

GREEN AUDIT REPORT

(2020-2021)

THE TAMIL NADU Dr. AMBEDKAR LAW UNIVERSITY

'Poompozhi', 5, Dr. D.G.S. Dhinakaran Salai, Chennai - 600 028



Under the guidance of

ROOPMATHI ANAND ARCHITECT

▪ ARCHITECT ▪ INTERIOR DESIGNER ▪ VALUER

ROOPMATHI ANAND ARCHITECTS

ARCHITECTS, INTERIOR DESIGNERS & LANDSCAPE

No:1, 13th STREET, NANDANAM EXTENSION,
CHAMBERS ROAD, CHENNAI - 600 035.

PHONE: 2431 2644 / 2431 2655

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- ❖ Team of colleagues

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Executive Summary

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will lead for sustainable development.

The Tamil Nadu Dr.Ambedkar Law University, is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the 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: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit were based on the identified risks.

1. Introduction

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.

Green audit is assigned to the criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India which declares the institutions as Grade A, B or C according to the scores assigned during the accreditation.

About the College

Tamil Nadu Dr. Ambedkar Law University was established by the Government of Tamil Nadu by an Act of State Legislature [Act No.43 of 1997] for the advancement and dissemination of knowledge in learning, teaching and research in the field of law. His Excellency Shri. K.R. Narayanan, former President of India inaugurated it on September 20, 1997, and the University started from October 3, 1997 onwards. The University was named after the architect of the Indian Constitution Dr. B.R. Ambedkar. It strives hard to develop in the students and research scholars, a sense of responsibility to serve the society in the field of law by developing skills in advocacy, legal services, legislation and law reforms through better educational instruction and research facilities.

The University has been recognized by the University Grants Commission (UGC) under Sec. 2f and 12b of the UGC Act and also granted with approval by the Bar Council of India for the courses offered by this University. The University is also a member of the Association of Indian Universities (AIU), Association of Common Wealth Universities, U.K. Indian Institute of Public Administration, New Delhi, Indian Law Institute and Sastry Indo Canadian Institute, New Delhi.

The School of Excellence in Law established by the University at its campus since 2002 has been modelled on the lines of other National Law Schools in the country and offers three year as well as five year integrated undergraduate courses in Law. The University is offering Postgraduate Programme in nine different specializations in Law under Choice Based Credit System (CBCS) Regulations. The University has a Research Centre, which offers doctoral programme as well as inculcating research in diverse areas of law. Within a short tenure, the School of Excellence in Law (SOEL) has emerged as one of the premier Law Schools in the country. Many students from School of Excellence in Law have been appointed as judicial officers, Indian Administrative Service (IAS), Group I Services of the State Government of Tamil Nadu and also as Judge Advocate General in India (JAG) in Indian Army Service. The students of the School of Excellence in Law have proved their intelligence by bringing laurels to the institutions not only by winning in the Moot Court Competitions both at the National and International Level, but also, in other activities like, Sports, Cultural, Debates, Oratorical, Essay, NCC activities at national level, Legal Aid Services, etc.

This University has been recognized by the University Grants Council under 12 (B) of the UGC Act and approved by the Bar Council of India. It situated in the heart of the city and has campus of 15 acres, which consists of which consist of class rooms, administrative buildings, canteen buildings, Post Office, Bank, U.G. Building, U.G. Annex Building, P.G. Building, Central Library Building, Stadium Gallery, hostel buildings, playground, auditorium, well equipped library, computer lab etc.

There are more than Twelve Thousand Students pursuing their law degrees through its Affiliated Law Colleges, in addition to School of Excellence in Law. The Tamil Nadu Dr. Ambedkar Law University as a nodal agency has been admitting the students for all the Government Law Colleges and a Private Law College viz. Saraswathi Law College at Tindivanam. It has got the appreciation from the High Court of Chennai for its transparent admission process in the previous years.

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The College has an N.S.S. units sanctioned by the university, which are doing tremendous job through organizing activities like blood donations, tree plantations, health check-up, personality development etc. are conducted by this unit. The N.S.S. Unit organised Rally on Legal Literacy, Special Camps, Slogan Contest, International Yoga Day Celebration, Cleaning Activities, Swatch Bharat, Distributing Nilavembu drinking water to increase immunity among faculty and students, Consumer awareness Rally in the adopted village and free legal aid service, Awareness programme on Road Safety, Awareness Rally on FIT INDIA PROGRAMME, Awareness Programme on Covid-19 etc.

The college has **NCC Unit and YRC** sanctioned by the University, which are also having various activities.



2. 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 aware students to real concerns of environment and its Sustainability.
- To secure the environment and cut down the 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.

3. Methodology

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, 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 in the campus:

- Water management
- Energy Conservation
- Waste management
- E-waste management
- Green area management

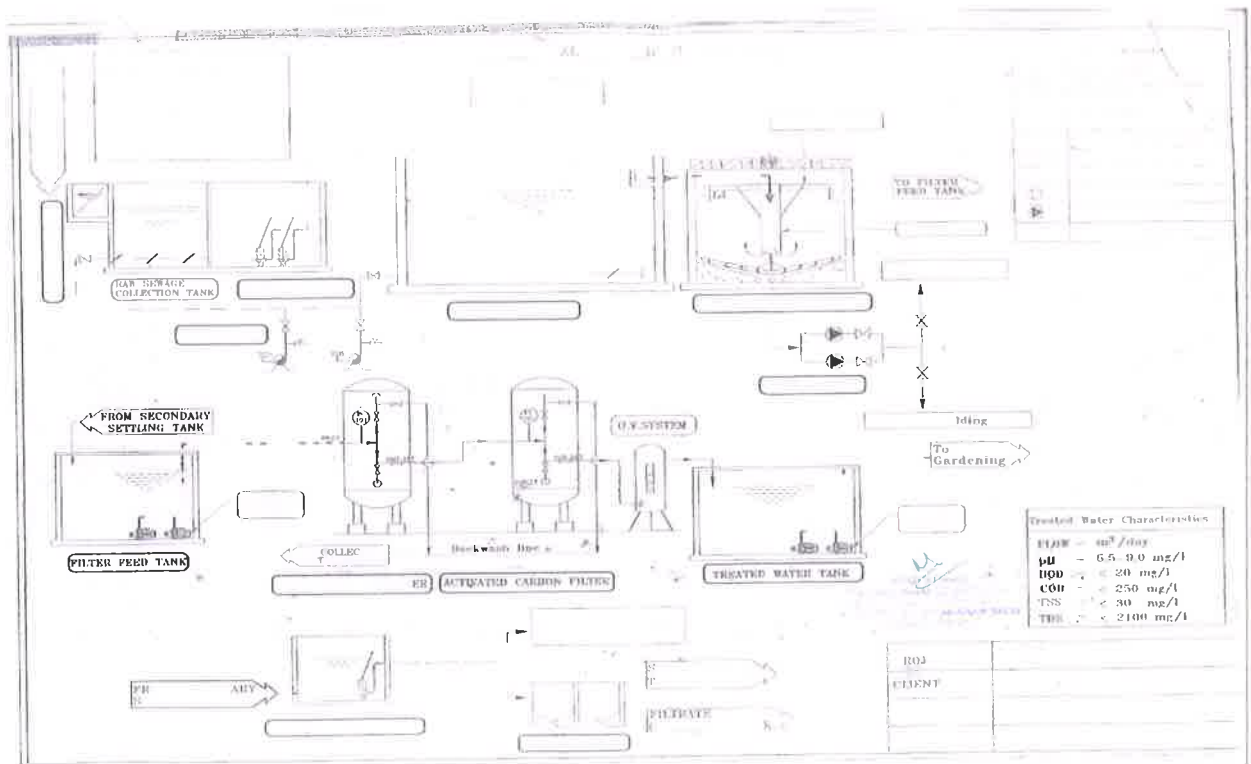
4. Observations and Recommendations

Water Use

This indicator addresses water consumption, water sources, irrigation, storm water, appliances and fixtures. A water audit is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

a) Observations

The study observed that the Water tanker supply system is the major sources of water in college and both the hostels. Water is used for drinking purpose, toilets and gardening. The waste water from the STP water purifier is used for gardening purpose. Purified Drinking Water is used for drinking purpose. During the survey, no loss of water is observed, neither by any leakages, nor by over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 29,000 L/day, which include 28,000 L/day for domestic, gardening purposes and 1,000 L/day for drinking purpose. Rain water harvesting units are also functional for recharging ground water level.



b) Recommendations

- In campus small scale/medium scale/ large scale reuse and recycle of water system is necessary.
- Minimize wastage of water and use of electricity during water filtration process, if used, such as RO filtration process and ensure that the equipment's used for such usage are regularly serviced.
- Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. they are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations.
- Gardens should be watered by using drip/sprinkler irrigation system to minimise water use.

Energy Use and Conservation

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

a) Observations

Energy source utilized by the campus is electricity only. Total average energy consumption is determined as **2814 KWH/month**. The entire campus including common facility centres are equipped with LED lamps and LED tube lights, except at few locations. Besides this, **photovoltaic cells are also installed in the campus as an alternate renewable source of energy**. Computers are set to automatic power saving mode when not in use. Also, campus administration runs **switch-off drill on regular basis**.

b) Recommendations

- In campus premises electricity should be shut down from main building supply after occupancy time, to prevent power loss due to eddy current.
- Support renewable and carbon-neutral electricity options on any energy purchasing consortium, with the aim of supplying all college properties with electricity that can be attributed to renewable and carbon-neutral sources.
- It is preferable to purchase electricity from a company that invests in new sources of renewable and carbon-neutral electricity.
- Installation of LED lamps instead of CFL and replacing the old tube lights with the new LED tubes.
- 5-star rated Air Conditioners, Fans and CFLs should be used.
- Cleaning of tube-lights/bulbs to be done periodically, to remove dust over it.

Waste Generation

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. and recycling. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus.

a) Observations

Waste generation from tree droppings and lawn management is a major solid waste generated in the campus. The waste is segregated at source by providing separate dustbins for Bio-degradable and Plastic waste.

Single sided used papers reused for writing and printing in all departments

and recently both side printing is carried out as per requirements. The waste generated by newspapers 300kg/year, magazine 280kg/year and of cartons is 20kg/year. Very less plastic waste (0.1Kg/day) is generated by the department, office, garden etc. but it is neither categorized at point source nor sent for recycling. Metal waste and wooden waste is stored and given to authorized scrap agents for further processing.

The solid waste is collected by the municipal corporation and disposed by their methods.

b) Recommendations

- Reduce the absolute amount of waste that is produced from college staff offices.
- Make full use of all recycling facilities provided by City Municipality and private suppliers, including glass, cans, white, coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.
- Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated.
- Important and confidential papers after their validity to be sent for pulping.
- Vermicomposting should be adopted on at least 300 sq. ft. of land.

E-Waste Generation

E-waste can be described as consumer and business electronic equipment that is near or at the end of its useful life. This makes up about 5% of all municipal solid waste worldwide but is much more hazardous than other waste because electronic components contain cadmium, lead, mercury, and Polychlorinated biphenyls (PCBs) that can damage human health and the environment.

a) Observations

E-waste generated in the campus is very less in quantity. Administration

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conducts the awareness programmes regarding E-waste Management with the help of various departments. The E-waste and defective item from computer laboratory is being stored properly. The institution has decided to contact approved E-waste management and disposal facility in order to dispose E-waste in scientific manner.

b) Recommendations

- Recycle or safely dispose of white goods, computers and electrical appliances.
- Use reusable resources and containers and avoid unnecessary packaging where possible.
- Always purchase recycled resources where these are both suitable and available.

Green Area

This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programmes.

a) Observations

Campus is located in the vicinity of many trees (species) to maintain the bio-diversity. Various tree plantation programs are being organized at college campus and surrounding villages through NSS (National Service Scheme) unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various type of indigenous species of ornamental and medicinal wild plant species.

Seed bowls were prepared and planted by NSS unit and students of the college.

This college has the following trees in its campus.

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Sl.No.	Trees and Plants in the campus		No.
1	Portia Tree	பூவரசன் மரம்	15
2	Guava Tree	கொம்பள மரம்	07
3	Java Plum	நாவல் மரம்	20
4	Pipal Tree	அரச மரம்	16
5	Almond Tree	பாதாம் மரம்	18
6	Honey Tree	தேன் மரம்	27
7	Margosa Tree	வேப்ப மரம்	71
8	Moringa / Drumstic Tree	முருங்கை மரம்	03
9	Mango Tree	மளமரம்	05
10	Arecanut Tree	பாக்கு மரம்	08
11	Samanea Saman	காட்டுவாகை மரம்	77
12	Pongamia Tree	புங்கை மரம்	49
13	Bundle Thorn	காட்டுச் செடி	19
14	Arecanut Plant	பாக்கு செடி	28
15	Plantain Tree	வாழை மரம்	02
16	Queen's Plant	குயின்ஸ் செடி	24
17	Henna	மருதாணி	03
18	Fig Tree	அத்தி மரம்	02
19	Gooseberry Tree	தெல்லி மரம்	01
20	Asoka Tree	அசோக மரம்	02
21	Bamboo Tree	மூங்கில் மரம்	40

b) Recommendations

- Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Assign scientific names to the trees.
- Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
- Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy.
- Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- Celebrate every year 5th June as 'Environment Day' and plant trees on

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this day to make the campus more Green.

- Indoor plantation to inculcate interest in students, Bonsai can planted in corridor to bond a relation with nature.
- Green library should be established.



5. Conclusions

Considering the fact that the institution is predominantly a law college, there is significant environmental research both by faculty and students. The environmental awareness initiatives are substantial. The installation of rain water harvesting system is noteworthy. Besides, environmental awareness programmes initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development.

As part of green audit of campus, we carried out the environmental monitoring of campus including Illumination and Ventilation of the class room. It was observed that Illumination and Ventilation is adequate considering natural light.



Ten Commandments of Sustainability

Pravals L

