

# **GREEN AUDIT REPORT**

## **(2024-25)**

**ST. XAVIER'S COLLEGE, MAPUSA**



**Prepared By**

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## **Acknowledgement**

The Green Audit Assessment Team wishes to thank St. Xavier's College for assigning us with this very significant task of carrying out the Green Audit. We appreciate the cooperation extended to our team during the entire process.

Our special thanks are due to College Principal Ms. Ursula Barreto and her staff for giving us necessary inputs to carry out this very vital exercise of Green Audit.

We are also thankful to Ms. Maria Beatriz De Souza, Dr. Rheane Da Silva and Dr. Caje Pinto who were actively involved while collecting the data and conducting field measurements.



**SUSHANT FIGUEIREDO**  
*Environmental Consultant*

## **CERTIFICATE**

This is to certify that the information provided in this report is to the best of our knowledge and due diligence has been carried out through physical verification, examination of official communication, reports and pictures available and interaction with relevant staff. Errors, if any, are purely incidental and not intended to mislead.

The Green Audit report is officially being submitted to the Management of St. Xavier's College, Mapusa, today, **the 25<sup>th</sup> of April 2025**.

Submitted by:



Sushant Figueiredo  
(Independent Environmental Consultant)

Acknowledged by (on behalf of St. Xavier's College, Mapusa)

Ms. Ursula Barreto  
(Principal)

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## Executive Summary

The rapid urbanization and economic development at local, regional and global level has led to severe environmental and ecological crises. While on one hand, resource depletion continues to occur at an alarming rate, on the other waste generation has also increased considerably leading to serious concerns. Keeping this in mind, it becomes essential to adopt Green Campus practices not just to reduce the ecological footprint of the college but to also be an example to students enrolled at the institution.

St. Xavier's College, Mapusa, Goa is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the existing trends. 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. The methodology included, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, random interaction with students, measurements where required and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy, Mapping of Biodiversity, eco-friendly practices and policy interventions.

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 and standards. It can make a tremendous impact on student health and learning, college operational costs and the environment.



## 1. Introduction

NAAC accreditation is mandatory for all the higher learning institutes, particularly state universities. Without NAAC accreditation, universities are not eligible for UGC grants, RUSA grants, financial aid etc. On the other hand, NAAC accreditation determines the quality of the institute in terms of education, infrastructure, research, teaching & learning etc. Institutes with top NAAC grades such as 'A++', 'A+' and 'A' are most sought-after institutes, as they offer high-quality education. On the other, all the recognized institutes of UGC must apply for NBA/ NAAC/ any other accreditation after the completion of the first or second batch of courses.

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.

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyse environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment.

Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit.

### **Benefits of Green Audit:**

If Green Audit is enforced effectively, there are many advantages and benefits to the Campus

1. Green Audit could help to shield the environment against damage or pollution
2. Recognize the cost saving methods through waste minimizing and managing strategies
3. Point out prevailing and forthcoming inadequacies and misdoings and understanding scope for future improvement
4. Authenticate conformity with the various environmental laws and guidelines laid down by the government
5. It portrays a good image of the institution thereby helping to build better relationships with the various stakeholders involved
6. Enhance the efficacy for environmental guidelines and duties set up by the college



## 2. About the College

Established, in June 1963, by the Archdiocese of Goa and Daman, the St. Xavier's College of Arts, Science and Commerce is the premier higher education institution in the beautiful State of Goa. It is managed by the Diocesan Society of Education – an organization that owns and oversees over a hundred academic institutions – on behalf of the archdiocese.

Nestled atop a hillock in Mapusa, the verdant College campus comprises twenty-four acres of flora interspersed with five Blocks where the various teaching-learning activities occur. Besides, the Institution possesses a Seminar Hall, a Conference Hall, a multi-purpose Xavier's Ark, a Recreational Hall and an outdoor stage that overlooks a well-maintained lawn. The College has well-equipped laboratories, an Instrumentation Centre, a spacious and well-stocked Library, banking facilities and a food court on the campus.

The College, which is affiliated to Goa University since June 1986, offers post-graduate and under-graduate courses. The visionary Management, well-qualified and student-centric faculty, and diligent and focused non-teaching staff of the Institution all work towards one goal – the holistic development of every pupil who passes through the portals. In this, the Institution is inspired by its Patron, St. Francis Xavier and its Latin motto "In virtute et scientia" (in virtue and knowledge).

The Institution's numerous alumni, who excel in various fields of human endeavour, are testament to the values, knowledge and skills imparted at the College.

The College was granted "College with Potential for Excellence" status by University Grants Commission (UGC), New Delhi, in 2004. It was re-accredited by NAAC (National Accreditation and Assessment Council) in 2019 with "A" Grade. In 2021, it was granted the DBT (Department of Biotechnology, Government of India) Star College Scheme.

The vision statement is 'Formation for Transformation'. Its Mission is 'to provide balanced all-round education, with the goal of forming young men and women who will be disciplined citizens and display a high intellectual calibre as well as emotional balance and social commitment, particularly, at helping Catholic youth to be committed followers of Christ'.



### 3. Objectives of the Study

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

The main objectives of carrying out Green Audit are:

- ❖ To introduce and make students aware of the real concerns of environment and its Sustainability.
- ❖ To secure the environment and reduce threats posed to human health by analysing the pattern and extent of resource use of the campus.
- ❖ To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requiring high cost.
- ❖ To bring out a status report on environmental compliance.
- ❖ To be able to continually improve the environmental performance of the college

## 4. Methodology

The methodology to perform the green audit included different tools such physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarise the present status of environment management campus:

- ✓ Waste management
- ✓ Water management
- ✓ Energy Conservation
- ✓ Biodiversity and Green Areas
- ✓ Health & Sustainability Audit
- ✓ Environmental Policy Audit

A Green Audit involves the following steps

### **A. Pre-Audit:**

- I. Plan the audit
- II. Select the audit team
- III. Schedule the audit facility
- IV. Acquire the background information
- V. Visit the site On-site

### **B. During Audit Process on Site:**

- I. Understand the scope of audit
- II. Analyze the strengths and weaknesses of the internal controls
- III. Conduct the audit
- IV. Evaluate the observations of audit program
- V. Prepare a report of the observations side by side

### **C. Report Preparation:**

- I. Produce a draft report of the data collected
- II. Produce a final report of the observations and the inference with accuracy
- III. Distribute the final report to the management
- IV. Prepare an action plan to overcome the flaws Keep a watch on the action plan



## 5. Observations and Recommendations

### A. WASTE AUDIT

ASPECT	OBSERVATIONS	RECOMMENDATIONS
Reduce the absolute amount of waste produced from college staff offices.	<ol style="list-style-type: none"> <li>1. There is a shift towards digital communication rather than letters or printed notices</li> <li>2. One side printed paper is collected by office staff for reuse in administrative purposes</li> <li>3. E-release of departmental journals and newsletter is being practiced over hard copies</li> <li>4. Assignment submissions in BCA department are undertaken in digital form</li> </ol>	Undertaking assignment/project submissions in soft copy may be encouraged and practiced across departments
Make full use of all recycling facilities provided by City Municipality and private suppliers	<ol style="list-style-type: none"> <li>1. The waste from collection points is picked up periodically and stored at a common area for collection by municipal authorities</li> <li>2. No further sorting of recyclables is undertaken</li> <li>3. A paper shredder is to be provided to the college as part of the CSR initiative of Colorcon which will be used to shred and sell all kind of paper to recyclers</li> </ol>	<ol style="list-style-type: none"> <li>1. Improved awareness may be undertaken among students to ensure correct use of bins</li> <li>2. MTS staff may be incentivized to undertake further segregation into categories such as PET, Tetra Pak, Cardboard, plastic packaging, paper, MLP etc. which may be sold to authorized waste collectors or agencies</li> </ol>
Compost, or cause to be	1. The operation of the canteen is outsourced	1. To ensure proper management of wet waste by

composted, all organic waste produced in or collected from the canteen, offices and staff rooms.	with the person operating it in charge of waste disposal. 2. There is a compost pit within the campus which is in use	canteen operators, small scale composting measures such as Khamba system or drum composting may be explored at a suitable location 2. The existing compost pit at the college may be better utilized to treat the entire wet waste generated from the campus. Requisite training may be provided to selected staff for optimal operation of the same 3. Measures to reduce wastage of food or tissue use may be promoted
Recycle or safely dispose of E-waste such as computers and electrical appliances.	1. An E-waste Awareness Session was undertaken by Group Tenplus on 22 <sup>nd</sup> October followed by a collection drive where 114 kgs of E-waste was collected 2. Obsolete items were found to be stored for condemnation and future disposal	1. Annual E-waste awareness sessions & collection drives may be undertaken in association with any Authorized vendor 2. Obsolete E-waste stored at the campus must be condemned and disposed at the earliest.
Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated	1. Three bins are provided on each floor – one for plastic, the other for dry waste and one smaller one for wet waste 2. Additionally, bins are also provided in common areas of the campus 3. Instances of waste mixing were noticed	A system of accountability may be put in place with selected classes/departments given the task of ensuring segregation on a rotation basis
Reduce the practice of burning plastic and other material that emit harmful gas on burning is prevented in the campus.	No signs of waste burning any dry waste were observed during the Audit. There were however indications of burning leaf litter from the campus	Burning of even organic material such as twigs, logs and leaves must be prohibited within the campus due to its contribution to Global Warming. The same may either be composted or used as mulch for trees
Make specific arrangements for	1. Use of printed banners at events are	Single use plastics such as gift wraps or plastic water

events, such as cultural Events, internal and external seminars and conferences, where significant recyclable waste is likely to be produced, in order to both minimize the waste produced and maximize what is recycled/reused	<p>avoided with an additional screen provided for projecting of event details (E-banner)</p> <p>2. No disposable plates or cutlery are used as reusable ones were arranged by the caterer of the event</p> <p>3. Use of plastic water bottles were avoided by providing a 20 lt. water dispenser</p> <p>4. Paper cups are provided to the guests</p>	bottles for guests shall be avoided with the latter replaced by glass jars and glasses
Promote reuse of items and waste recycling among staff, students, conference guests & residents through training, posters and incentives	<p>1.the followings initiatives were undertaken to create awareness on waste</p> <ul style="list-style-type: none"> <li>- ‘Swachhta Hi Seva’ was practiced from 17<sup>th</sup> September to 2<sup>nd</sup> October 2024 with various waste clean ups organized within the campus</li> <li>- AS coastal clean up drive was organized along with the Indian Coast Guard at Calangute beach on 17<sup>th</sup> September</li> <li>- A trash to treasure competition was organized on the 10<sup>th</sup> of October 2024</li> </ul> <p>2. While reminders to ensure a green and clean campus were seen in common areas, no posters or awareness material were seen on notice boards on waste management</p>	<p>1. Better awareness on waste management and segregation through workshops, lectures or competitions may be organized</p> <p>2. Visits may be undertaken to the Mapusa Waste Treatment Facility to demonstrate waste processing and the importance of segregation</p> <p>3. No plastics day may be followed where carry or sale of plastics within the campus may be prohibited</p>



**GROUP TENPLUS**  
Join the green side

Date:- 24/10/2024 Reference no:-SXC/2425/01


GSPCB Reg:- PCB/515898/EWaste0035/Tech/22499 dated 08/03/2021

This is to certify that Group Tenplus, authorised dismantler for E-waste in Goa, has assumed rights and ownership of obsolete electronic and electrical equipment at their collection center, comprising of:-

114 Kgs of IT E-waste and other Electrical Equipments  
received from St. Xavier's College, 51m, Duker - Manna - Siolim Rd,  
Dangui Colony, Mapusa, Goa 403507

All the material has been sent for recycling in an environmental friendly manner, in accordance with the guidelines set up by the E-waste Management and Handling rules 2022.

By processing obsolete equipment, we are doing our duty to help keep our environment clean.

  
Ashley Delaney  
Recycling Consultant

Certificate

**E-waste awareness session and collection drive organized by Group Tenplus**



**From L-R: bins placed in common areas, on each building floor and for final handover to MMC**





**Clean-up drive at Calangute Beach**



**Campus clean-up as part of Swacchhta Pakwada**



**Compost pit at the College**







Use of E-banners at Conferences



Distribution of paper bags at Sangolda



Wealth from Waste Competition

## B. WATER AUDIT

ASPECT	OBSERVATION	RECOMMENDATION
Repair sources of water leakage, such as dripping taps and faucets as quickly as possible.	<ol style="list-style-type: none"> <li>1. Orlando Estrochio, an office staff is in charge of housekeeping including the repair and maintenance of equipment and fixtures</li> <li>2. No defined procedure is in place for reporting leakages (they are traced and repaired)</li> <li>3. Housekeeping staff are instructed to report any leakages to the concerned individual for further action</li> </ol>	<ol style="list-style-type: none"> <li>1. Students council representatives can be given responsibility to report leakages and follow up with repairs</li> <li>2. Register for reporting leakages could be maintained at the office and checked periodically by the person responsible</li> </ol>
Install appliances which reduce water consumption	<ol style="list-style-type: none"> <li>1. Most toilets were seen having a single flush system</li> <li>2. Instructions are provided on such flush systems to reduce water use for flushing</li> <li>3. Flow rates of taps are relatively high with scope for reduction</li> </ol>	<ol style="list-style-type: none"> <li>1. Dual flush WCs should be prioritized over the conventional single flush at the time of replacement</li> <li>2. Flow retarders may be installed in all taps to reduce water flow rates</li> </ol>
Encourage a decrease in water usage among staff, students and conference guests	<ol style="list-style-type: none"> <li>1. No instructions or posters provided in common rooms to switch off taps or save water</li> <li>2. There are however posters on toilet etiquette</li> </ol>	IEC material such as 'save water' or 'every drop counts' signages may be placed/stuck in common rooms to serve as a reminder to students
Conduct testing of potable water to make sure that drinking water standards are adhered to.	<ol style="list-style-type: none"> <li>1. Testing of Coliform Count in drinking water samples of various buildings was conducted by the Microbiology Department on 23<sup>rd</sup> September 2024</li> <li>2. Water coolers showing detectable count were serviced to improve water quality</li> <li>3. No external water testing has been conducted</li> </ol>	<ol style="list-style-type: none"> <li>1. Drinking water testing must be carried out annually by an NABL accredited laboratory to confirm biological as well as chemical standards for drinking water</li> <li>2. Follow-up measures in samples having detectable Coliform levels must be documented and retested for effectiveness</li> </ol>

Install Water recycling mechanism, such as rain water harvesting system	<ol style="list-style-type: none"> <li>1. The college has an existing pit meant for rainwater recharge near the parking beside the entrance. It is however currently defunct.</li> <li>2. Downpipes are provided from the terraces of the commerce, library and PG buildings for storage and capture of rainwater in a large tank</li> <li>3. Underground septic tank and soak pit are provided for sewage</li> </ol>	<ol style="list-style-type: none"> <li>1. Given the challenges with rainwater reuse, simpler systems for ground water recharge may be prioritized over collection. Appropriate studies may be conducted to identify the areas best suitable for groundwater recharge, ideally around the central garden area.</li> <li>2. Installation of a sewage treatment plant (STP) may be explored for water treatment with the treated water reused for landscaping/flushing</li> </ol>
Strive to reduce landscaping water requirement either through use of recycled water or choice of species	<ol style="list-style-type: none"> <li>1. A vast proportion of the landscaped area consists of flowering, medicinal and ornamental plants meant to increase biodiversity in the campus</li> <li>2. The lawn area near the seminar halls uses sprinklers for irrigation</li> </ol>	<ol style="list-style-type: none"> <li>1. Drought resistant species of plants should be encouraged during future plantation drives to improve chances of survival and reduce water consumption</li> <li>2. Deep pipe water irrigation must be practiced to further reduce water</li> </ol>
Promote water conservation through relevant awareness competitions, seminars, lectures and workshops	<ol style="list-style-type: none"> <li>1. A Poster Making Competition on the theme <b>"Conservation of Wetlands"</b> was held on 03<sup>rd</sup> February 2025</li> </ol>	<ol style="list-style-type: none"> <li>1. World water day (22<sup>nd</sup> March) may be celebrated annually with various competitions held with the aim of creating awareness and promoting conservation</li> <li>2. Small projects or research on water conservation such as adopt a well or lake, identifying sources of water pollution in the vicinity etc. may be explored</li> </ol>

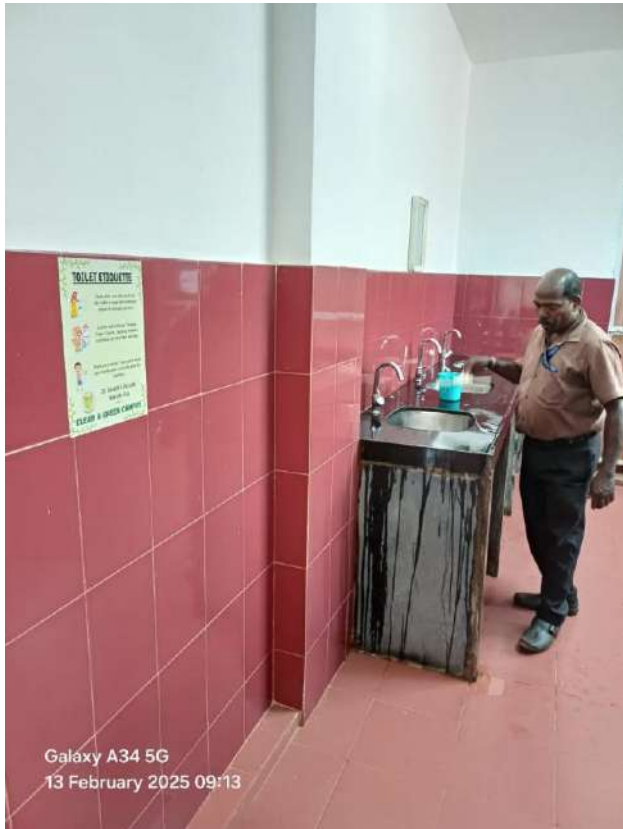




**Rainwater storage tank**



**Rainwater recharge pit near the parking area**



**No signages for water saving in restrooms**



**Dual flush latrines**



**Downpipe for rainwater storage**





**Participant of the Wetlands Poster Making Competition**



**Water sprinkler being used for irrigation of the lawn area**



### C. ENERGY AUDIT

ASPECT	OBSERVATION	RECOMMENDATION
Look in to the possibility of on-site generation of renewable energy	1. A letter received from Goa Energy Development Agency (GEDA) stated that a site assessment was carried out by them as per the request of the college, which estimated a roof top solar capacity of 175 kW in order to meet the entire energy needs of the campus. The file has been accordingly put up for approval under MPLAD scheme	Given an average installation cost of around 55,000/kW, appropriate budgetary allocation may be undertaken based on which the final capacity may be decided
Give preference to the most energy efficient and environmentally sound appliances available, including energy-saving light bulbs	1. The new buildings of the college are found to have 100% LED lighting. 2. Few mercury containing tubelight fixtures are still be found in the older buildings with a plan to completely phase-out such fixtures by replacing them with energy efficient LED ones 3. All new AC's are 3 star rated	1. Due diligence should be undertaken to choose appliances and brands with longer lifespans prior to procurement 2. Storage and disposal of mercury containing lighting fixtures must be done as per the e-waste Rules 3. Inverter AC's may be prioritized given their efficient operation
Encourage staff, students and conference guests to save energy through visible reminders, incentives and information to increase awareness.	1. Reminders for switching off lights and fans were placed at all classrooms and commonly occupied spaces	Poster competitions on 'reducing your electricity bill at home' or any other relevant topics may be undertaken to create awareness on energy saving
Ensure that all electronic and electrical equipment's, such as computers, are switched off when not in use, and is generally	1. Many computer systems were kept on even when not in use to prevent users from switching-off systems without being shut down 2. No specific guideline or instruction for power	1. Computer labs may have an auto shut down software in case of over 10 minutes of idling. 2. All office computers/laptops should ideally be used in power saving mode

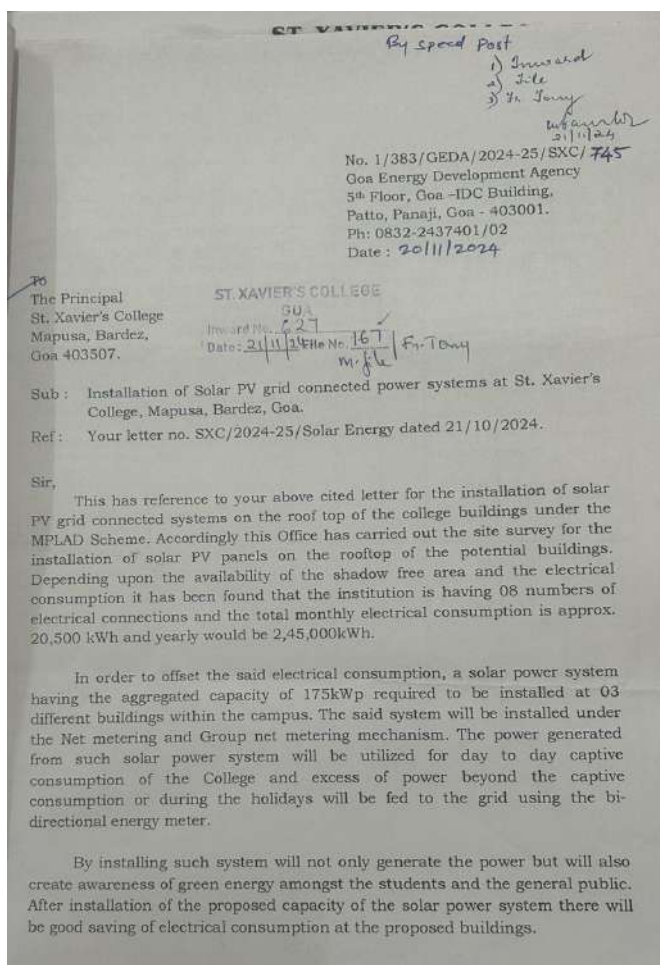
configured in power saving mode when such option is available	saving at the computer labs or office with inbuilt screen-off mode used when idling	3. At least one 15amp socket may be provided at an easily accessible location for those wanting to charge electric vehicles (EV's)
Make available information about bicycle and pedestrian routes, public transport services and car share schemes to staff and students.	1.The college facilitated the appointment of a private bus service to ferry students travelling from Panjim, Porvorim and surrounding areas, used by 21 students and 2 teachers 2. Bicycle use will be very challenging due to the college being located at a higher terrain	1. Bus names and timings from Mapusa could be made available on the notice board 2. The college, without being directly involved, may facilitate the use of ride shares by sharing details of available options with students and staff for possible use
Promote car sharing / car pool among the students and faculty Members	Save fuel day was practiced on 28 <sup>th</sup> January 2025 with students and teachers encourage to carpool or ride share to reduce overall fuel consumption	Carpooling should be incentivized/recognized through public acknowledgement, rewards or preferred (shaded) parking etc.
Conduct awareness competitions, seminars, lectures and workshops to promote energy conservation	No initiatives were planned specifically on energy management and conservation	Seminars or lectures or even interclass competitions on energy conservation may be organized to improve behavioural change
Reduction of Heat Island Effect	1.The road leading to the college from the parking is lined by high canopy trees, thereby shading the road and reducing heat island effect 2. Both parking areas are largely unshaded leading to high heat absorption due to the parked vehicles	1. Covered shading of the open parking areas may be explored as part of the Solar electrification initiative under MPLAD 2. Terrace floor must be whitewashed after the monsoons to increase reflectance of the roof 3. High canopy trees may be planted along the periphery to improve shading of hardscape



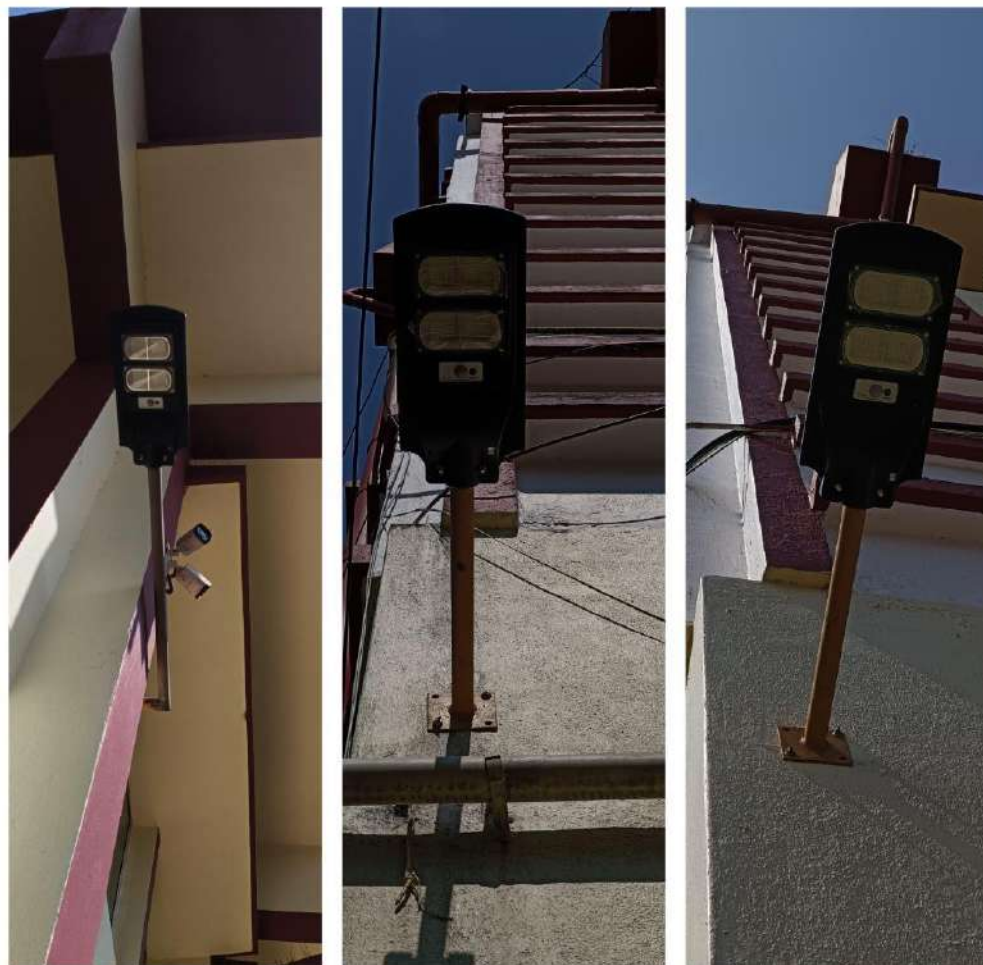
Energy saving reminders at classrooms and office areas



Star rating & coolant used in AC's

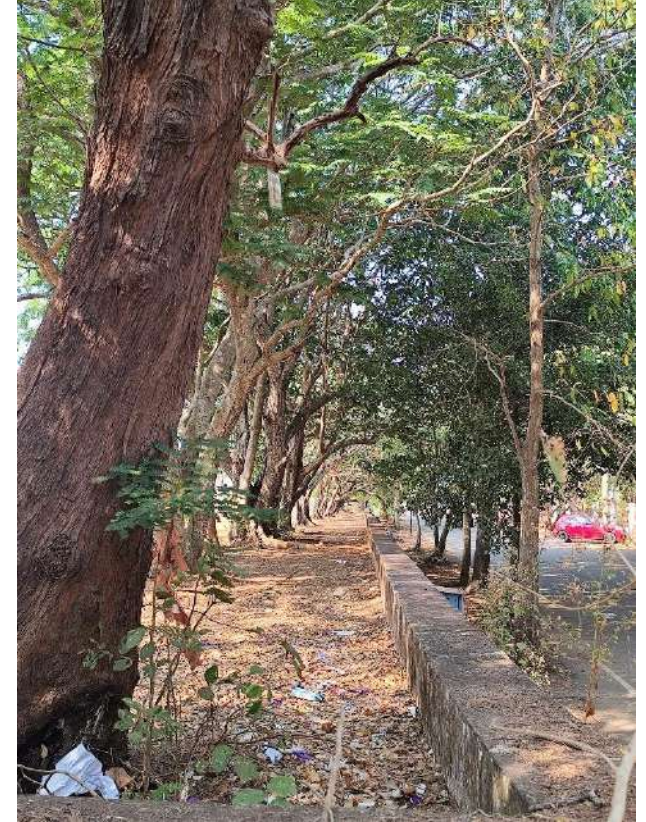


Letter received from GEDA confirming RTS assessment



Solar powered lamps used in common areas





**Shaded hardscape resulting in lowered heat island effect**





**Measure to ensure cross ventilation in classrooms**



**Open parking area with scope for Shaded parking with RTS**





**Brochure for save fuel day distributed among staff & students**

#### **Starting Point of Bus Route**

- ☐ Kamat Mega Mart ,Caranzalem
- ☐ Adarsh Circle
- ☐ Rickshaw Stand Tonca
- ☐ Bhal Bhavan
- ☐ Panjim Bus stand
- ☐ Porvorim
- ☐ Delphinus Supermarket
- ☐ Opp Mall de Goa
- ☐ Near Croma
- ☐ Succouro junction
- ☐ St. Xavier's College



**Bus route**

## D. BIODIVERSITY AUDIT

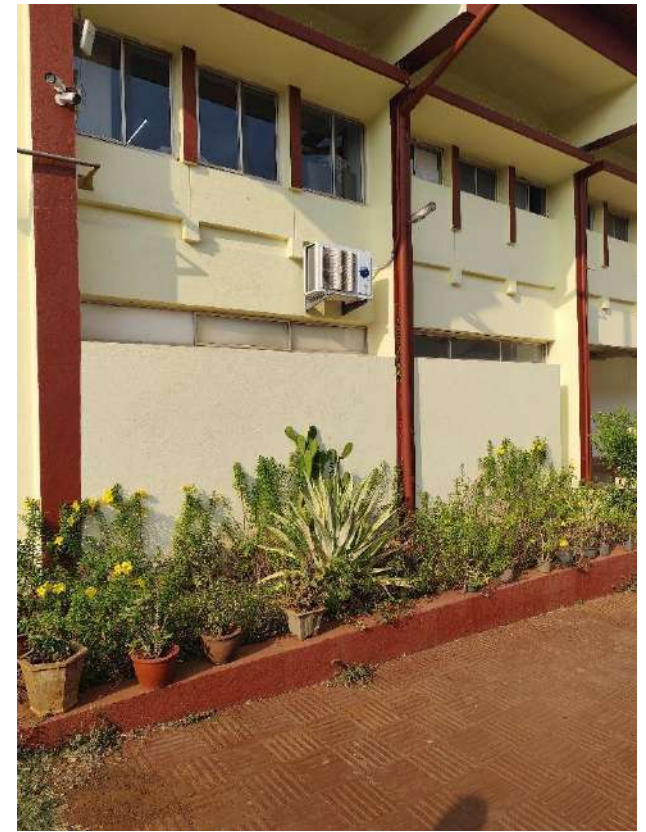
ASPECT	OBSERVATION	RECOMMENDATIONS
Establish a Garden to improve biodiversity in the campus	<ol style="list-style-type: none"> <li>1. The college campus has ample green areas with the following garden spaces <ul style="list-style-type: none"> <li>- 2 gardens with ornamental plants</li> <li>- An Orchidarium</li> <li>- Medicinal plants patch</li> <li>- Vegetable patch</li> </ul> </li> <li>2. Two other spaces have been prepared for plantation, located adjacent to the college ground and internal parking area</li> <li>3. A lawn area is also present between the office building and conference hall</li> </ol>	<ol style="list-style-type: none"> <li>1. The central garden area may be better maintained and utilized given the topography and soil profile with fruit bearing trees such as custard apple, mango, wild berries and kokum prioritized, among others.</li> <li>2. The parts of the areas to be landscaped, adjacent to the road may be planted with Bougainvillea with pineapples also an option due to growth in shade</li> </ol>
Encourage the faculty and students to plant trees and increase green cover in and around the campus	<ol style="list-style-type: none"> <li>1. The college encourages students to plant trees in the campus during the onset of the monsoons in June. Individual saplings planted are then looked after by the respective student till October.</li> <li>2. Plantation drives within the campus are also undertaken every year as part of Van Mohotsav</li> <li>3. A plantation drive #‘Ek ped maa ke naam’ was also undertaken on 9<sup>th</sup> August 2024, within the campus, where trees were named after the mothers of those planting them</li> <li>3. Flowering and other ornamental plants are grown along the periphery of the college buildings</li> <li>4. Departments are also encouraged to have indoor plants in the staff rooms and labs</li> </ol>	<ol style="list-style-type: none"> <li>1. Spaces may be identified within the campus for planting of medicinal, flowering and fruit bearing plants and trees that would encourage and increase biodiversity</li> <li>2. Tree and plant species native to Goa and which are drought resistant must be prioritized</li> </ol>

Minimize the use of fertilizers and pesticides in college grounds, opting for the use of compost produced on site wherever possible	<p>1. No chemical fertilizers or pesticides are used within the campus. Plants species chosen in the campus do not require much use of fertilizers or pesticides</p> <p>2. While a pit was present, on-site compost is not yet being used in the garden areas</p>	<p>1. Compost generated from the composting facility may be used in the garden areas of the campus whenever required.</p> <p>2. In case of a requirement vermicompost may be purchased from the Zonal Agriculture Office at Mapusa.</p>
Strive to improve resource recovery from dried twigs and leaves	Plenty of leaf litter is found around the campus due to the presence of trees. No measures are currently implemented for management.	<p>1. Multiple, cost-effective leaf composting systems may be set up considering the large area and green belt in the campus.</p> <p>2. Dried wigs may also be used as mulch to reduce water requirement in the garden areas</p>
Conduct awareness competitions, lectures and field visits to promote biodiversity	<p>1.The following field visits were undertaken for the students</p> <ol style="list-style-type: none"> <li>Mollem National Park on 27<sup>th</sup> February 2024</li> <li>'Kuddem Kabderam Farm', Canacona-Goa on 2<sup>nd</sup> October 2024</li> <li>Tanshikar Farm, at Netravali on 10<sup>th</sup> October 2024</li> <li>Mr. Farmer Nursery at Guirim on 19<sup>th</sup> October 2024</li> <li>Garca Branca Botanical Garden at Loutolim on 28<sup>th</sup> October 2024</li> </ol> <p>2. Guest lectures related to biodiversity and conservation were undertaken on a range of topics</p> <p>3. Poster, photography and rangoli competitions were also conducted to spread awareness on the subject</p>	-



**College garden areas**





**Green areas in various functional areas of the college**





**College Orchidarium**



**Area prepared for green belt development**





**Tree plantation drive on Van Mohotsav**



**Vegetable and medicinal plant patches**

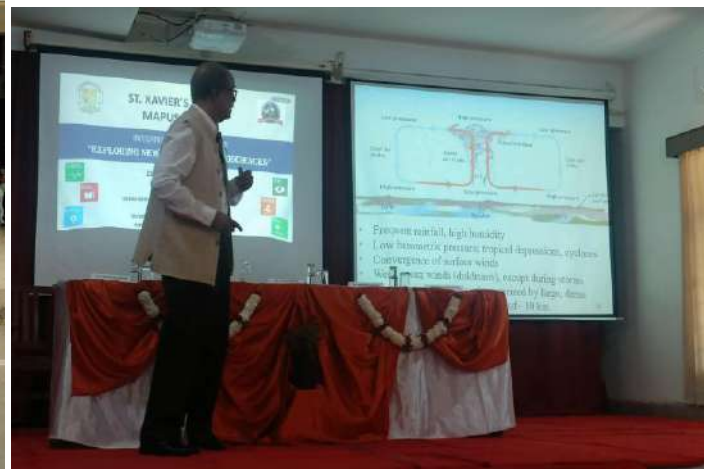




**College field trips to Bhagwan Mahavir National Park and Mr. Farmer Nursery**



Poster making competition held on 17<sup>th</sup> August 2024



Lecture by Dr. Satish Shetye on 23<sup>rd</sup> January 2025



Talk on Snake Awareness & Protection by Amrut Singh on 17<sup>th</sup> August



Rangoli Competition on 27<sup>th</sup> January 2025

## E. HEALTH & SUSTAINABILITY AUDIT

ASPECT	OBSERVATION	RECOMMENDATIONS
Seek and act upon professional advice in order to minimize the adverse environmental impact of any new developments and exceed government regulatory requirements	No new developments are envisaged by the management in the near future	Feedback from an Indian Green Building Council (IGBC) and GRIHA accredited professional may be taken in case any future developments
Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment	1. Chemical floor washing liquids are currently in use 2. The cleaning agents are bought in bulk thereby improving financial viability and reducing generation of waste	Preference must be given to eco-friendly/organic cleaning agents given the impact of chemical agents on the environment
Conduct environmental awareness seminars, workshops, competitions and initiatives to inculcate sustainable practices in students	1. A range of workshops and lectures were organized for students as detailed in the chapters above 2. Students are encouraged to participate in various competitions including photography, rangoli and poster making as detailed earlier in the report 3. Around 20 students have been trained as Green Ambassadors to promote good environmental habits among peers 4. As part of the Eco-posro event meant to promote ecofriendly items, a range of items were on display and for sale, including handmade crafts, complex crocheted items, and a variety of ornamental and useful plants	Inter-departmental competitions such as paper presentations, quizzes, debates etc. may also be organized annually, especially focussing on issues faced in Goa such as tourism, mining etc.
Promote environmental awareness as a part of course work in various curricular areas,	1. Certificate course on environmental microbiology was organized from 31 <sup>st</sup> August to 4 <sup>th</sup> October 2024	1. MoU's with government organizations such as Goa State



certification courses and independent research projects	<p>2. VAC Production of Bio-enzyme for use as ecofriendly cleaning product on 31<sup>st</sup> September to 4<sup>th</sup> October 2024</p> <p>3. Workshops on analysis of nutritional content and dairy adulterants were undertaken on 6<sup>th</sup> and 7<sup>th</sup> of August 2024</p> <p>4. Environmental Studies is a mandatory subject for all first-year students</p>	<p>Biodiversity Board, Zonal Agriculture Office Mapusa, Goa Waste Management Corporation could be explored to improve exposure of students</p> <p>2. Internship opportunities/project work with environmental organizations and NGO's may also be promoted</p>
Provide sports and recreation facilities to students	<p>1. A full-fledged gym is available for use by the students</p> <p>2. The college has a full-size football ground which can be used for multiple outdoor sporting activities as well as basketball court shared with the higher secondary section.</p> <p>3. The Director of Physical Education and Sports is in charge of identifying, grooming, training and supporting budding talent in various sports. He is supported by two sports instructors</p>	-
Ensure that healthy eating practices are encouraged	<p>1. The college canteen does provide some health eating options such as fresh fruits, sprouted beans, green tea and others on pre-order.</p> <p>2. A canteen audit was conducted by an FSSAI approved auditor to ensure hygiene practices are being followed</p> <p>3. Seminars on 'Nutritious Diets &amp; Decoding Food Labels' and 'Protein &amp; Dietary Supplements' were conducted by industry experts on 2<sup>nd</sup> and 4<sup>th</sup> September, respectively</p> <p>4. 'Rashtriya Poshan Pakwada' a cooking competition to highlight the use of clean and healthy ingredients in</p>	-

	<p>cooking was organized on September 2024</p> <p>5. A poster making competition promoting healthy eating habits was also undertaken on 2<sup>nd</sup> June 2024 with the same displayed in the canteen</p> <p>6. Various activities such as street plays and cooking competitions were conducted promoting 'International Year of the Millet'</p>	
Have a provision for provision of First Aid to students in staff in case of minor accidents	A fully stocked first aid room is provided in the college stocked to provide basic medical aid. Details of available medication and equipment are provided in the images below	Regular trainings on administration of first aid may be conducted, especially for students participating in sports



**Outdoor sports facilities within the campus**

## COMPLIANCE REPORT

A Canteen Audit was conducted at St. Xavier's College, Mapusa - Goa by Ms. Mahima Kapoor, FSSAI - approved auditor on 20<sup>th</sup> March 2024. A set of recommendations were made during the Audit.

Following are the measures adopted by the Institution vis-à-vis the said recommendations:-

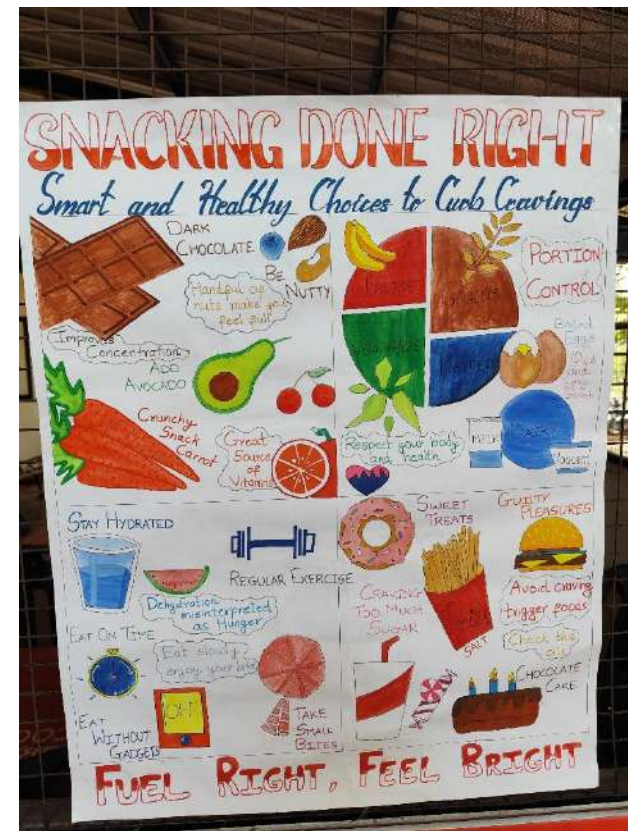
- 1) The Kitchen area of the College canteen has been increased.
- 2) The food items are now being prepared by the caterer at the canteen itself.
- 3) A handwash station has been provided for the canteen staff.
- 4) Nets have been fitted to the windows.
- 5) Measures have been undertaken to provide for a chimney. This work will be completed soon.
- 6) Appropriate separated storage spaces have been provided for beverages and food items.
- 7) Separate deep freezers have been provided for vegetarian and non-vegetarian food items.
- 8) The two fridges in the kitchen area have been repaired/replaced.
- 9) A bin - marie unit has been installed.
- 10) A hot oven has been installed.
- 11) A Menu list has been displayed.
- 12) The License - copy has been prominently displayed.
- 13) The Caterer and permanent canteen staff possess Health Cards.
- 14) Steps have been taken to ensure regular pest control.
- 15) The recommendation for food sample testing is being looked-into.

### Canteen Committee (2024-2025)

Sr.No.	Name	Signature
1.	Fr. Antonio F. Salema (Convener)	
2.	Prof (Dr.) Blanche Moesarenhas	
3.	Ms. Ursula Barreto	
4.	Ms. Sandra Fernandes	
5.	Fr. Luis Gomes	
6.	Dr. Eulalia Fernandes	
7.	Mr. Carmelito D'Souza	
8.	Ms. Vailarose Fernandes	
9.	Ms. Kalpita Taplekar	
10.	Ms. Joyce Rodrigues	

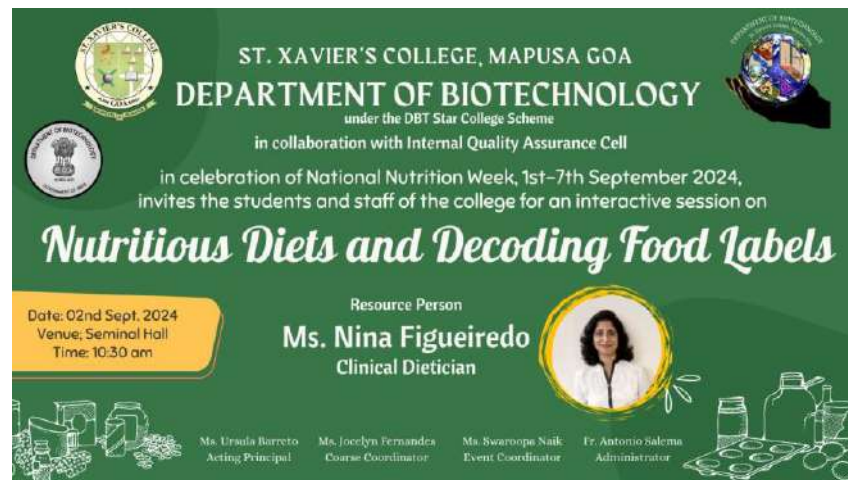


Measures implemented as per recommendations by FSSAI Auditor



Healthy snacking posters in the canteen





Brochure for talk on Nutritious Diets



Participants for seminar on Protein & Dietary Supplements



College Gymnasium







First aid room and medical stocks

#### FIRST AID MEDICINE STOCK /OTHER EQUIPMENT RECORD

August, 2023

##### A. MEDICINE IN STOCK/OTHER MEDICINAL STOCK

Sr.No.	NAME OF THE MEDICINE /OTHER STOCK	QUANTITY	EXPIRY DATE
1	Crocin (Advance) Tablets	(20) X2 strip	Mfg. Mar-2023 Exp. Feb., 2025
2	Avil 25 Tablets	(15) X 1 strip	Mfg. Apr. 2023 Exp. Mar. 2026
3	Eldoper ® Tablets	(10) X 1 strip	Mfg. May, 2022 Exp. Oct. 2025
4	Rantac 150 mg Tablets	(10) X 1 strip	Mfg. Sep. 2022 Exp. Feb. 2024
5	Domstal ® Tablets	(10) X 1 strip	Mfg. Feb. 2023 Exp. Jan. 2026
6	Combiflam Tablets	(20) X 1 strip	Mfg. 04/2023 Exp. 09/2025
7	Dettol Antiseptic liquid	1 bottle	Mfg. 04/2023 Exp. 09/2026
8	Mecurochrome Solution	1 bottle	Mfg. 2023 Exp. Feb. 2025
9	Adhesive Bandages	1 bottle (100 Nos.)	Mfg. 11/2022 Exp. 3yrs. Mfg. dt.
10	Framycelin Skin Cream	1 tube	Mfg. 04/2023 Exp. 09/2025
11	Volini Pain Relief Spray	1 tube	Mfg. 12/2022 Exp. 11/2024
12	Burnol	1 tube	Mfg. 05/2022 Exp. 04/2024
13	ORS	1 pkt.	Mfg. 05/2023 Exp. 04/2025
14	Cotton	1 Bundle	Mfg. Jan. 2023 Exp. Dec- 2024
15	Sterile Gauge	20 (small pkts )	Mfg. 2023 Exp. 2026
16	Gauge	1 pkt.	Jan. 2022 Exp. 3 yrs. —dt. of mfg.
17	Gauge	10 pkt. (long rolls)	Mfg. 2023 Exp. 3 yrs. dt. of mfg.
18	Surgical Tape	1 No.	---



Green Ambassadors

## F. ENVIRONMENT POLICY AUDIT

ASPECT	OBSERVATION	RECOMMENDATIONS
Establish a College Environmental Committee that will hold responsibility for the framing, enactment, enforcement and review of the Environmental Policy.	The College has an active Cell for Environmental Monitoring and Green Initiatives comprising of 8 members	The committee may also include a senior management and admin representative, a senior housekeeping staff and few students
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	No Green Officer has been appointed	A Green Officer to be appointed and consulted whenever deemed necessary
Ensure that the Environmental Policy is enforced and clearly visible in common areas of the College	A draft Environmental Policy has been prepared and circulated among staff for comments	1.The environmental policy for the college shall be improved and finalized at the earliest 2. The same shall be accessible to students and placed in common areas of the building
Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings	A Green Audit has not been conducted in the college in the past 3 years	1.Suggestions requiring behavioural changes or systems to be put in place should be implemented within three months of submission of audit report 2. A timeline for other recommendations may be shared with the auditor for approval
Require that every staff and student member recognize their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice		The Environmental Policy as well as Audit report should be circulated to all departments with the college student committees also given a detailed run-through of the same