





DEVI SHARVANI EDUCATION SOCIETY'S V. M. SALGAOCAR COLLEGE OF LAW

Green Audit Report 2023 – 2024



Acknowledgement

The Environment Conservation and Research Organisation (ECRO) would like to thank the V. M. Salgaocar College of Law, Miramar for assigning us with the task of carrying out the Green Audit for the academic year 2023-24. We appreciate the cooperation extended to our team during the entire process.

Our special thanks are due to the college Principal, Dr. Shaber Ali G and the Administrator, Mr. Dnyaneshwar Pednekar for giving us all the support while conducting the audit.

We are also thankful to the Assistant Professors, Mr. Ramrai Naik and Mr. Siddesh Tari for coordinating the entire process and providing valuable information and details of the various initiatives undertaken by the committee.

Special mention needs to be made about all the faculty and non-teaching staff for their assistance and cooperation during the audit process.

Contents

| BACKGROUND | 1 |
|------------------------------|----|
| RELEVANCE OF A GREEN AUDIT | 1 |
| ABOUT THE INSTITUTION | 2 |
| OBJECTIVE OF THE GREEN AUDIT | 3 |
| APPROACH | |
| GREEN COVER | 6 |
| WASTE MANAGEMENT | 9 |
| WATER MANAGEMENT | 10 |
| ENERGY MANAGEMENT | 10 |
| INFRASTRUCTURAL MANAGEMENT | 12 |
| SUSTAINABLE INITIATIVES | 13 |
| RECOMMENDATIONS | 15 |
| CERTIFICATION | |
| | |

BACKGROUND

Green Auditing is usually defined as a systematic evaluation of performance by an establishment, institution, or an enterprise pertaining to factors of compliance with Environment and its management as a step towards achieving sustainability.

The rapid urbanization and economic development at local, regional, and global level has led to several environmental and ecological crisis. 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 carbon dioxide from the environment. Moreover, it is a 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.

In recent time, the Green Audit of an institution has been becoming important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. Many institutions undertake lot of good measures to resolve these problems but are not documented due to lack of awareness.

The processes involved in a typical Green Audit comprises of:

- 1. Waste Management
- 2. Water Management
- 3. Energy Management
- 4. Infrastructural Management

The Green Cover of the college was taken into consideration for a better understanding of the college's connect with nature.



Also, other sustainable initiative(s) undertaken by the college across various departments with the help of the faculty and the students can certainly be highlighted as a "collective effort" in achieving the greater good.

Relevance of a Green Audit

- It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers.
- It aims to analyse environmental practices within and outside of the concerned sites, which will have an impact on the overall eco-friendly ambience of the college.
- · Green auditing promotes financial savings through reduction of resource use.



ABOUT THE INSTITUTION

V.M. Salgaocar College of Law which today features as a respectable and foremost name in the field of legal education in India, was established in the year 1973. The college is centrally nestled in the heart of Goa at Miramar adjoining the capital city, Panaji, yet away from the hustle and bustle of the city thus providing a conducive environment to pursue legal education over a lavish area ad-measuring 7831 square meters. Honors received in the name of Institutional Excellence Award from Society of Indian Law Firms, Community Engagement Awards from Herbert Smith Freehills and the Knowledge Steez Legal Aid Award from Knowledge Steez, Delhi, all stand testimony to the same.



The College offers the Five Year Integrated double degree B.A. LL.B., Three year LLB Degree, the two year post graduate LL.M programme, Ph.D program and a Diploma in Civil Law. There are enough airconditioned classrooms which are spacious, well-ventilated, and well-lit. Provision has

been made of LCD projectors & internet connections in each classroom. The College also has three air-conditioned Staff Rooms, a well-resourced Moot Court Room, a big air-conditioned Conference Hall, a Governing Council Room, a Child Rights Clinic Room, a spacious Canteen, a well-equipped Gymnasium, a separate Book Bank, and other facilities. The college has an independent three-storied library named the 'HIRABAI V. SALGAOCAR LIBRARY' which is well-equipped including online legal databases and a digital library. It is the third largest library in Asia.

The Mission of the College is 'Excellentia Justitia et Humanitas' which means "Excellence in Legal Education, in Pursuit of Justice and Service to Humanity". The College is committed to academic excellence and affords opportunities for knowledge acquisition and adaptation



through training, research, consultancy service to the public, and through outreach activities. V. M. Salgaocar College of Law is the first Law College in India, to secure 'A' grade rating from NAAC in 2005, and yet again in its re-accreditation in 2012. In 2011, the College was conferred the 'INSTITUTIONAL EXCELLENCE AWARD' for its outstanding efforts in imparting legal education and for its commitment in reaching out to the public through its Permanent Legal Aid Cells.

The Vision of the College is "Let Justice be Done Though the Heaven Fall." The College inspires, motivates and challenges the teacher and the pupil alike, to the attainment of



excellence in the field of legal education and emphasizes respect for human dignity and the inculcation of basic values crucial to the legal profession. The College encourages uninhibited democratic ideas and endeavours to translate those ideas for the benefit of the Nation. As a result, the curriculum is carefully chosen, the faculty are dedicated to the cause of promoting access to justice, and students are geared towards community interaction.

This is the legacy of legal education for the benefit the community that has defined VMSCL's reputation and which gives it a cutting edge over the other institutions.

The Salgaocar Law Review, the Contemporary Legal Development Forum, Trial Advocacy, the various Law Clubs as well as the Economic and Innovative forum, and Communication Club, are activities conducted to enrich the learning experience of the students.

Objective of the Green Audit

"To self-assess the college in a systematic way and to identify, quantify, record the components of the environment of the institution."

This exercise will also investigate the measures taken by the college in an optimum utilization of resources available in the campus by following the practices in accordance with the green policy of the nation.

APPROACH

The methodology followed for completing the green audit was simple. The observations were made for:

- 1. The existing green cover,
- 2. The waste management,
- 3. The water management,
- 4. The energy management,
- 5. The infrastructural management,

along with a glimpse of sustainable initiatives along with proposed activities of the educational institution. A complete scenario of the present ecosystem in the college shall be revealed whereby any concerns faced can be dealt with suitable solutions/recommendations.

All the Teachers along with students, non-teaching staff, PTA members, local Biodiversity Management Committee (BMC), and ex-alumni were involved in the audit process giving their contribution in the best possible manner.



Given below is the Green Environment Policy designed and developed by VMSCL for sustainable resource utilisation and conservation of environment within the college.

Green Environment Policy

Objectives:

The broad objective of the Green Initiative policy is to protect and conserve ecological systems and resources within the campus.

- 1. To integrate environmental concerns into policies, plans and programmes for social development and outreach activities like NSS and the Legal Aid Cells of the college.
- 2. To work with all stakeholders and the local community to raise awareness and seek the adoption of environmental good practice and the reduction of any adverse effects on the environment.
- 3. To continuously improve the efficient use of energy and water resources and to reduce consumption and the amount of waste produced, recovering and recycling waste where possible.
- 4. To make the campus plastic free.
- 5. To conduct environmental and energy audits from time to time.
- 6. To minimize the use of paper in administration through having policy for E-governance.

a) Clean Campus Initiatives

V. M. Salgaocar College of Law had pledged to actively coordinate and participate in the cleanliness activities in the college and beyond the campus in accordance with the vision of Swachh Bharat Abhiyan.

In continuance with this Programme, the college follows the following policies:

- 1. Generating mass awareness on cleanliness and hygiene amongst students and staff members by holding regular cleanliness drives.
- 2. Activities under 'Swachh Bharat Abhiyan' will be a key component of all the community work being done by NSS and Legal Aid Cells of the college.
- 3. Staff Members will be encouraged to participate in the cleanliness drive in the college campus on days like Independence Day, Republic Day, and Gandhi Jayanti and so on.
- 4. Events such as poster and slogan competitions, essay writing, spoken word poetry, speeches, skits on 'Swachh Bharat' will be organised.
- 5. Rallies on themes connected with 'Swachh Bharat Abhiyan' in and around the college campus will be conducted to create mass awareness.



- 6. Remove all kinds of waste material like broken furniture, unusable equipment etc.
- 7. Conduct workshops on the 3Rs: Reduce, reusing and recycling of waste.

b) Clean Air Initiatives

The college encourages the students as well as the staff to use public transportation.

Carpooling is done by many of the staff members as well as students while coming to the college. This is an activity that is undertaken to control air pollution and strengthen social interaction. The entry of automobiles inside the campus is restricted to discourage the use of private vehicles.

c) Smoking Free Campus

Smoking and use of tobacco in and around the campus is strictly prohibited. The grievance redressal committee of the college ensures enforcement of the antismoking policy.

d) Infrastructural Initiatives

Energy Saving and Energy Efficient Equipment

VMSCL is committed to install environment-friendly electrical appliances that saves energy and reduce wasteful inefficiencies. The college believes in using cleaner energy such as LED lighting.

Water Conservation through Rainwater Harvesting System

V.M. Salgaocar College has also been practicing rainwater harvesting. This practice helps in the replenishment and recharge of the groundwater.

Waste Management Processes

The College is dedicated to reduce and manage the waste generated by the college campus. For these following measures have been undertaken by the team:

- 1. Solid Waste Management by engaging itself with the 3Rs of environment friendliness (Reduce, Reuse and Recycle).
- 2. Collecting paper waste produced on campus and collaborating with scrap dealers for recycling of the same.
- 3. Reduce use of paper by supporting digitization of attendance and internal assessment records.
- 4. Reduce requirement of printed books by updating the e-books and e-journals collection of the college library. For this the College has subscribed to Lexus Nexus, N-Lib, KNimbus, Goa Kaydo which gives digital access to the books.



- 5. Encourage the students and teachers to use emails for assignment submissions.
- From time to time the college organises workshops for students on solid waste management.
- 7. Continued employment of a caretaker to take immediate steps to stop any water leakage through taps, pipes, tanks, toilet flush etc.
- 8. E-Waste Management by collecting e-waste on regular intervals and giving it to ewaste recycling companies to get electronic waste recycled.

Plastic-Free Campus

In view of the Government of India's resolution to ban all single use plastics due to the hazardous impact of plastic use and pollution, the college administration has strictly banned the use of single use plastics in its premise to make it a 'Plastic Free Campus'









Green Cover

The institution is situated at Miramar, Panjim, North Goa District of the state of Goa. The famous Miramar beach is located within a five (5) minutes' walk from the college. However, being in a complete urban setup, one could locate quite a few native biodiversity (flora/fauna) thriving in and around the institution. A compilation of the biodiversity noted within a radial range of 2kms of the institution is included after a preliminary survey and an interaction with the college students, faculties, as well as the neighbourhood.

Some of the flora observed in and around the campus are as follows:



| Sr. No. | Common Name/Local Name | Scientific Name |
|---------|------------------------------|----------------------------|
| 1. | Crown Flower/Rui | Calotropis gigantea |
| 2. | Indian Gooseberry/Awla | Phyllanthus emblica |
| 3. | Chirata/Kirayte | Swertia |
| 4. | Turmeric/Halad | Curcuma longa |
| 5. | Holy Basil/Tulsi | Ocimum tenuiflorum |
| 6. | Jasmine/Juhi | Jasminum auriculatum |
| 7. | Mango/Aamo | Mangifera indica |
| 8. | Jackfruit/Panas | Artocarpus heterophyllus |
| 9. | Tamarind/Chinch | Tamarindus indica |
| 10. | Coconut/Nall | Cocos nucifera |
| 11. | Banyan Tree/Vad | Ficus benghalensis |
| 12. | Cluster Fig/Rumad | Ficus racemosa |
| 13. | Guava/Peru | Psidium guajava |
| 14. | Indian jujube/Bor | Ziziphus mauritiana |
| 15. | Indian Almond/Badam | Terminalia catappa |
| 16. | Common Leea/Jino | Leea indica |
| 17. | Blackboard Tree/Saton | Alstonia scholaris |
| 18. | Monkey Pod Tree/Raintree | Samanea saman |
| 19. | Show-flower Plant/Dasan | Hibiscus rosa-sinensis |
| 20. | Bermuda Grass/Durva | Cynodon dactylon |
| 21. | Okra/Lady's Finger/Bheno | Abelmoschus esculentus |
| 22. | Amaranth/Tamdi Bhaaji | Amaranthus |
| 23. | Aloe/Kate-kavar | Aloe vera |
| 24. | Pinwheel Flower/Ananta | Tabernaemontana divaricata |
| 25. | West Indian Lantana/Ghanyari | Lantana camara |
| 26. | Neem/Kodu-limb | Azadirachta indica |
| 27. | Banana/Keli | Musa paradisiaca |
| 28. | Frangipani/Dhavo chafo | Plumeria |
| 29. | Curry tree/Karbil | Murraya koenigii |
| 30. | Fishtail Palm/Bhillamad | Caryota urens |
| 31. | Indian Mast Tree/Ashok | Polyalthia longifolia |
| 32. | Lemongrass/Ganjan | Cymbopogon |
| 33. | Malabar Nut/Adulsa | Justicia adathoda |
| 34. | Touch-me-not/Lajali | Mimosa pudica |
| 35. | Arecanut/Supari | Areca catechu |
| 36. | Drumstick/Mhaska shango | Moringa oleifera |
| 37. | Papaya | Carica papaya |
| 38. | West Indian Jasmine/Pitkoli | Ixora |
| 39. | Croton/Shobhechi | Croton |
| 40. | Snake Plant | Dracaena trifasciata |
| 41. | Corn/Mokko | Zea mays |
| 42. | Chilli/Mirsango | Capsicum annuum |



Commonly observed birds in and around the college campus are as follows:

| Sr. No. | Common Name | Scientific Name |
|---------|----------------------------|---------------------------|
| 1. | Indian Cormorant | Phalacrocorax fuscicollis |
| 2. | Indian Pond Heron | Ardeola grayii |
| 3. | House Crow | Corvus splendens |
| 4. | Malabar Grey Hornbill | Ocyceros griseus |
| 5. | Oriental magpie-robin | Copsychus saularis |
| 6. | Common Myna | Acridotheres tristis |
| 7. | Rock Dove/Blue Rock Pigeon | Columba livia |
| 8. | Red-whiskered Bulbul | Pycnonotus jocosus |
| 9. | Brahminy Kite | Haliastur indus |
| 10. | Black Kite | Milvus migrans |

Commonly observed insects in and around the college campus are as follows:

| Sr. No. | Common Name | Scientific Name |
|---------|--------------------------------|-----------------------|
| 1. | Common Evening Brown Butterfly | Melanitis leda |
| 2. | Common Lime Butterfly | Papilio demoleus |
| 3. | Asian Weaver Ant/Humlo | Oecophylla smaragdina |
| 4. | Two-striped Jumping Spider | Telamonia dimidiata |

Commonly observed reptiles in and around the college campus are as follows:

| Sr. No. | Common Name | | Scientific Name |
|---------|-------------------------------|--|----------------------|
| 1. | Oriental Garden Lizard/Sheddo | | Calotes versicolor |
| 2. | Common Bronzeback Tree | | Dendrelaphis tristis |
| | Snake/Pasco | | |

Commonly observed mammals in and around the college campus are as follows:

| Sr. No. | Common Name | Scientific Name |
|---------|-------------------------------|----------------------------|
| 1. | Indian Palm Squirrel/Chaani | Funambulus palmarum |
| 2. | Indian Flying Fox/Vhodlo pako | Pteropus giganteus |
| 3. | Asian Palm Civet/Katandar | Paradoxurus hermaphroditus |

The sheer presence of Banyan trees right at the entrance of the college gate delivers various ecosystem services either directly or indirectly to the institution and its environment. The college management with the help of concerned authorities and residents should make efforts to declare such trees as "Heritage Trees" to prevent them from being cut down in the name of development soon.



Waste Management

The institution considers waste segregation at source as an utmost priority. Two dustbins with trash bags have been kept in each classroom and at strategic locations around the college for students and faculties to dump the trash accordingly. Dependence on hard copies for notices, assignments etc. additionally contributing to dry solid waste is reduced largely by encouraging all to go digital.

The Housekeeping collects all the dry waste trash bags daily in the college while the municipality picks up the dry waste generated from the institution collectively. To cater to the effective disposal of the wet waste generated from the canteen and the leaf litter around the college, a composting unit has been setup to provide organic compost which is added to the plants and trees present in the college campus.











Water Management

There are 2 overhead water tanks with capacities of 10000 Ltrs. and 1000 Ltrs. respectively, whereby the water from the well present in the college campus is pumped into these tanks and utilised as per requirement.

The college also considerably derives its water needs from the rainwater harvesting system installed in the college infrastructure. The rainwater is naturally collected through the pipelines placed on the walls and is collected in an underground recharge well which is later used in preferably watering the plants and trees in the college campus.

Water saving signages have been placed near washrooms as a reminder to all the visitors. Drinking water is dispensed through 3 water purifiers placed in the college.

A register is maintained at the college office to report leakages in water faucets in the college.

Following are the units of water consumed in the academic year 2023-24 by VMSCL:

| Sr. No. | Date | Units Consumed |
|---------|--------------|-----------------------|
| 1. | 22 June 2023 | 90 |
| 2. | 22 Aug 2023 | 146 |
| 3. | 07 Oct 2023 | 141 |
| 4. | 28 Dec 2023 | 95 |
| 5. | 05 Mar 2024 | 135 |





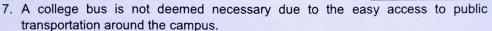
Energy Management

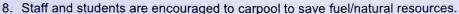
The college gets its supply of electricity from the Goa Electricity Department (GED). Some impressive measures to curb energy consumption have been taken up in the college campus in the following manner:

 There are 15 external LED lamps operating on solar energy along the periphery of the campus.



- The college has almost completely shifted from regular tubes to LED bulbs and tubes.
- 3. All new air conditioners installed in the campus are BEE 3 star rated.
- 4. Motion sensor-based energy efficient lighting have been installed in the college common rooms.
- 5. Save energy signages and reminders to switch off appliances are placed at every classroom, staffroom, office, and conference area.
- 6. All computer systems in the campus are run on power saving mode when in use and switched off when not in use.

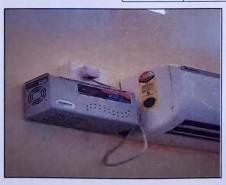


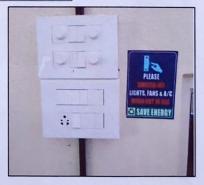


- 9. Ample ambient sunlight is available within the classrooms due to all being located around a central open courtyard.
- 10.15 amp charging sockets have been provided for charging of EVs in the parking area.

Following are the units of electricity consumed in the academic year 2023-24 by VMSCL:

| Sr. No. | Date | Units Consumed |
|---------|--------------|-----------------------|
| 1. | 09 June 2023 | 3967 |
| 2. | 22 Aug 2023 | 2147 |
| 3. | 10 Oct 2023 | 3964 |
| 4. | 15 Dec 2023 | 2609 |
| 5. | 14 Feb 2024 | 2758 |





The college management is presently in the planning phase of relocating the existing campus from Miramar to Kadamba Plateau. Hence, setting up of solar panels for partial/complete dependency on renewable sources of energy has been put on hold temporarily.



Infrastructural Management

An overview of VMSCL establishments along with important stats in the present infrastructure is given below:

Academic Year: 2023 - 2024

Classrooms - 18; Moot Court - 01; Conference Hall - 01; Sports Room - 01; Gym -

01; Library - 01; Computer Lab - 01; Canteen - 01

Staffrooms - 03; Washrooms - 09

Total No. of Students - 1007

Total No. of Faculties: Full-time - 23; Contractual - 07; Visiting - 18

Total No. of Non-teaching Staff - 26

Indoor plants line up in the passages of VMSCL thus improving the aesthetics of the infrastructure.

The classrooms are quite spacious with all essential amenities required for teaching and learning effectively.

The washrooms are hygienic wherein the taps/faucets are in a good working condition.











SUSTAINABLE INITIATIVES

VMSCL has been on frontline in terms of executing numerous activities and programs that have been held from past years through collaborations with the Goa Forest Department, Goa State Biodiversity Board, Goa State Pollution Control Board, local BMCs, and other state bodies likewise.

The institution since its inception in 1973 has been instrumental through the initiatives/campaigns/activities conducted or participated in by the institution over the years.



College NSS Cell regularly conducts social-work related activities such as tree plantation, clean-up drive, e-waste collection, etc. throughout the year.

The College has been influential in propagating a sense of responsibility amongst public towards environment conservation by adopting steps such

as switching to Electric Vehicles (EVs) from fossil fuel-based vehicles by some of the faculties thereby **reducing the carbon footprint** significantly.

Selling of newspapers and paper waste to scrap-dealers for reuse or recycling.

Students are encouraged to inculcate eco-friendly habits such as switching off lights, fans etc. when not in use and using water judiciously.

Some of the glimpses from such activities involved are displayed below:



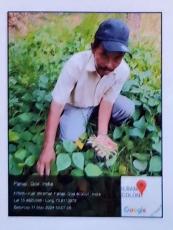






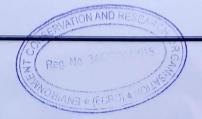


The "Green Initiative" of V. M. Salgaocar College of Law is a successful project that has transformed the campus into an environmentally sustainable space. Through this project, the college has planted varieties of flowers, fruits, and vegetables throughout the campus. The plants have not only made the campus more beautiful but also helped in purifying the air and creating a healthy environment. The practice is thereafter sustained by the management, principal, staff, and students, who have worked dedicatedly for years towards this drive. Additionally, this initiative has generated a new source of income by selling fruits and vegetables to staff and others.









RECOMMENDATIONS

- 1. Burning of any materials in the college campus must be strictly prohibited due to its ill effects on the environment and from a safety perspective as well.
- Basic recycling of plastic and paper should be encouraged in the college to minimise the impact on the environment.
- 3. Vermicomposting could be an effective and sustainable alternative given the amount of leaf litter generated in the college during summers for adding it to the kitchen garden and other agricultural crops grown on the campus.
- Testing of drinking water parameters may be undertaken quarterly through a NABET Accredited Laboratory.
- Mulching and drip irrigation may be explored for the agricultural crops grown in the campus.
- 6. In case of relocation of the college, solar panels must be installed on all new buildings for energy self-generation and utilisation.
- Motion sensor-based energy efficient lighting should be installed in other setups of the college as well.
- 8. Painting of the infrastructure along with regular maintenance work should be undertaken to ensure longevity.
- 9. Planting of more fruit-bearing/shade giving indigenous trees is recommended to cover up some of the sunlit areas in the college and provide respite from hot summers.
- 10. Awareness seminars for students and faculties on topics such as Urban Biodiversity and Energy Conservation may also be considered.

CERTIFICATION

This is to certify that the following educational institution has undergone a Green Audit as a part of annual NAAC re-accreditation cycle.

Name: V. M. Salgaocar College of Law, Miramar - Panjim, Goa, India - 403001

Date: 25/04/2024

Green Audit Inspected, Verified, and Endorsed by:

Mr. Laxmikant Desai; M.Sc. (Environment Science & Technology)

Co-founder & Secretary

Environment Conservation and Research Organisation (ECRONOMICS)