the site visit

Evidence documents for Site visit of external audit team

Audit team headed by external expert - Ar. Nahida Abdulla
Accredited & Certified Green Building Professional, ISO IA (IMS)
Audit objective: Green Building up gradation of the premises

Audits covered: Green audit Energy audit Environment audit

Institute: Ashoka Business School Date: 24 APRIL 2024

Document objective: Proof of the Site visit



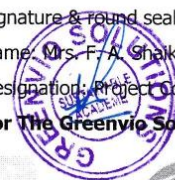
Meeting with the core team



Investigation of the systems



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Name: Dr. Sarita Dhawale
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Name: Mrs. F. A. Shaikh
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Plate 2: Evidence files related to the site visit

Evidence documents for Site visit of external audit team

Audit team headed by external expert - Ar. Nahida Abdulla
 Accredited & Certified Green Building Professional, ISO IA (IMS)
 Audit objective: Green Building up gradation of the premises

Audits covered: Green audit Energy audit Environment audit

Institute: Ashoka Business School. Date: 24 APRIL 2024

Document objective: Induction Meeting attendance sheet

S. No.	Name	Committee	Designation	Signature
1.	Mrs. F. A. Shaikh	External	Project Coordinator	
2.	Ar. Nahida Abdulla	External	Project Head	
3.	Dr. Sarita Dhawale	Internal	I/C Director, ABS	
4.	Dr. Mahesh Wagh	Internal	Aca. coordinator	
5.	Dr. Leena Garhe	Internal	ISR Cell coordinator	
6.	Dr. Pooja Ghelap	Internal	Research Cell coordinator	
7.	Mx. Nishal Sankamble.	Internal	Sr. Admin Officer	



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 For the said Institute

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Plate 3: Evidence file related to induction meeting attendance record

Evidence documents for Site visit of external audit team

Audit team headed by external expert - Ar. Nahida Abdulla
 Accredited & Certified Green Building Professional, ISO IA (IMS)
 Audit objective: Green Building up gradation of the premises

Audits covered: Green audit Energy audit Environment audit

Institute: Ashoka Business School Date: 24 APRIL 2024

Document objective: Exit Meeting attendance sheet

S. No.	Name	Committee	Designation	Signature
1.	Mrs. F. A. Shaikh	External	Project Coordinator	
2.	Ar. Nahida Abdulla	External	Project Head	
3.	Dr. Sarita Dhawale	Internal	I/C Director, ABS	
4.	Dr. Mahesh Wagh	Internal	Academic coordinator, ABS.	
5.	Dr. Keena Gorbe	Internal	ISR cell coordinator, ABS.	
6.	Ms. Vishal son-Kamble	Internal	Sr. Admin officer	
7.	Dr. Pooja Ghalap	Internal	Research cell coordinator.	



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Name: Dr. Sarita Dhawale

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Name: Mrs. F. A. Shaikh

Designation: Project Coordinator

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Plate 4: Evidence file related to exit meeting attendance record

5. Documentation

5.1 Green Practices Audit

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

5.1.1 Green practices

We observed the following points during the investigation data verification of the premises.

- **Well maintained premises** - *The Institute has done exceptional work towards infrastructure, hygiene, cleanliness of the campus.*
- **Social awareness** - *The Institute has taken up social works.*

5.1.2 Community development

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

S. No.	Type	Since	Coordinator name
1	Earn while you learn scheme	2012	Dr Pooja Gholap
2	Jawahar Kala Kendra (JKC)	2019	Dr Pooja Gholap
3	Employability Skills centre	2012	Dr Hemant Wanjare
4	Neighborhood development scheme (ISR Cell)	2017	Dr Leena Gorhe

Table 3: Details of the extension initiatives by the Institute

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

S. No.	Initiative	Details	Type	Date
Academic year 1 (2022-2023)				
1	World Environment	5 th June is Celebrated as World Environment Day globally to save earth	Physical	05-06-2022

	Day	valuable resources like water soil and food		
2	World Cycle Day	3 rd June Celebrated as World Cycle Day globally to save earth from pollution	Physical	03-06-2022
4	National Energy conservation day	ISR Cell ABS	Physical	15-12-2022
5	Go-Green Pledge	One person one tree	Physical	17-12-2022
6	Swachh Bharat	Student participated for College cleanliness drive	Physical	17-12-2022
7	Kirloskar District level Vasundhra competition	Ashoka Business School ISR Cell presented ABS Green initiatives for the Kirloskar Vasundhara Eco Rangers KVER competition conducted by Kirloskar Oil engines Ltd.	Physical	20-01-2023
Academic year 2 (2023-2024)				
1	Soil: where food begins	Online webinar on the subject	Digital	07-072023

Table 4: Details of the environmental initiatives undertaken by Institute

The study suggests that the nos. of practices should be increased.



Plate 5: Certain evidences of the environmental activities

5.2 Waste Audit

Waste is an inevitable part of our lives. Over the years the awareness about waste management techniques has given a rise to rethink how the waste can be avoided being sent to the landfills. The audit provides an approximation of the types of waste generated, location of waste collections, disposal techniques used, waste segregation methodologies adopted, and waste management strategies that are implemented in addition to the newer ways that can be adopted aiming to make the premise clean and sustainable.

5.2.1 Waste management (Parameters adopted)

S. No.	Type	Current practice	Proposed practice
1	Solid waste (Toilets)	Connected to NMC (Local corporation)	Continue with the practice
2	Organic waste (Regular)	Composting is practiced	<i>Requires improvement</i>
3	Liquid waste (Toilets, wash basins)	Connected to NMC (Local corporation)	Continue with the practice
4	Chemical waste from laboratories	Not applicable	
5	Toxic waste from laboratories		
6	E-waste	Not managed appropriately	<i>Tie-up with eco-reco; thereco for recycling</i>
7	Plastic waste	Segregated and sent to municipal corporation	<i>Undertake eco-walls project & other practices</i>
8	Bio-waste (Sanitary)	Handover with dustbin bag To NMC Vehicle	Continue with the practice

Table 5: Details of the waste management practices

5.2.2 Waste management (Measures adopted)

There are thirty-six dustbins in the indoor and five in the outdoor areas of the premises.

5.3 Water Audit

Water is one of the basic needs. Pure drinking water is a resource that needs to be preserved efficiently. A water audit helps to identify the sources of water consumption, and the water requirement by the premises is met by these sources.

The effective usage of water without any wastage should be a mandatory practice. Understanding the techniques as per site context to increase water conservation in terms of awareness and practice can be identified and executed as part of this exercise.

5.3.1 Water availability and consumption

5.3.1.1 Source of Primary water supply

The Institute requires water from the Local Municipality for drinking water purposes. There is one underground and one overhead tank with a capacity of 36,000 litres each.

The study suggests that the space requires of tanks can be documented with mention of size, capacity usage, Institute name, colour coding and last maintenance date mentioned on each facility.

5.3.1.2 Source of Secondary water supply

The Institute uses water supply for secondary usages such as watering plants, kitchen, toilets, and wash basins and other spaces. There are no such facilities, the water tanks serve dual purpose of primary and secondary sources.

5.3.1.3 Source of Tertiary water supply

The tertiary source of water is the source of water harvesting, one pit of 4' x 4' is available in the premises.

5.3.1.4 Source of Reusing waste water

This initiative is not practiced.

The study suggests that keeping the site context and constraints in mind this is not a compulsion as the city waste is connected to the local corporation which is further treated.

5.4 Health and Hygiene Audit

The hygiene is a part and parcel of our daily life. It is extremely essential to keep the surroundings clean in the same manner as we would want our houses to be. Educational Institutes have a bigger role to play in order to affect the young minds in the positive manner through better hygienic practices.

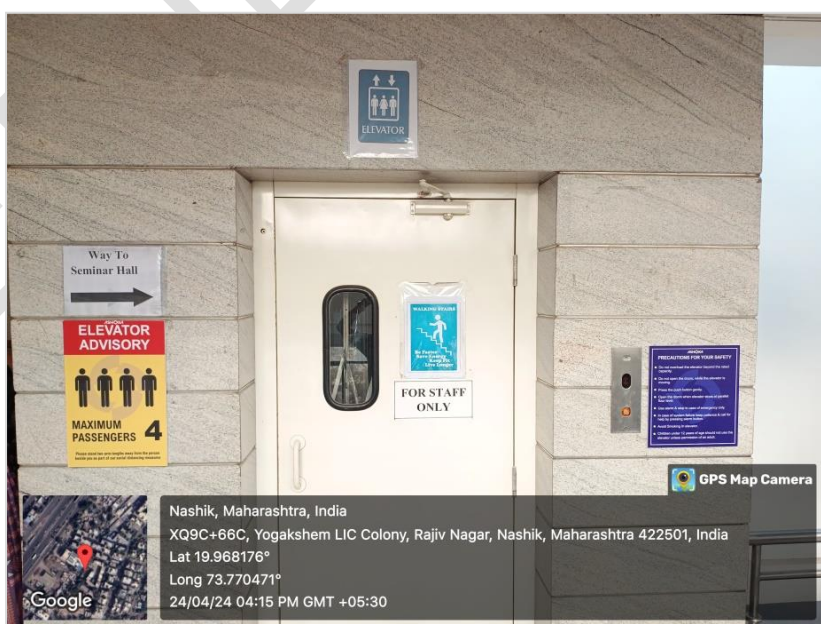
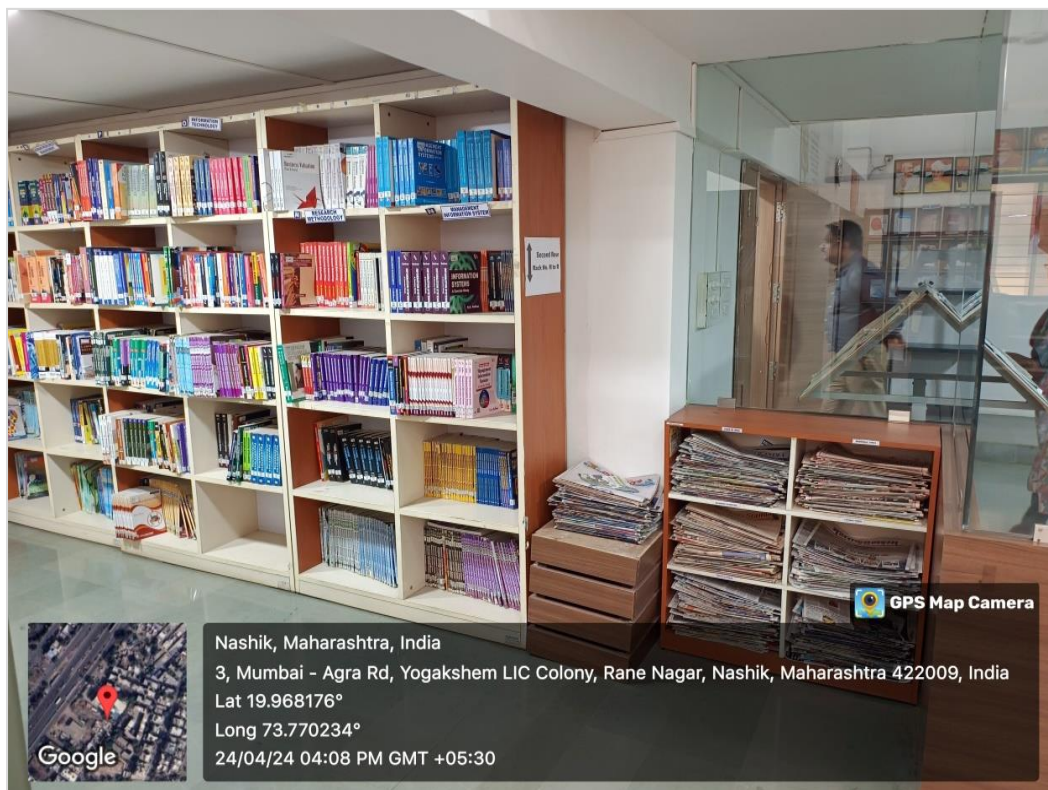


Plate 6: Clean and hygienic premises

Overall, the campus is extremely well maintained and hygienic.

6. Inferences

The suggestion (inference) would act as a 'PLAN OF ACTION' to implement all the suggestions in a detailed manner. The same has been identified in two phases for a total duration of three years.

➔ Phase 1

- *Duration: One year from the date of Report submission – Shared currently*
- These are first hand suggestions
- They are easy and quick to implement
- They involve close very less or almost no expenses
- They can serve as a foundation for the entire plan of action

Section 1 – Green practices audit

➔ Environmental awareness

- There can be various slogans in local and national language on the compound wall giving the message of saving the environment through the joint efforts of the students and staff thereby making the student socially and environmentally responsible citizens.

➔ Increase the green awareness practice

- This should be in terms of the physical and virtual events, which will be beneficial for all stakeholders in the shared premises. (Basically the frequency of the lectures should be increased)

➔ Mandatory programs should be conducted on following days

- January
 - i. Wd. Braille Day
- February
 - i. Wd. Wetland day
 - ii. Wd. Pulses day
 - iii. Intd. Polar Bear Day
 - iv. NI. Science day

- March

- i. Wd. Wildlife day
- ii. Intd. Action for Rivers
- iii. Global Recycling Day
- iv. Wd. Sparrow day
- v. World forest day/ Intl. day of happiness
- vi. Wd. Water day
- vii. Wd. Meteorological & resources day

- April

- i. Intd. Mine awareness day
- ii. World health day
- iii. Wd Atmosphere Day
- iv. Intd. Earth day
- v. Intd girl in ict/ Wd. Safety, health

- May

- i. Wd Migratory Bird Day
- ii. Intd. Of plant health
- iii. Wd. Bee day
- iv. Intd. Biological diversity
- v. Wd. No tobacco day

- June

- i. Wd. Bicycle day
- ii. Wd. Env't day
- iii. World Oceans Day
- iv. Global Wind Day
- v. Wd. Combat drought
- vi. Sustn. Gastronomy day
- vii. Intd. Of the tropics

- July

- i. Intd. Of cooperatives & World Day Free of Plastic Bags
- ii. Soil conservation
- iii. Wd. Population day
- iv. Mangrove Ecosystem

- August

- i. Intd. Indigenous day

- September
 - i. Intd. Clean blue sky
 - ii. Intd. Literacy/ Clean-up Day
 - iii. World ozone day
 - iv. Intd. Of peace/ Zero Emission Day
 - v. Intd. Aware food loss
- October
 - i. Wd. Nature day
 - ii. Wd. Habitat day
 - iii. Wd. Wildlife day
 - iv. Wd. Cotton day
 - v. Wd. Migratory bird
 - vi. Intd. Rural women
 - vii. Wd. Food day
 - viii. Climate Action
 - ix. Wd. Cities day
- November
 - i. Wd. Tsunami awareness
 - ii. NI. Birds day
 - iii. Wd. Energy/ Diabetes
 - iv. Wd. Toilet day
- December
 - i. Intd. Person with disability day
 - ii. Wd. Soil day

Note:

- ⇒ Wd. Stands for World
- ⇒ Intd. Stands for International Day

Section 2 - Waste audit

➔ Awareness

- Educate the housekeeping staff through monthly or quarterly programs related to waste management
- Generate awareness among student and staff stakeholders about products that generate waste through display boards about 'Do not litter' with messages about waste management, its importance and process

➔ Measures towards waste management

- Check cutlery practice in canteen area to inculcate healthy habits
 - i. Steel/ paper/ *bagasses* (sugarcane waste) plates for food
 - ii. Paper cups/ *Kulhad* or mud containers for tea
 - iii. Food served on leaf and further used for composting
 - iv. Spoons or straws made of disposable or edible material
 - v. Stakeholders can be guided to bring their own tiffin's for material management
 - vi. Possibilities of waste paper reused including newspaper for cutlery replacement can be explored

➔ Facilities

- One dry small dustbin of each class must be installed
- One dry big dustbin has to be installed in every 10-20 meters of walking area in outdoor spaces
- Install Sani bins with display of 'Sanitary pads icon' in washrooms of every department and toilets

Section 3 - Water audit

➔ Awareness

- Remind every stakeholder about water conservation/ avoid water wastage by displaying board at every wash room, laboratories, outdoor ground and canteen areas
- Literate employees about water conservation and educate the staff members about the measures and action that can be taken

➔ Measures towards water conservation

- Put a container below the outdoor unit pipe of every air conditioner and reuse the same for secondary purposes such as washing cars, cleaning campus outdoor areas etc. avoid using the same for plantation.
 - i. Maintain a record of the nos. of containers and water recycled on a daily basis, further prepare a monthly or quarterly report about the same

➔ Regular checks

- Check taps/ faucets of toilets, wash basins, laboratories and outdoor areas for non-working conditions and leakages on a daily basis after 5 pm or once Institute's working hours are over
- If there is hostel facility there should be a regular check once students go to the Institute for any open taps or any type of water wastage; additionally replace all showers with bucket and tap system within hostel premises
- Lock the outdoor taps when they are not in use and check pipelines for damage to avoid any non-maintenance
- Use buckets for floor cleaning to save water and recycle the waste water
- Any kind of water wastage in any area indoor/ outdoor in every department of the Institute and report about the same to authorities
- Cover any open drain/ open water area (except farm/ water pond) that can be prone to become a mosquito breeding spot

Section 4 - Health and Hygiene Audit

➔ Awareness

- Prepare specific instructions for cleaning and sanitizing and display the instructions all over premises
- Display signages/ posters about 'Do not spit' and 'Keep surrounding clean' 'No smoking' and 'Healthy premises' for healthy habits
- Undertake every Saturday 'Campus Cleanliness program' once in a week by the students and staff members

➔ Neat and clean premises practices

- Daily one times cleaning of all floors passage areas through sweeping dusting in indoor areas collection of dry fallen leaves and access ways; watering of plants in outdoor areas
- Daily three times cleaning, disinfecting washroom areas and check to avoid any garbage burning all around campus
- Weekly deep cleaning of building spaces including individual areas, open grounds and grass cutting

➔ Hygiene Facilities - Availability of Sanitizing Equipment

- Water dispenser (Non-mechanic/ electric), hand wash on every floor
- Green carpets could be placed outside drinking water and toilet blocks. This will add to hygiene areas and keep the water spillage under control.

7. Compilation

The study is based on the data collected, analyzed, rechecked, and confirmed through multiple modes. For the quality study, some standards/ notes have been referred to. These are listed and noted below. However, no direct references have been used anywhere. These are used as a base to analyze and study the data collected.

- ➔ Uniform Plumbing Code – India, 2008
- ➔ IGBC Green Existing Buildings – Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
- ➔ IGBC Green Landscape Rating system, March 2013
- ➔ BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST – Canada

