



Dr. Bhimrao Ambedkar University, Agra

(NAAC A+ Accredited)

Sustainable Development Report



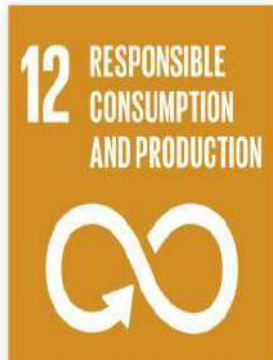
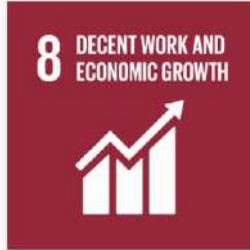
WHAT ARE THE SUSTAINABLE DEVELOPMENT GOALS?

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

Through the pledge to Leave No One Behind, countries have committed to fast-track progress for those furthest behind first. That is why the SDGs are designed to bring the world to several life-changing 'zeros', including zero poverty, hunger, AIDS, and discrimination against women and girls.

Everyone is needed to reach these ambitious targets. Creativity, know-how, technology, and financial resources from all of society is necessary to achieve the SDGs in every context





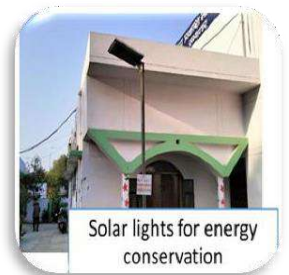
Students' Environment Club Activities



Solar cells & Renewable Energy



Waste to wealth



Solar lights for energy conservation

The Practice

The University has a focused approach for sustainable green practices on the campus, geared towards implementing environmentally conscious activities, having spin-off short and long term financial benefits. The University admissions, administration, finance, attendance, examinations are fully digitized, reducing the use of paper. The University 'Waste Management Policy' provides for segregation of solid waste into biodegradable waste (wet waste); non-biodegradable waste (dry waste) and hazardous waste. The wet waste is converted as compost, the dry waste is segregated into the recyclable and non-recyclables for disposal. The food and wet waste is processed/ decomposed by an on-campus Compost Plant. Rainwater harvesting system of the University ensures reduction, recycle and reuse of water. There is a 400KLD capacity STP and 30KLD ETP for treating effluents; the recycled water is used for horticulture and flushing system, and the sludge for manure. Biomedical waste is disposed-off in accordance with the statutory norms. Due process is also followed in handling hazardous chemicals and radioactive waste management. The e-waste management involves e-waste segregation and disposal through empaneled vendors following government guidelines. For energy conservation, energy efficient appliances are used to reduce radiation, heat and expenditures. A solar power plant has been set up. Sensor-based switches have automated the on/off of lights, increasing the optimum use of energy. Reduce, recycle and reuse policy is implemented in case of water. For irrigation, sprinkler and drip irrigation system is used, wherever feasible. University has procured automated water spray vehicle to control the dust in the campus. Battery operated vehicles have been introduced to move around the campus. Used paper is reused. Massive plantation has resulted in more than 4000 plants succeeding. Students through Students' club, NSS and Eco-Task Force actively engage in green practices and thereby safeguarding the environment. Landscaping and attractive greenery also serve the purpose of reduced pollution. Complete ban on smoking and burning any material on the campus has been imposed. The University has embedded three-credit course on green practices in curricula and its relevance for conservation of natural resources and environment. Community Connect course also contributes in spreading awareness on issues such as pollution and the measures to contain the same by the community. The University has an undergraduate programme in environmental sciences and a Centre of Excellence on Solar Cells and Renewable Energy which is working on super capacitors for using energy resources more effectively.

Evidence of Success

The energy audit carried out by the University recently has brought out substantial savings on expenditure due to various energy saving practices adopted. The Solar PV energy, solar geyser system and replacement of tube lights (4200) with LEDs, etc. have led to annual electricity saving of more than 14.54 lakhs KWh/per year. The large scale plantation has perceptibly brought down temperature on the campus. Similarly, rain water harvesting measures and conservation of water, structured waste management, etc., have contributed to the overall improvement in the maintenance and up keep of the University at a lower operational cost. Digitization of processes involved in admission, attendance, administration and examination, etc., has facilitated handling of work in a comparatively much faster and accurate manner, besides resulting in savings on account of purchase of papers, etc. Increasing participation of students in environmental protection practices is a positive sign for a clean and green future. It is expected that the future generation will benefit from improved air and water quality, fewer landfills and more renewable energy resources, leaving a much smaller carbon footprint

Solar Energy

The university's commitment to sustainable development shines through its integration of solar power systems into its infrastructure. A substantial portion of the power demand is met by the energy generated through solar cells. It's imperative to minimize reliance on conventional energy sources and transition towards renewable resources. Currently, the university boasts two different capacities of solar cells, producing 60 kWh at the Khandari Campus and 70 kWh at the Chhallesar Campus.

University Solar Energy System



Sensor-Based Energy Conservation in University

e-Waste Management

With technological advances, the demand for electronic gadgets and usage is increasing in a significant manner. These electronic goods impact our society in terms of providing comfort in our daily lives. However, they have become a major health and environmental hazard. Therefore, an appropriate approach is required for E-waste management and disposal. In this university, electronic waste (e-waste) is generated mainly from four sections: the Computer Science department, the administrative office, the Account office and the library. The Environment, Forest and Climate Change Ministry, Government of India introduced the E-Waste Management Rules in 2016 which replaced the earlier rules of 2011, E-waste Management and Handling. It highlights that the producers must be accountable for E-waste collection and E-waste exchange which extends the producer's responsibilities. SCOPE E-waste broadly covers various electronic products such as computers, mobile phones, digital music recorders/players, refrigerators, washing machines, televisions (TVs), etc. Some of them contain toxic substances/chemicals like lead, zinc, barium, cadmium, mercury, beryllium, BFR, polyvinyl chloride and phosphor compounds that are released into the atmosphere and can hurt human health and the environment if not handled properly. Serious repercussions may arise for those in proximity to places where E-waste is recycled without proper recycling and disposal procedures.

AIM AND OBJECTIVES

The following listed items are considered-

- Centralized data processing instruments, Mainframes, Minicomputers, Central Processing Units (CPUs), Input and output devices, Laptop, Desktop, Notepad.
- Printers, Printer cartridges, Copying Equipment.
- Electrical and electronic typewriters, Teleprompter terminals, Facsimiles, and Telex machines.
- Telephones, Cordless telephones, Cellular telephones, Answering systems.
- Television sets are based on Liquid Crystal Display (LCD) and Light Emitting Diode (LED) technology.
- Air-conditioners (excluding centralized air-conditioning plants)
- Fluorescent lamps, lamps which contain mercury, and other Consumer electrical and electronic items.

The disposal of such items is treated on a priority basis and necessary action is taken by the College accordingly. The policy proposes the following solutions for E-waste management:

- Providing information about e-waste prices in the market.
- Promoting electronic E-waste recycling.
- Upskilling informal E-waste recycling workforce.
- Deploying easily applicable and successful recycling technologies.
- Developing effective methods and schemes to stop various forms of E-waste.

ACTION PLAN

The Ministry of Environment, Forest, and Climate Change launched a web based application in May 2016. The purpose is to implement the concept of a paperless/ green office and track the movement of hazardous waste which will also help in ensuring its proper management. The College should constitute a committee that goes along with the following procedure:

Step 1: Apply for authorization to the State Pollution Control Board (SPCB) in Form-I. Three copies of the form should be sent to the SPCB within 120 days from the date of commencement of manufacture.

Step 2: The following documents are required to be attached to the form:


- a) Certificate of registration obtained from the District Industries Centre (DIC)
- b) Certificate of installed capacity of plant and machinery issued by the DIC
- c) An undertaking affirming that:

- Environmentally sound technologies in the manufacture of electronic products have been used by the applicant.
- Sufficient technical competence has been possessed to handle the generated E-waste.
- The applicant can provide the equipment needed to forward the E-waste to the warehouse of a recycler or dismantler.
- The applicant is willing to comply with the guidelines specified by the Central Pollution Control Board (CPCB) relating to the generation of E-waste.


Step 3: Fees should be paid for field inspection. There is no need to pay

any fees along with the application. The payable amount may vary from state to state. Step 4: The SPCB will grant authorization after conducting the field inspection. The authorization is valid only for the period and place mentioned in the certificate issued by the SPCB. The authorization should be granted or refused within 120 days. An authorization, once granted, is valid for five years. Step 5: An internal file regarding E-waste management should be maintained according to Form-2 which deals with maintaining records of e-waste handled/ generated. There is no need to share this file with SPCB. Step 6: The amount of waste recycled during the year is mentioned in Form 3 regarding filling annual returns and should be submitted within the given time frame.

E-waste management refers to the responsible handling, disposal, and recycling of electronic waste, or e-waste, which includes discarded electronic devices like computers, smartphones, televisions, and other electronic gadgets. E-waste management is crucial due to the rapid proliferation of electronic devices and their potentially harmful environmental impact if not disposed of properly.



डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा
(पूर्ववर्ती: आगरा विश्वविद्यालय, आगरा)



कार्यवृत्त

विश्वविद्यालय के आवासीय संस्थानों/विभागों में अप्रयुक्त ई-वेस्ट सामग्री के निस्तारण हेतु गठित समिति की बैठक दिनांक 28.10.2022 का कार्यवृत्त

मा० कुलपति जी के आदेश दिनांक 25.10.2022 के द्वारा गठित e-waste material समिति की बैठक दिनांक 28.10.2022 को निदेशक कक्ष, दाऊ दयाल संस्थान, खंदाशी परिसर में पूर्वाह्न 01.00 बजे आहूत की गयी।

बैठक में निम्नलिखित सदस्य उपस्थित हुये:-


1. प्रो० शरद उपाध्याय, निदेशक, दाऊ दयाल संस्थान, खंदाशी।
2. प्रो० मनु प्रताप सिंह, निदेशक, आई०ई०टी०, खंदाशी।
2. प्रो० अनिल गुप्ता, प्रभाषी, विश्वविद्यालय कम्प्यूटर केन्द्र, खंदाशी।
3. सहायक कुलसचिव, प्रशासन।

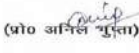
सर्वप्रथम बैठक में समन्वयक द्वारा सभी सदस्यों का स्वागत किया गया तदोपरान्त बैठक प्रारम्भ किये जाने का अनुरोध किया।

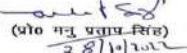
बैठक में विश्वविद्यालय के विभिन्न परिसरों के संस्थानों/विभागों में भारी मात्रा में अप्रयुक्त e-waste material (कम्प्यूटर, फोटोस्टेज मशीन, माइक, माउस, फ्लिपर, लाइट, यू०पी०एस०, ए०सी०, इन्वर्टर, टी०वी० इत्यादि) के निस्तारण किये जाने हेतु निम्नलिखित सुझाव/निर्णय लिये गये है:-

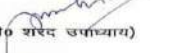
1. सर्वप्रथम बैठक में निर्णय लिया गया कि e-waste material के निस्तारण हेतु विशाल ट्रेडिंग कम्पनी, आगरा द्वारा प्राप्त कराये गये प्रस्ताव के संदर्भ में विशाल ट्रेडिंग कम्पनी, आगरा एवं डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा के साथ अनुबंध (MoU) करने पर सहमति प्रदान की गयी।
2. विशाल ट्रेडिंग कम्पनी, आगरा एवं विश्वविद्यालय के मध्य होने वाले MoU का प्रस्ताव सर्वसम्मति के साथ तैयार किया गया। (प्रस्ताव संलग्न)
3. समिति के द्वारा यह भी निर्णय लिया गया कि विश्वविद्यालय के आवासीय परिसरों में जो ई-वेस्ट सामग्री एवं सोल्विड वेस्ट सामग्री अप्रयुक्त रूप से रखी है जिसके निस्तारण हेतु विशाल ट्रेडिंग कम्पनी एवं डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा के मध्य हुये MoU के अनुसार निस्तारण कराया जाये।

उपरोक्त के क्रियान्वयन हेतु मा० कुलपति जी से अनुमोदन प्राप्त किया जाना भी उचित होगा।


 सहायक कुलसचिव,
 प्रशासन


 (प्रो० अनिल गुप्ता)


 (प्रो० मनु प्रताप सिंह)
 28/10/22


 (प्रो० शरद उपाध्याय)

approved
 Ashu Ka -
 28/10/22

E-waste management committee report



उत्तर प्रदेश UTTAR PRADESH

GB 386000

AGREEMENT

This agreement was made on July 11, 2023, between Registrar Dr. Bhimrao Ambedkar University, Agra a UP Government University, and M/s Vishal Trading Company, Agra (U.P.) 282005.

AND

M/s Vishal Trading Company, a firm registered under GST. GSTIN is 09DWVPS1919E1ZW under the GST office of Agra. Its registered office is at KH. No. 516 Anandi Bhairon, Mau Mauja Mustkil, Nagla Budi, Dayalbagh, Agra, 282005. M/s Vishal Trading Company is a proper firm. On behalf of the firm, Prop. Vishal Sharma is making the agreement with Registrar Dr. Bhimrao Ambedkar University, Agra, to purchase the e-waste.

For Vishal Trading Company

Vishal
Proprietor

[Signature]
Registrar
Dr. B.R. Ambedkar University, Agra

Agreement between University and Vishal Trading Company, Agra.

Waste management policy

Introduction

Dr. Bhimrao Ambedkar University, Agra is committed to transforming lives and serving the society through pursuit of excellence in teaching, innovation lifelong learning, and cultural enrichment and outreach services. University realizes that sustainable and holistic waste management essential in reducing its environmental footprint and providing a safe and healthy work environment for teaching and non-teaching employees, students, and visitors. The University must ensure that all the campus wastes are disposed of responsibly by using proper waste segregation mechanisms at the source and if possible, converting it into value-added environment-friendly products. Furthermore, the medical and other hazardous waste should be disposed of or managed by government approved, registered waste contractors.

Policy Statement

The University will adopt the principles of the ‘best practicable environmental option’ in the delivery of its waste management services. The University will apply a ‘waste hierarchical approach’, to reduce, reuse, recycle and recover waste products in preference to the disposal of waste to landfill. waste legislations.

Policy Objectives

The University recognises the importance of meeting these legal requirements and managing its waste responsibly, reducing the volume of waste sent to landfill and maximising reuse and recycling where possible. The University requires all the teaching and non-teaching staff, students, guests and anyone else making use of the premises to comply with this Policy and associated “University Environmental Guidance” to ensure compliance with all

The objectives of this policy are:

- To ensure that waste management is performed by all waste legislative requirements, including the duty of care, and to plan for future legislative changes and to mitigate their effects.
- To minimise waste generation at source and facilitate repair, reuse and recycling over the disposal of wastes in a cost-effective manner.
- To provide clearly defined roles and responsibilities to identify and coordinate each The activity of Waste Management.
- To promote environmental awareness to increase and encourage waste minimisation, reuse and recycling.
- To invest in the expansion of recycling opportunities on the University campus and transform waste into value-added products.
- To ensure the safe handling and storage of wastes on the University campus.

- To provide appropriate training for teachers, residents, staff, students and other stakeholders on waste management issues.
- To promote a holistic approach to waste management in the campus.

Organization and Management.

The responsibilities and organisational arrangements for this Waste Management Policy lie with a variety of personnel within the University.

The function of Advisory Board

- i) Coordinating the provision of a central waste and recycling contract service for use by all facilities on the campus.
- ii) Ensuring that all contractors are advised that they must comply with the Duty of Care; and that they must comply with the University's Waste Management Policy.
- iii) Ensuring that all contractors appointed to carry out works are from the government 'approved list'.

Co-ordinator, Environment Sustainability Management Cell (ESMC), University is responsible for:

- i) Provision of advice and guidance to the University on waste management.
- ii) Setting Environmental Performance Indicators for waste management.
- iii) Reporting annually to the University on progress against the 'Environmental Performance Indicators'.
- iv) Monitoring and auditing the management systems for all wastes, to ensure safety and legal compliance.
- v) Monitoring and auditing all waste contractors working for the University.
- vi) Provision of appropriate training for all personnel who have responsibilities for waste management.
- vii) Coordinating the gathering of, and supplying all relevant information to appropriate enforcement agencies, when information relating to waste management is requested.
- viii) Investigation of any incidents or spillage relating to all types of hazardous and general waste management.

The support staff is Responsible for:

- i). Overseeing the day-to-day delivery of general waste and recycling services.
- ii). Monitoring the performance of the university contractor against the contract agreements.
- iii). Liaisoning with the "Environment Sustainability Management Cell" to establish standard procedures for managing waste on the University campus.
- iv). Operational monitoring of waste management systems across the campus.
- v). Compiling waste transfer data and statistics notes for centrally managed waste and recycling collections.

Heads of Department/Directors are Responsible for:

- i). Non-hazardous Wastes Ensuring that no hazardous waste is disposed of through the general or waste recycling streams.
- ii). Hazardous Wastes; Nominating a 'responsible person' within their department to coordinate waste disposal for any hazardous or laboratory wastes.
- iii). Informing the Environment Sustainability and Management Cell, about the Staff/Supervisor (contractual) will be Responsible for: nominated 'responsible person' and updating the cell if and when the 'responsible person' changes.

The tenure of the person will be a minimum of two years.

i). Disposing of waste responsibly (at both office and residence), through the appropriate waste disposal system (segregation of waste), by University policy and procedures.

ii). Reporting any problems with waste collection schemes to ESMC of the University. Students will be Responsible for:

i). Disposing of waste responsibly, through the appropriate waste disposal system, according to University policy and procedures.

ii). Reporting any problems related to department/laboratory waste or waste collection procedure to the 'Head of Department'. Action Plan It will be mandatory on the part of the Head of the Department/Principal investigator (Project)/ in-charge to report changes/additions in hazardous waste generation and steps taken to reduce the generation of waste per unit of production. As per the Hazardous Waste regulations, the University can store hazardous waste for a period not exceeding 90 days and shall maintain a record of the sale, transfer, storage, recycling and reprocessing of such wastes unless the concerned State Pollution Control Board has extended the stipulated period. The waste could be recycled /reused or disposed of in captive or common treatment, storage and disposed facilities available on the campus or incinerated, as proposed in the waste hierarchy list. Inventories of 'end of life' consumer products such as e-waste are also required to be made. The university will explore options/ opportunities for reusing, recovering and recycling of non hazardous waste in an environmentally sustainable manner. Paper waste will be recycled to make paper board and packing material. The toxic inks and dyes of the paper will be treated with enzyme technology, which is environmentally benign. Safe disposal of hazardous waste For the waste which cannot be recycled/ reused, safe and environmentally sound disposal will be adopted depending upon the waste category. Design and operation norms of disposal facilities should be strictly adhered to as per the guidelines framed by CPCB. Setting up of common Treatment, Storage and Disposal Facilities is essential. A common treatment plant for departmental and household waste will be established and the degradable and non-biodegradable waste will be segregated and treated according to their physical nature. Waste According to the United Nations Statistics Division (UNSD), waste is "materials that are not prime products (that is, products produced for the market) for

which the generator has no further use in terms of his/her purposes of production, transformation or consumption, and of which he/she wants to dispose. Wastes may be generated during the extraction of raw materials, the processing of raw materials into intermediate and final products, the consumption of final products, and other human activities. Residuals recycled or reused at the place of generation are excluded." Incidents are events that are distinguished from accidents in terms of being less severe.

Segregation It is an activity where waste or materials are separated or are kept separate according to radiological, chemical and/or physical properties to facilitate waste handling and/or processing.

Biomedical waste Waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals, and including categories mentioned in Schedule I, (Management and Handling) Rules, 1998, MoEF, Gov. of India.

Treatment and disposal of "Biomedical Waste" (a) Bio-medical waste shall be treated and disposed of by Schedule I, and in compliance with the standards prescribed in Schedule V, Bio-Medical Waste (Management and Handling) Rules, 1998, MoEF, Gov. of India. (b) Every occupier, where required, shall set up by the time- schedule in Schedule VI, requisite bio-medical waste treatment facilities like incinerators, autoclaves, and microwave systems for the treatment of waste, or, ensure requisite treatment of waste at a common waste treatment facility or any other waste treatment facility.

Biomedical Waste Management

Biomedical waste undergoes a stringent collection process to ensure it remains separate from other types of waste. Managed by Environment Waste Connections, this waste is deposited into biohazard waste boxes. Once filled, these boxes are sealed, appropriately labelled, and then transported in closed container vehicles to undergo proper treatment.



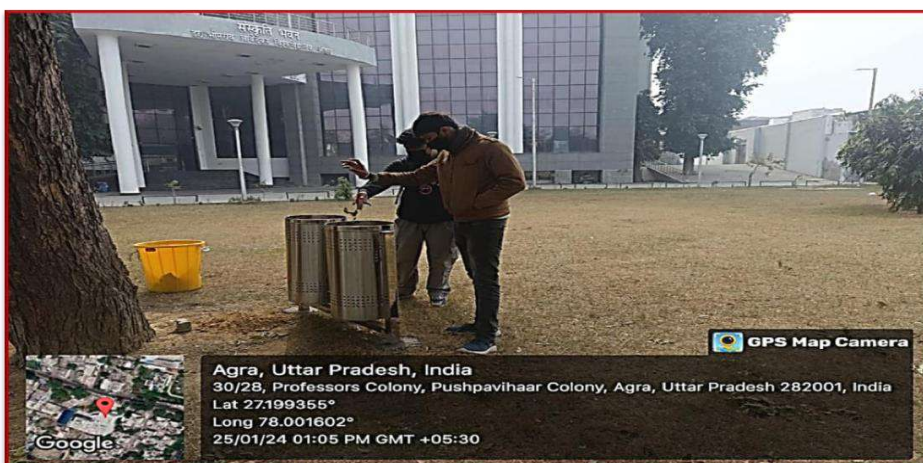
Collection of biomedical waste

Solid Waste Management

The University upholds stringent waste management protocols by implementing a system of three separate dustbins in every hostel, department, and administrative block. Each bin is designated for specific types of waste: one for biodegradable waste, another for non-biodegradable waste, and a third for chemical waste. This meticulous segregation facilitates the proper collection of garbage, ensuring that each type of waste is appropriately handled. Subsequently, the collected waste is transported to the municipal corporation in Agra for disposal in accordance with established regulations.



Compost Pit



Solid waste Bins




Solid waste collection in University premises in collaboration with Nagar Nigam Agra



Solid Waste Bins

liquid Waste Management

The University has undertaken the installation of sewerage lines, a crucial infrastructure project aimed at enhancing sanitation and environmental sustainability on campus. The initiative was made possible through collaboration with the UP Jal Nigam, with a total investment of 167.45 Lacs. This infrastructure upgrade not only contributes to the overall cleanliness and hygiene of the University but also aligns with broader environmental goals, promoting efficient wastewater management and reducing pollution.

	कार्यालय परियोजना प्रबंधक, यमुना प्रदूषण नियंत्रण इकाई, उ०प्र० जल निगम वाटर वर्क्स चौराहा, जीवनी मण्डी रोड, आगरा - 282 004 फोन : (0562) 2621751 फैक्स : (0562) 2621633 E-mail : pmypcuagra@gmail.com
पत्रांक २५५ / प्राक्कलन / १०	दिनांक २९.३.१९
सेवा में,	कुल सचिव, डॉ० भीमराव अम्बेडकर विश्वविद्यालय, आगरा।
विषय:-	<u>विश्वविद्यालय के खंदारी परिसर की सीवर लाइन डालने के सम्पूर्ण कार्य का पुनरीक्षित प्राक्कलन उपलब्ध कराने के सम्बंध में।</u>
महोदय,	उपरोक्त विषयक विश्वविद्यालय के खंदारी परिसर की सीवर लाइन डालने हेतु नगर आयुक्त, नगर निगम, आगरा महोदय के पत्रांक 400/D/NA/17, दिनांक 06.11.2017 के अनुसार विश्वविद्यालय अभियंता द्वारा खंदारी परिसर में बताये गये स्थानों पर सीवर लाइन डालने हेतु रु० 89.33 लाख का प्राक्कलन पूर्व में इस कार्यालय द्वारा माह जुलाई-2018 में प्रेषित किया गया था। जिसके संदर्भ में वर्तमान में विश्वविद्यालय के पत्रांक इजी० 908, दिनांक 07.03.2019 के अनुक्रम में दिनांक 07.03.2019 को ही इस कार्यालय के परियोजना अभियंता एवं सहायक परियोजना अभियंता द्वारा विश्वविद्यालय के अभियंता श्री हरिमोहन शर्मा के साथ संयुक्त रूप से खंदारी परिसर के निरीक्षण में पूर्व में प्रस्तावित कार्यों हेतु प्रेषित प्राक्कलन के अतिरिक्त परिसर के सभी चौचालों को सीवर लाइन से संयोजन करने, सम्पैल के नवीनीकरण, प्रस्तावित सीवर लाइन को जल संस्थान की सीवर लाइन से संयोजन करने इत्यादि कार्यों हेतु भी प्राक्कलन प्रेषित करने हेतु अवगत कराया गया है।
	अतः उपरोक्तानुसार विश्वविद्यालय अभियंता के साथ दिनांक 28.03.2019 को दूरभाष पर हुई बातों के अनुसार पूर्व प्रेषित प्राक्कलन अनुमानित लागत रु० 89.33 लाख के विरुद्ध घनावंटन कराने का कराने का कष्ट करें ताकि अग्रेतर कार्यवाही की जा सके।
	भवदीय (लोकेश शर्मा) परियोजना प्रबंधक
प्र०सं० एवं दिनांक उपरोक्तानुसार।	
प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।	
1. महाप्रबंधक, यमुना प्रदूषण नियंत्रण इकाई, उ०प्र० जल निगम, आगरा।	
	परियोजना प्रबंधक

Demand Notice of U.P. Jal Nigam

INDIA NON JUDICIAL
Government of Uttar Pradesh

PRAVEEN KUMAR
LICENCE NUMBER - 75
E-STAMP ACC. ID - 142
CIVIL COURT, AGRA

e-Stamp


Certificate No.	: IN-UP41475810447744V
Certificate Issued Date	: 22-Feb-2023, 12:12 PM
Account Reference	: NEWIMPACD (S.V.)UP14324804/ AGRA/SADAR/ UP-AGR
Unique Doc. Reference	: SUBIN-UPUP1432480476898954863662V
Purchased by	: DR B R A UNIVERSITY AGRA
Description of Document	: Article 5 Agreement or Memorandum of an agreement
Property Description	: Not Applicable
Consideration Price (Rs.)	:
First Party	: DR B R A UNIVERSITY AGRA
Second Party	: UP JAL NIGAM AGRA
Stamp Duty Paid By	: DR B R A UNIVERSITY AGRA
Stamp Duty Amount(Rs.)	: 100 (One-Hundred only)

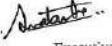
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MEMORANDUM OF UNDERSTANDING

THIS Memorandum of Understanding is made at AGRA on this 18 day march month 2023 between Finance Officer Dr. B.R.A. University, Agra (Hereafter called "The Client" which expression shall unless repugnant to the context thereof include its successor-in-office and assion of one part and "Project Manager. Construction Unit U.P. Jal Nigam (Nagariya) Agra." (Here-inafter called the construction Unit U.P. JAL NIGAM which expression shall unless repugnant to the context there of include its successor assigns) of the other part.

Whereas at the proposal of the "Client" the construction Unit U.P. JAL NIGAM (Nagriya) is executing "डिपॉजिट कार्यक्रमान्तर्गत आगरा के बी० आर० अग्नेडकार यूनिवर्सिटी, खदारी कैम्पस, खदारी आगरा योजना (UTT-DEP-CU-AGR-001-1)", amounting to Rs. 167.45 Lac (Here


Finance Officer
Dr. Bimrao Ambedkar University


Executive Engineer
Construction

Exclusion Alert:
1. The e-stamp certificate issued by the Government of India is valid only when the e-stamp certificate is used in the State of Uttar Pradesh.
2. The validity of the e-stamp certificate is on the basis of the certificate.
3. The e-stamp certificate is not valid if it is not used in the State of Uttar Pradesh.

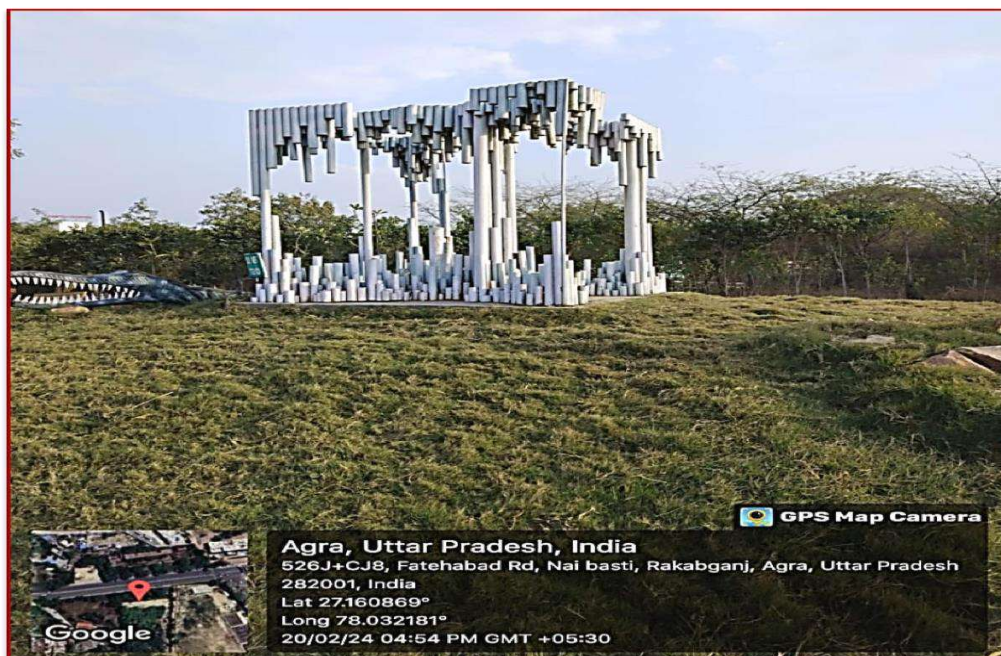
MoU between UP Jal Nigam and University

Waste Recycling System

The University aims to foster a waste recycling movement through artistic innovation, utilizing waste materials to generate creative ideas. Additionally, it aims to bolster interpersonal skills to generate value from waste, contributing to environmental sustainability.



Artifacts crafted from scrap iron showcased at Sanskriti Bhawan



University student's installation featuring plastic pipes exhibited during G-20 Summit near Fatehabad Road

Water management policy

Introduction:

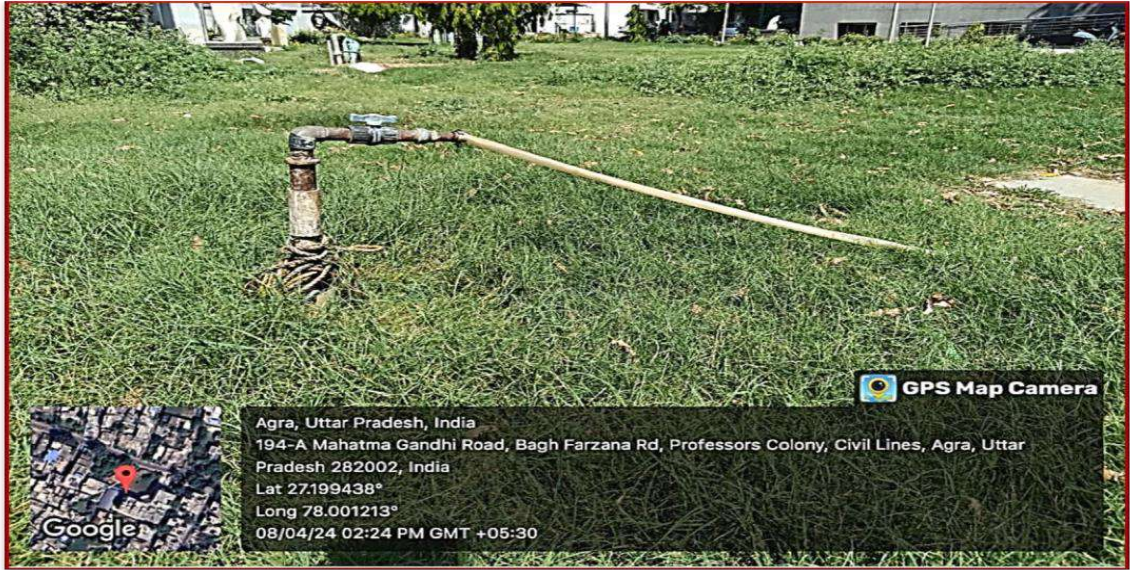
Dr. Bhimrao Ambedkar University, Agra is committed to Reducing, Reusing and recharging water as water is so essential for life that its simply impossible to imagine life without water. India has 16% of the world's population and only 4% of the world's water resources are available for use, and that too is depleting rapidly. The water demand is expected to grow from 40 billion cubic metres to around 220 bcm in 2025. The uneconomical and unethical use of water by human beings is the sole reason for the exploitation and deterioration of this valuable natural resource. Thus, both the quality and quantity of water are at stake and have to be taken care of. It's the moral duty and social responsibility of each individual and community as a whole to contribute to conserving water and rejuvenating water resources. In this direction, our University has made efforts to ensure water conservation and water harvesting. The campaign has been channelized with the Motto "Be Water Smart, Every Drop Counts" following the 3R principle - Reduce, Reuse and Recharge. The primary goal of Dr. Bhimrao Ambedkar University, Agra water conservation policy is to provide safe and clean water in all the campus areas. The university is implementing water-efficient practices. Student and staff engagement plays a major role in our water sustainability strategies. Reducing water consumption and protecting water quality shall be the key objectives of the sustainable policy of Dr. Bhimrao Ambedkar University, Agra.

Bore-well / Open Well Recharge

The University has supplemented its water supply by constructing bore wells to meet various water needs across the campus. Furthermore, in certain areas, open wells have been established specifically for cultivation and plantation purposes, further enhancing the University's sustainable water management efforts.



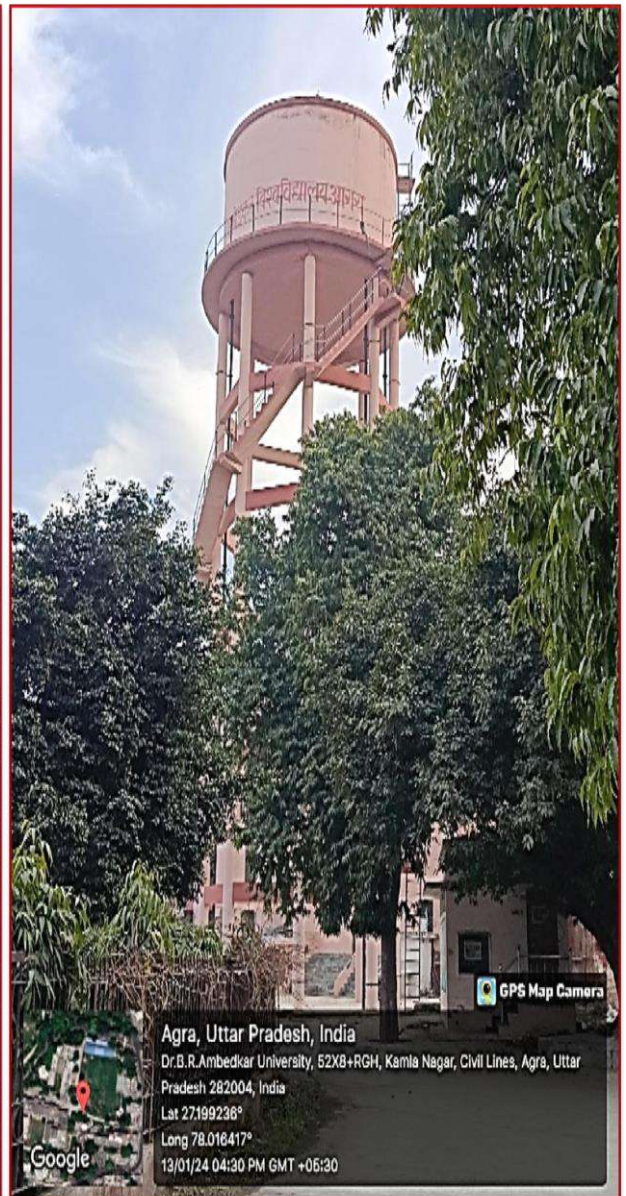
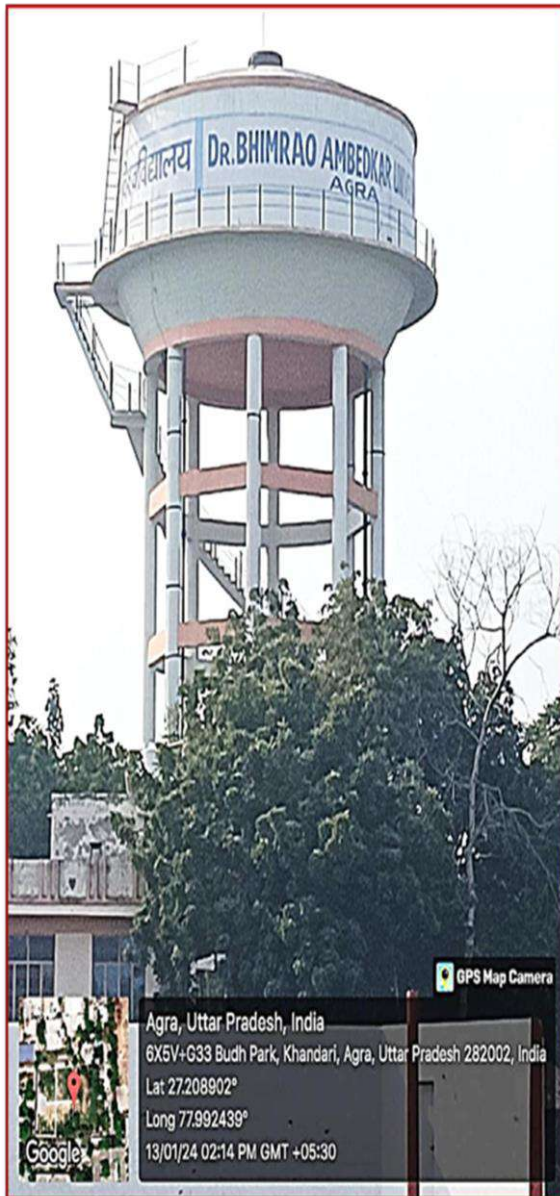
Borewell at University Campus



Borewell at University Campus

Construction of Tanks and Bunds

The University has erected multiple water storage units to facilitate its water distribution system. These units receive water from municipal corporation stores and subsequently distribute it to various campus buildings, including academic facilities, administrative offices, and hostels. The University boasts an exemplary water distribution network, ensuring reliable access to water across its infrastructure.



Tanks at university Campus



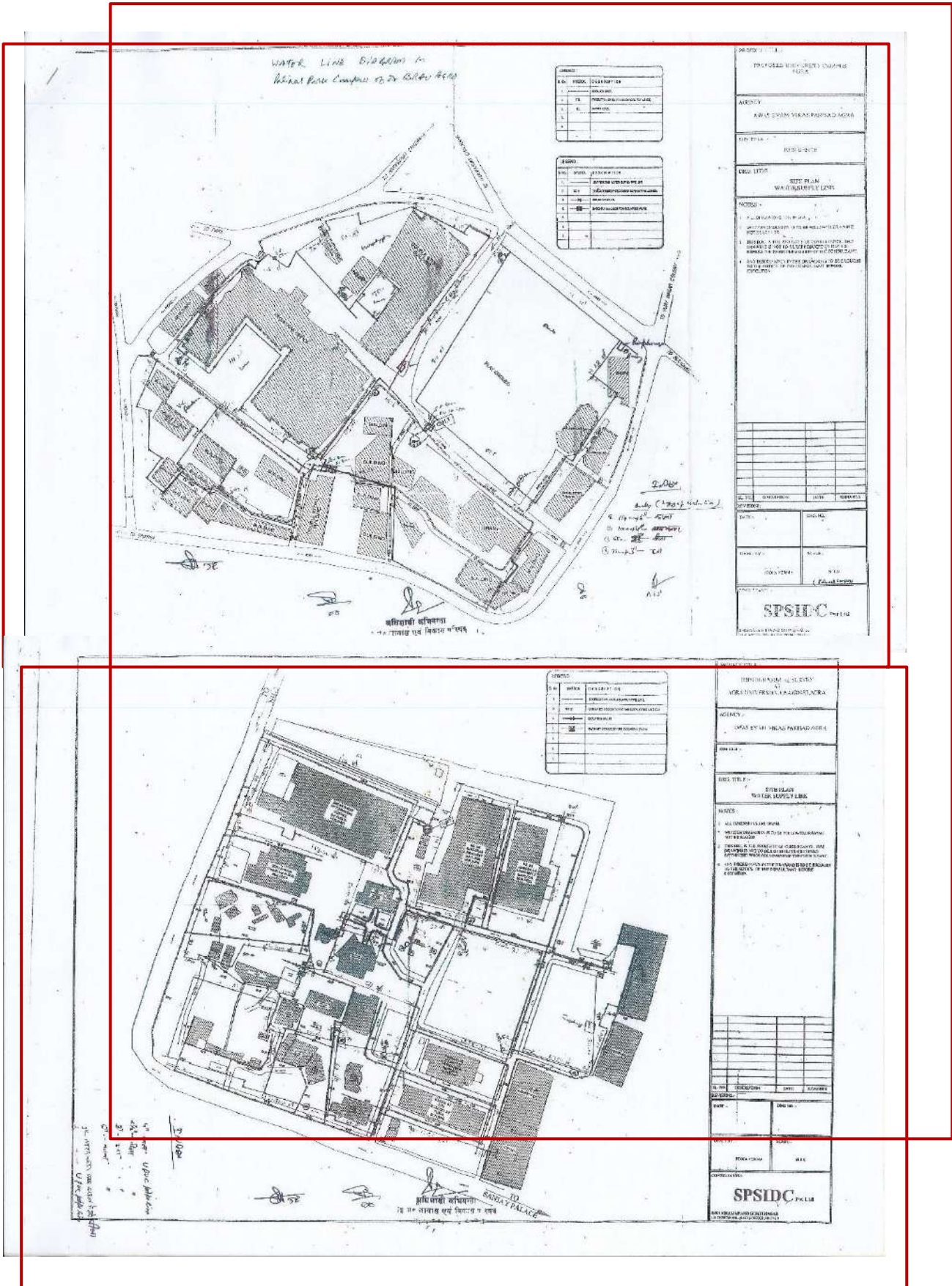
Bunds at Sanskriti Bhawan

Maintenance of Water Bodies and Distribution System

The University maintains a meticulously upheld water distribution system, ensuring sustainable, reliable, and safe water provision across campus. Regular maintenance focuses on disease prevention, employing chlorination to eradicate harmful microorganisms and curb waterborne diseases like cholera and typhoid. Water is distributed through a well-equipped pipe network. Low-flow plumbing fixtures are utilized to minimize water wastage. Scheduled machinery inspections prevent leaks and conserve water. Overall, the system is closely supervised by University authorities to ensure its effective operation.



Water distribution Tanks



Floor layout for water distribution in university premises

Rainwater Harvesting

The University has implemented a comprehensive rainwater harvesting system across its campus to secure groundwater supply. Strategically positioned gathering pits, constructed to industry standards, facilitate rainwater collection at multiple locations. Wide shallow ditches traverse the campus, directing rainfall for conservation. Additionally, all open terraces feature rainwater collection pipes connected to planned drains, ensuring efficient water capture. Building drainage is directed to lower floors through external drains, contributing to effective rainwater management.

Rainwater Harvesting Pits at different location of university



Rainwater Harvesting Pits

University policies

POLICY ON BAN ON USE OF PLASTIC

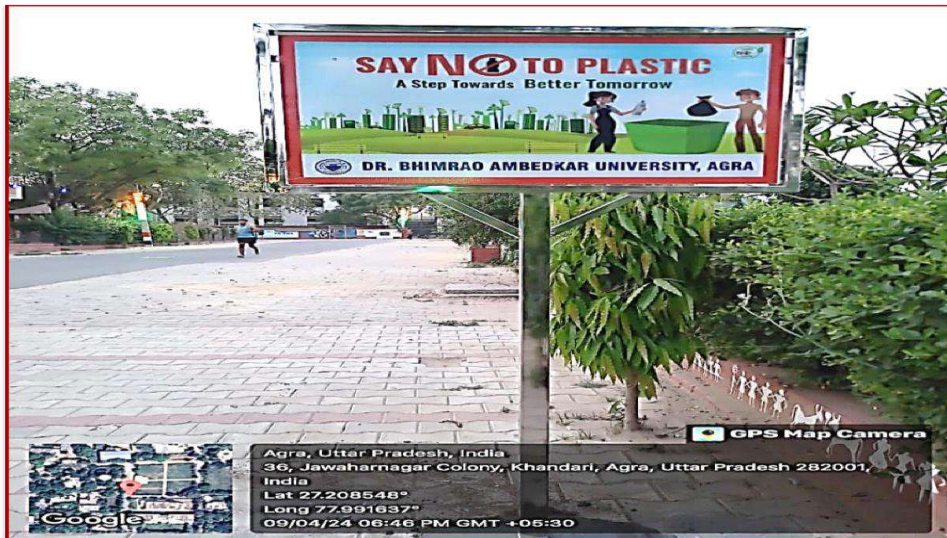
Plastic waste has emerged as one of the biggest environmental concerns adversely impacting the soil, water, health and well-being of citizen at large. Excess consumption of plastic combined with limited waste disposal systems has become a challenge to the urban waste disposal systems, and has choked the rivers and water systems in rural areas. The University has decided to take plastic ban as a campaign of importance to address the environmental hazards of plastic & being and bring attitudinal changes that shun use of plastics. The educational institutions have the unique spread and influence to educate the students and households on the needs for avoiding usage of plastic. As per the University Grant Commission (UGC) guidelines to ban the use of plastic in Universities/educational institutions and in support of the 'Swachhata Hi Sewa' Campaign, launched by the Government of India with an aim to eliminate the use of plastic and to dispose of plastic waste, Dr. Bhimrao Ambedkar University implement strict ban on single use plastic in its campus, constituent colleges and affiliated institutions with immediate effect. Towards achieving the objective, following measures will be taken to make their campuses 'plastic-free' by systematically banning the use of plastic and replacing the same with suitable environment-friendly substitutes at all institutions and adoption of policies and practices towards cleaner and plastic-free campuses. For this, Dr. Bhimrao Ambedkar University Adopted following rules: a) Banning use of single-use plastics in canteens, shopping complexes in the institution's premises and hostels, etc. b) Carrying out awareness drives and sensitization workshops on the harmful impacts of single-use plastics. Dr. Bhimrao Ambedkar University (Policy on Ban on Use of Plastic) c) Mandating all students to avoid/bringing non-bio-degradable plastic items to the institutions. d) Encouraging students to sensitize their respective households about the harmful effects of plastics and make their households 'plastic-free' e) Installing necessary alternative facilities like water units to avoid the use of plastic water bottles and encouraging the use of alternative solutions like cloth bags, paper bags, etc, instead of plastic bottles, bags, cover, and other goods in University campus. f) Dr. Bhimrao Ambedkar University will adopt villages under Unnat Bharat Abhiyan shall undertake a campaign in their adopted villages till they are converted into 'plastic-free villages' through promoting awareness and encouraging the shift to alternative products.

Ban on use of Plastic

The University annually observes World Environment Day on June 5th, raising awareness among staff and students. It has implemented a complete ban on single-use plastic items like bottles, bags, spoons, straws, and cups, with orientation sessions and display boards reinforcing awareness. Additionally, staff and students are encouraged to use steel or copper water bottles instead of plastic ones.



Signpost regarding Prohibition of Plastics in the Campus



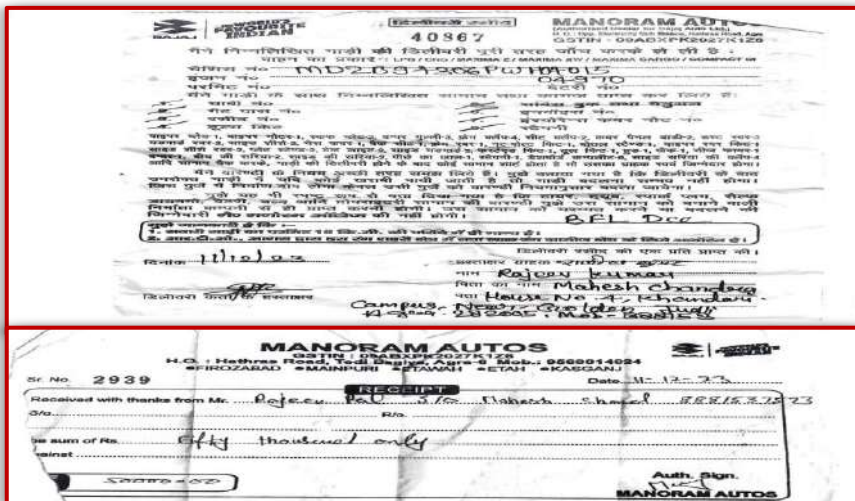
Signpost — Say no to Plastics

Use of Bicycles/ Battery Powered Vehicles

The university encourages students and staff to utilize bicycles, allowing them to be kept on campus premises. Additionally, battery-operated vehicles are provided for differently abled students' transportation within the campus and for transporting luggage, guests, and others. Both faculty and students predominantly use battery-powered vehicles, contributing to sustainable mobility practices.



Use of Battery Powered vehicles in the campus



Battery Powered vehicles bill



Use of Bicycles by the students

Landscaping with Trees

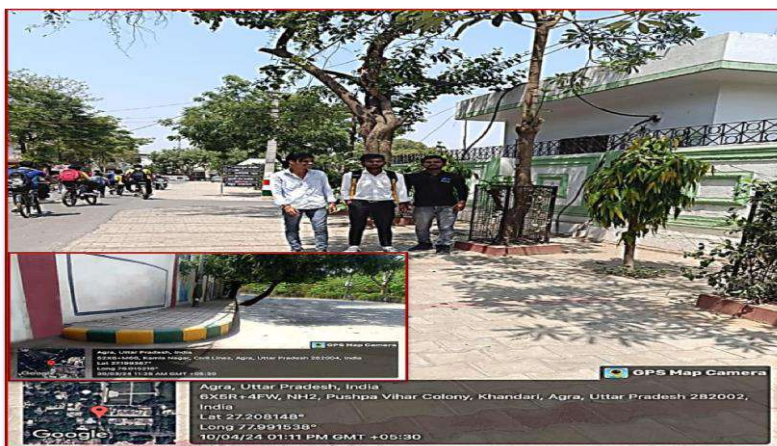
The university's landscaping is visually captivating, reflecting a keen aesthetic sense, with well-maintained lawns and trees providing shade and enhancing the ambiance. The university boasts a diverse landscape comprising old, middle-aged, and young trees, along with herbs and shrubs, all meticulously maintained by skilled personnel.



Enhancing outdoor spaces through strategic tree landscaping

Pedestrian Friendly Pathways

Parking spaces for vehicles are available at the entrance of each institute. Campus being mostly vehicle-free, students and staff enjoy the convenience of walking along pedestrian-friendly pathways. Moreover, covered and tiled pathways enhance the walking experience for students and faculty, further promoting a pedestrian-friendly environment



Pedestrian Friendly Pathway at different locations of the University

Policy on green clean campus

POLICY ON GREEN CLEAN CAMPUS

The relationship between Dr. Bhimrao Ambedkar University, Agra and nature is a long and enduring one, something that students and staff of the university are aware of.

The focus areas of this policy are:

1. CLEAN CAMPUS INITIATIVES

2. LANDSCAPING INITIATIVES

3. CLEAN AIR INITIATIVES

◆ Smoking Free Campus

4. INFRASTRUCTURE

◆ Solar Power Plant

Installation of Energy Efficiency Equipment

Water Conservation through Rainwater Harvesting System

5. WASTE MANAGEMENT PROCESSES

◆ Solid Waste Management

◆ Liquid Waste Management

◆ E-Waste Management

6. AWARENESS INITIATIVES

7. ENVIRONMENT- CENTRIC STUDENT SOCIETIES AND DEPARTMENT ACTIVITIES

8. GREEN AUDIT

9. ENERGY AUDIT

10. PLASTIC-FREE CAMPUS Dr. Bhimrao Ambedkar University (Policy on Green Clean Campus)

OBJECTIVES OF THE POLICY

To protect and conserve ecological systems and resources within the campus. To ensure judicious use of environmental resources to meet the needs and aspirations of the present and future generations. To integrate environmental concerns into policies, plans and programmes for social development and outreach activities. 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. To continuously improve our contribution to climate protection and adaptation to climate change and to the conservation of global resources. To continuously improve the efficient use of all resources, including energy and water, and to reduce consumption and the amount of waste produced, recovering and recycling waste where possible. To make the campus plastic free. To conduct environmental and energy audits from time to time. To minimize the use of paper in administration through having policy for E governance. POLICY:

CLEAN CAMPUS INITIATIVES

Dr. Bhimrao Ambedkar University, Agra had pledged to actively coordinate cleanliness activities in the all campus of the university and beyond the campus in accordance with the vision of Swachh Bharat Abhiyan. It commits to continue with this Programme. The broad vision is as follows: 1. Generating mass awareness on cleanliness and hygiene amongst students and staff members by holding regular cleanliness drives. The idea is to motivate them to contribute in a proactive manner. 2. Activities under 'Swachh Bharat Abhiyan' will be a key component of all the community work being done by students of different departments of the university 3. Staff Members will be encouraged to participate in the cleanliness drive in all campuses of the university. Dr. Bhimrao Ambedkar University(Policy on Green Clean Campus) 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 university campus will be conducted to create mass awareness. 6. Remove all kinds of waste material like broken furniture, unusable equipment etc. through auction. 7. Administer of the pledge by students and staff members to maintain cleanliness of the university campus and its surrounding areas on an annual basis. 8. Conduct workshops on the 3Rs: Reduce, reusing and recycling of waste. 9. Commit to manage waste and maintain clean campus especially during university events.

LANDSCAPING INITIATIVES

The campus landscape, like its buildings, can be seen as the physical embodiment of a university values. It is a vital part of the life of a campus, providing space for study, play, outdoor events, relaxation and aesthetic appreciation. Green campus landscapes also manage runoff, help recharge groundwater, and clean and cool the air on campus.

The landscape serves as a visual representation of the campus community's commitment to sustainability. As campus landscapes are so visible and accessible, landscaping initiatives are a great way to build awareness around the environment. The university commits to enriching this healthy habitat and maintaining the symbiotic relation of the institution with nature by

- Organizing annual tree plantation drives
- Encouraging student societies to hold tree planting events

CLEAN AIR INITIATIVES

We encourage our students and staff to use public transportation. We encourage carpooling to university, an activity that will control air pollution and strengthen social interaction. The entry of automobiles inside the campus is restricted to discourage the use of private vehicles. We feel responsible to maintain our green cover. The abundant natural landscape not only cleans the air on campus but also becomes an extension of the green lungs of the city. □ **SMOKING FREE CAMPUS**
In compliance with the framework provided by the National Tobacco Control Programme (NTCP) 2007-2008, the university prohibits smoking and the use of other tobacco products and promoting a tobacco free environment as a step in this direction, smoking and use of tobacco in and around the campus is strictly prohibited. The antismoking committee of the university ensures enforcement of

the antismoking policy. Dr. Bhimrao Ambedkar University(Policy on Green Clean Campus)

INFRASTRUCTURAL INITIATIVES □ **RENEWABLE SOURCES OF ENERGY** Dr. Bhimrao Ambedkar University, Agra is dedicated to minimize and sustainably manage its use of electricity. The university believes in reducing the consumption of electricity produced by non-renewable resources by switching to clean energy sources like solar energy for purposes like lighting the campus. □ **ENERGY SAVING AND ENERGY EFFICIENT EQUIPMENT** We commit to install environment- friendly electrical appliances that save energy and reduce wasteful inefficiencies. The university believes in using cleaner energy such as LED lighting. □ **WATER CONSERVATION THROUGH RAINWATER HARVESTING SYSTEM** Dr. Bhimrao Ambedkar University located in the area that has seen maximum fall of ground water levels, Dr. Bhimrao Ambedkar University, Agra has committed itself to this effort to replenish the groundwater table by practicing rainwater harvesting. This practice helps in the replenishment and recharge of the groundwater. **WASTE MANAGEMENT PROCESSES** Dr. Bhimrao Ambedkar University, Agra strives to have a minimal impact on the environment and is dedicated to reduce and manage the waste generated by the university campus. The following specific procedures will be undertaken to ensure Dr. Bhimrao Ambedkar University, Agra contribution in protecting the environment. □ **SOLID WASTE MANAGEMENT** With its aim to provide holistic education that also has a positive impact on the environment, the university will adopt practices that will mitigate the generation, and manage solid waste through the following methods: □ Systematically engage with the 3Rs of environment friendliness (Reduce, Reuse and Recycle). □ Collect paper waste produced on campus and collaborate with scrap dealers for recycling.

- Reduce solid waste by developing a technology-centric teaching and administrative model. □ Reduce use of paper by supporting digitization of attendance and internal assessment records. Dr. Bhimrao Ambedkar University(Policy on Green Clean Campus) □ Reduce requirement of printed books by updating the e-books and e-journals collection of the university library. □ Encourage the students and teachers to use emails for assignment submissions. □ Take initiatives to spread awareness amongst students about □ Food wastage and ways of minimizing it □

Minimizing the use of packaged food The habit of reusing and recycling non-biodegradable products Organizing workshops for students on solid waste management. □ **LIQUID WASTE MANAGEMENT** □ Maintain leak proof water fixtures. □ Minimize the use of water by constructing more Indian style toilets instead of western style toilets. □ Continued employment of a caretaker to take immediate steps to stop any water leakage through taps, pipes, tanks, and toilet flush etc. □ **E-WASTE MANAGEMENT** Dr. Bhimrao Ambedkar University, Agra ensures that its usage of technology and generation of e waste does not impact the environment. For this purpose, the university plans to strive towards: □ More provisions for the disposal of the institutional e-waste. □ Disposal of e-waste through auction to recycling companies to get electronic waste recycled. □ Awareness amongst students about reduction of e-waste and environment friendly disposal practices for e-waste. □ Encouraging department and society level activities pertaining to e-waste management.

AWARENESS INITIATIVES

Outreach and education are of utmost importance so that all members of the campus community may value the objectives of the policy and aid in its implementation. This is why Dr. Bhimrao Ambedkar University, Agra supports and encourages awareness campaigns, seminars, workshops, conferences and other interactive sessions to facilitate effective implementation of the Green Campus, Energy and Environment policies. Dr. Bhimrao Ambedkar University(Policy on Green Clean Campus) Environment-Centric Student Societies And Department Activities Dr. Bhimrao Ambedkar University, Agra encourages all the departments to organize events, competitions and training sessions that will bring about positive environmental changes at the grass root level. The university supports departments and student societies in moulding the students into active agents of environment protection and conservation. CONDUCT GREEN AUDIT The university aims to regularly conduct a Green Audit of our campus to assess our strengths and weaknesses to further our goals of long-term sustainability. A green audit is a useful tool to determine how and where most energy or water or resources are being used. The university can then consider how to implement changes and make savings. It can determine the type and volume of waste. Recycling projects or waste minimization plans can be adopted. It will create health consciousness and promote environmental values and ethics. It provides a better understanding of the impact of ecofriendly practices on campus. Green auditing will promote financial savings through reduction of resource use. It is imperative that the university evaluate its own contributions toward a sustainable future. CONDUCT ENERGY AUDIT An Energy Audit to be conducted as and when required to further reduce its carbon footprint. The importance of reducing energy consumption cannot be overstated. The energy audit, with its specialized tools will identify wastage of energy. Such an inspection often reveals several different flaws which cause a loss of significant amounts of energy which the university will not be able to detect. These flaws often have easy and affordable solutions and provide significant savings. PLASTIC-FREE CAMPUS Dr. Bhimrao Ambedkar University, Agra has been observing most of its duties in terms of solid waste management since its inception. 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 strictly bans the use of single use plastics in its premise to make it a ‘Plastic Free Campus’

Green Audit

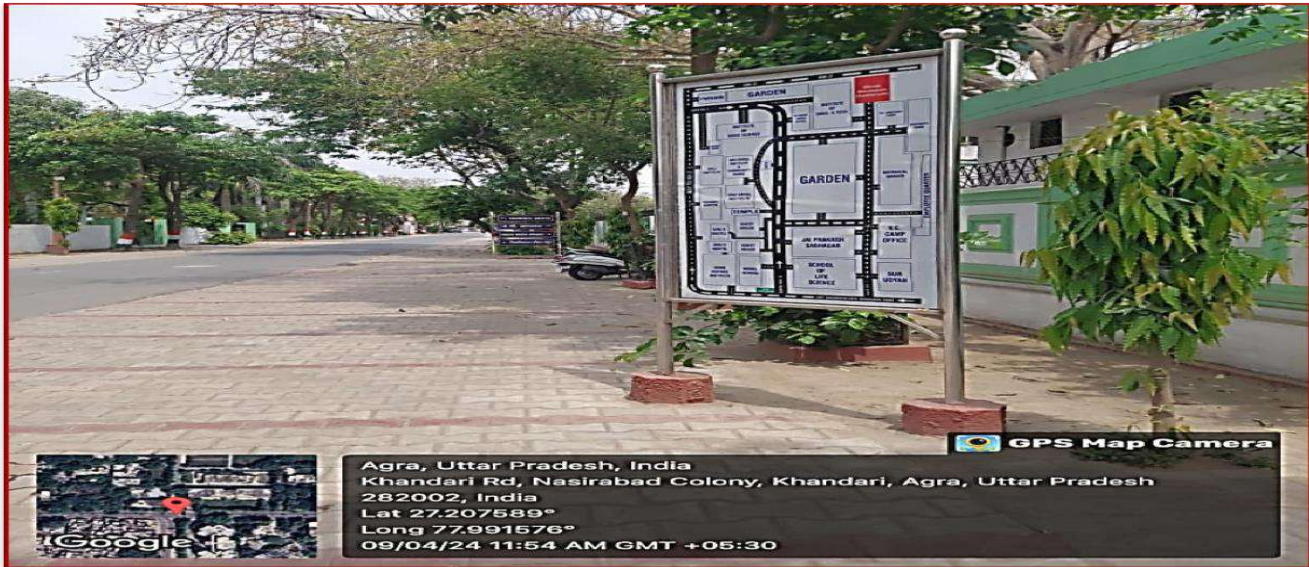


Environment Audit



Energy Audit





Awards for Green and Clean campus from Parijat



Awards for Green and Clean campus from Prosocial Foundatio

Events To Reduce Inequalities

Divyangjan Activities

1. University Community Radio Partnership in event “Udaan” by an NGO, fashion show especially for disabled people. Our radio got appreciation from IAS Officer Ira Singhal ji (first especially disabled IAS) on 10th June 2018. Total 42 Divyangjan performed on ramp.

Ms. Ira Singhal (IAS Officer) giving memento to University



Community Radio Team



Specially disabled all participants of fashion show

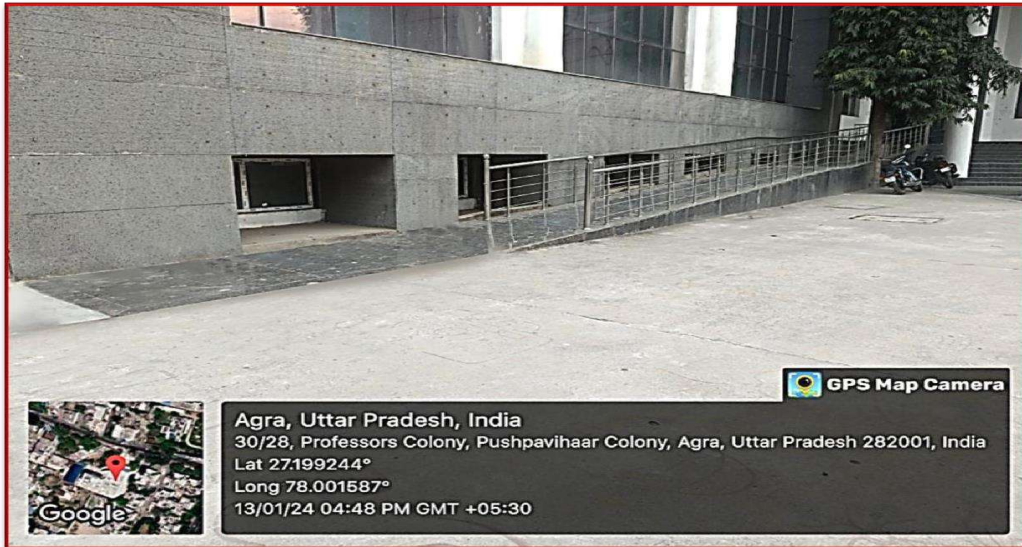
2. TY Radio of the University with an NGO honored the Kinnar community and honored

Karmayogi in an event of Divyang Fashion Show on 18.02.24. Total 20 Divyangjan participated for ramp walk and showcasing their creative talent of singing, dancing, etc.

Hon'ble VC Prof. Ashu Rani giving honour Karmayogi Samaan to Subedar Leela Ram



Specially disabled all participants of the show with Mahamandleshwar Shri. Mayuri Nandgiri, Shri. Sanjna Nandgiri and Shri. Parvati Nandgiri Kinnar Community Samaan to Subedar Leela Ram



Ramps for easy access to classrooms



Divyangyan-Friendly Washrooms

Built Environment with Ramps / Lifts for Easy Access to Classrooms

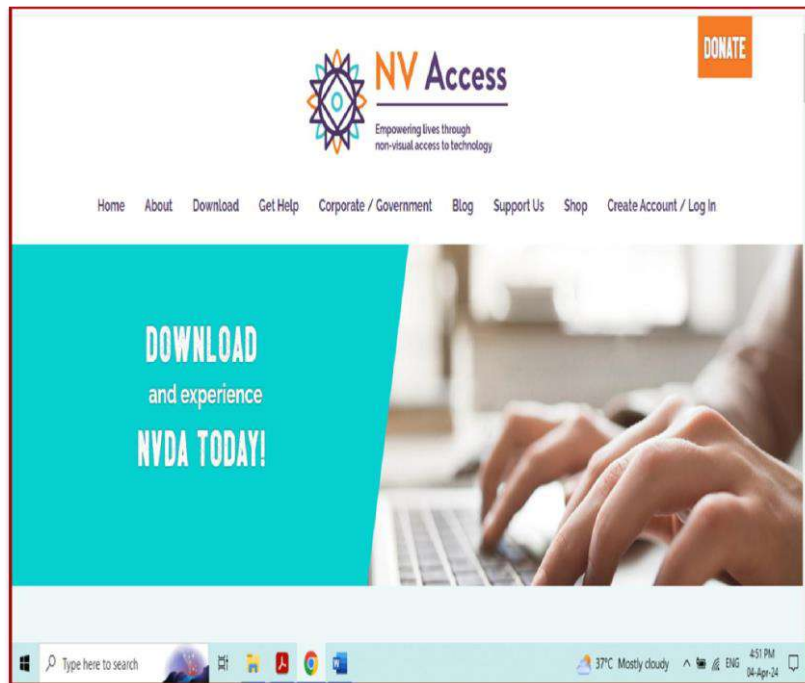
The University is dedicated to providing a barrier-free environment that ensures safe and independent access for individuals with disabilities to all facilities. Our University installed ramps in all buildings and lifts in taller structures, underscoring our commitment to accessibility. The washrooms for disabled persons are provided separately almost in all the campus. This ensures a comprehensive and inclusive teaching and learning environment for divyangjan



Lift facility for easy access to classrooms



Tactile path



Assistive Technology And Facilities For Persons With Divyangjan Access Website, Screen-Reading Software, Mechanized Equipment etc.

HUMAN VALUES CELL

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- 9. Code of Conduct**

Prologue

In recognition of the profound impact that higher education institutions have on shaping not only the intellectual but also the moral and ethical fabric of society, Dr Bhimrao Ambedkar University, Agra is dedicated to fostering an environment where human values are not only taught but also lived and practiced.

At the heart of our academic community lies a commitment to cultivating individuals who are not only knowledgeable in their respective fields but who also possess the empathy, compassion, and integrity necessary to contribute

Love and Compassion

True love is demonstrated by kindness, empathy, and compassion for everyone. Compassion is the result of true, unconditional love. It can be observed in action when people show kindness, charity, and generosity.

Peace

Values such as equality, modesty, optimism, patience, self-assurance, self-control, and self-worth are all part of peace. Its purview encompasses world, societal, and individual peace.

Truth

Since truth deals with ultimate and unchanging reality, it is eternal and unchanging. It is characterized by virtues like truthfulness, impartiality, sincerity, justice, courage, integrity, curiosity, and resolve, among others. Sincerity, which is reflected in a person's dedication to their work, is the most basic way that truth can be shown in the workplace.

Non-Violence

The avoidance of intentionally causing harm to any living or non-living thing by one's words, deeds, or thoughts not alive. The practice of nonviolence necessitates giving up hatred and cultivating compassion and love for all living things.

Righteousness

As it entails living and acting in a way that upholds decency and decorum at all times, righteousness is the foundation of fundamental human values. It addresses moral principles, ethical conduct, and ethical standards.

Renunciation implies having altruistic intentions and a compassionate attitude towards all living things. It is demonstrated by a person's self-control, austerity, and selflessness.

Service

It is an act of love done for another person. It also represents kindness and selflessness. The value of service requires equality, devoid of restrictions or prejudice based on a person's caste, creed, race, geography, or religion.

Coherent and Cohesive

Partnerships are characterized by peaceful cohabitation. It encompasses social and psychological ideals including environmental consciousness, perseverance, equality, fraternity, kindness, morality, forgiveness, and equality.

Discipline

Discipline refers to the set of rules that a person adheres to for all living things. It includes values such as direction, order, and regulation.

Aim

Our aim is to foster a culture of integrity, empathy, and social responsibility within the university community and beyond.

Vision

- To create a campus culture where integrity, empathy, and respect for diversity are valued and practiced by all members of the academic community.
- This involves nurturing individuals who are not only academically proficient but also ethically grounded and socially responsible, contributing positively to society.

Mission

- To provide a platform for promoting and instilling moral and ethical values among students, faculty, and staff.
- To integrate human values into the curriculum and create a supportive environment for personal growth and ethical decision-making.

Objectives

1. **Promote Ethical Leadership:** Develop ethical leaders who lead by example and inspire others through their actions.
2. **Foster Empathy and Respect:** Create an inclusive and empathetic campus environment where all individuals feel valued and respected.
3. **Encourage Social Responsibility:** Engage students, faculty, and staff in community service, volunteerism, and initiatives that address societal challenges.
4. **Provide Guidance and Support:** Offer resources, workshops, and counseling services to assist individuals in navigating ethical dilemmas.

and making responsible decisions.

5. Uphold Academic Integrity: Promote academic honesty and integrity among students through awareness campaigns, integrity committees, and honor codes.

Organization Structure

Patron	: Prof Ashu Rani, Vice-Chancellor
Co-Patron	: Prof Ajay Taneja, Pro-Vice-Chancellor
Benefactor	: Prof Brijesh Rawat
University Coordinator	: Dr Swati Mathur
College Coordinators	: Principals of concerned Colleges
Administrative Coordinator	: Registrar
Student Facilitator	: Ms Rashi Srivastav

Activities & Initiatives

1. Workshops and Seminars: Organize workshops, seminars, and lectures on topics related to ethics, moral values, and social justice.
2. Community Service Programs: Facilitate community service programs, volunteer opportunities, and outreach initiatives to give back to society.
3. Counseling and Support Services: Provide counseling services, support groups, and confidential consultations to address ethical concerns and personal challenges.
4. Student Integrity Committees: Support student-led integrity committees and honor codes to promote academic integrity and peer accountability.
5. Research and Publications: Encourage research initiatives and publications that explore ethical issues, moral philosophy, and values-based leadership.

Code of Conduct

All members of the university community are expected to adhere to the highest standards of ethical conduct, integrity, and respect. Violations of

ethical principles, academic integrity, or university policies will be addressed through appropriate disciplinary measures positively to the world around them.

The establishment of the Human Values Cell within Dr Bhimrao Ambedkar University, Agra (Inception in January 2023) reflects our firm belief that education extends far beyond the mere transmission of information; it is about nurturing the holistic development of individuals who are equipped to navigate the complexities of the modern world with wisdom, integrity, and a deep sense of responsibility. Grounded in the principles of respect, empathy, inclusivity, and ethical conduct, the Human Values Cell serves as a beacon of light, guiding our university community towards a future where human values are not merely theoretical concepts but lived realities. Through a diverse array of programs, initiatives, and collaborative efforts, the Human Values Cell seeks to instill in our students, faculty, and staff a deep appreciation for the intrinsic worth of every individual, a commitment to social justice, and a reverence for the interconnectedness of all life. As we embark on this journey together, let us embrace the opportunity to cultivate a culture of compassion, integrity, and mutual respect within our academic community, and thereby, become catalysts for positive change in the world.

Human Values

The term "human values" refers to the fundamentally good moral tendencies that underpin human nature and the goodness of society as a whole, such as kindness, honesty, loyalty, love, peace, sympathy, and truth. These are the ideals that people respect, uphold, and practice in the majority of settings and eras, whether consciously or unconsciously. Human values impact one's view of the world and aid in understanding behaviour, motivation, and attitude. They offer methods for comprehending people and organisations as well as

the ability to interpret what is "right and wrong." The following is a quick discussion of the main human values:



DR BHIMRAO AMBEDKAR UNIVERSITY, AGRA

PERFORMA FOR STUDENT VOLUNTEERS

HUMAN VALUES CELL

Name of the student: _____ :

Class : _____

Department/College: _____ :

Address: _____ :

Mobile No _____ :

Email Id _____ :

Area of Interest _____ :

Views on the importance of human values education in Colleges/departments:

Signature of the Student

Human Value Cell

The university's organization of seminars, workshops, and the establishment of a Human Value Cell demonstrates its dedication to fostering a well-rounded educational experience for students. These initiatives offer opportunities for students to engage in meaningful discussions, reflection, and practical activities focused on universal human values. Through the Human Value Cell and associated activities, the university aims to cultivate a culture of ethical awareness and holistic development, preparing students to become compassionate, ethical leaders in their respective fields.

Value added courses and environmental studies

The mission of the course on Human Values and Environmental Studies is to create morally articulate solutions to be truthful and just and to become responsible towards humanity. The course seeks to establish a continuous interest in the learners to improve their thought process with intent to develop a new generation of responsible citizens capable of addressing complex challenges faced by the society due to disruptions in human interactions effecting human values. This course works towards

- Building fundamental knowledge of the interplay of markets, ethics, and law,
- Look at various challenges faced by individual to counter unethical issues
- Look at core concepts for business ethics
- Look at core concepts of anti- corruption
- Look at core concepts for a morally articulate solution evolver to management issues in general,
- Issues of sustainable development for a better environment.
- To know how environmental degradation has taken place.
- Be aware of negotiations and international efforts to save environment.
- How to develop sustainably?
- Efforts taken up by UN in Sustainable Development.
- Efforts taken by India in Sustainable Development.

Department of Higher Education U.P. Government, Lucknow

- The course intends to create a sense of how to be more responsible towards the environment. Upon finishing of the course students will be able to come up with using ethical reasoning for decision making and frame ethical issues as well as operationalise ethical choices. The course integrates various facets of human values and environment. As the course requires two areas of Human Values and Environment Studies institutions can even opt for a parallel delivery

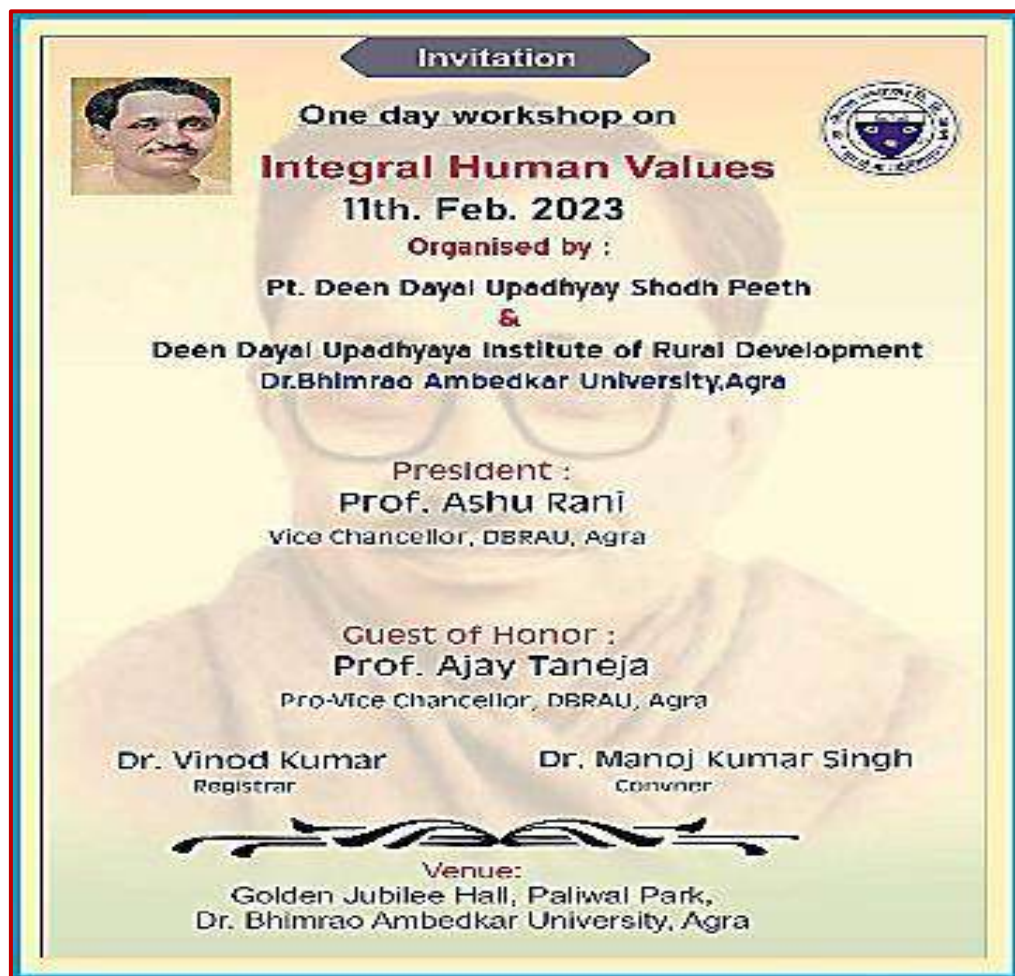
Topics are I Human Values- Introduction- Values, Characteristics, Types ,Developing Value system in Indian Organisation , Values in Business Management , value based Organisation , Trans –cultural Human values in Management. Swami Vivekananda's philosophy of Character Building, Gandhi's concept of Seven Sins, APJ Abdul Kalam view on role of parents and Teachers. Human Values and Present Practices – Issues : Corruption and Bribe , Privacy Policy in Web and Social Media, Cyber threats ,Online Shopping etc. Remedies UK Bribery Act, Introduction to sustainable policies and practices in Indian Economy. Principles of Ethics Secular and Spiritual Values in Management- Introduction- Secular and Spiritual values, features , Levels of value Implementation. Features of spiritual Values , Corporate Social Responsibility-

Nature, Levels ,Phases and Models of CSR, Corporate Governance. CSR and Modern Business Tycoons Ratan Tata, Azim Premji and Bill Gates. 02 02 03 II Holistic Approach in Decision making- Decision making, the decision making process , The Bhagavad Gita: Techniques in Management , Dharma and Holistic Management. Discussion through Dilemmas – Dilemmas in Marketing and Pharma Organisations, moving from Public to Private – monopoly context , Dilemma of privatisation, Dilemma on liberalization, Dilemma on social media and cyber security , Dilemma on Organic food , Dilemma on standardization ,Dilemma on Quality standards. Case Studies 03 03 02 III Ecosystem: Concept, structure & functions of ecosystem : producer, consumer, decomposer, foodweb, food chain, energy flow, Ecological pyramids Conservation of Biodiversity- In-situ & Ex- situ conservation of biodiversity Role of individual in Pollution control Human Population & Environment Sustainable Development India and UN Sustainable Development Goals Concept of circular economy and entrepreneurship 7 IV Environmental Laws? International Advancements in Environmental Conservation Role of National Green Tribunal Air Quality Index Importance of Indian Traditional knowledge on environment 8 Bio assessment of Environmental Quality Environmental Management System Environmental Impact Assessment and Environmental Audit

Some Activities to show University sensitiveness for sustainable goals

One Day workshop on Integral Human Values

The university hosted a one-day workshop on Integral Human Values on February 11, 2023, for students and staff. This initiative highlights the institution's dedication to fostering a community centered on vital human virtues. By involving both students and staff, the workshop aims to cultivate ethical awareness, social responsibility, and holistic development within the university community.



One Day workshop on Integral Human Values Organised by Pt. Deen Dayal Upadhyay Shodh Peeth and Deen dayal Upadhyay Institute of Rural development, DBRAU

Workshop on Universal Human Value towards holistic, value based education

The Workshop on Universal Human Values towards holistic, value-based education featured Dr. Upasana Mishra as the keynote speaker. Dr. Mishra, the Regional Coordinator for the North Region at AICTE, shared insights from her extensive experience at the Seth Padam Chand Jain Institute of Management Studies. The workshop provided a platform for participants to delve into the essential role of human values in education.



Workshop on Universal Human Value towards holistic, value based education at Seth Padam Chand Jain Institute of Management Studies on 22-04-2023

**Key note Speaker - Dr. Upasana Mishra,
Regional coordinator (North Region) AICTE**

Blood Donation Camp

Sensitizing students and employees to their responsibility for society through blood donation is crucial for fostering a culture of compassion and civic engagement. By promoting blood donation initiatives within educational institutions and workplaces, students and faculty are encouraged to recognize the impact they can have on saving lives and supporting their community. Through these efforts, students and employees are empowered to take an active role in addressing the ongoing need for blood donations in society.



The students generously donated blood to contribute to the welfare of society

Health Check Camp

Organizing health check-up camps is a powerful way to sensitize students and employees to their responsibility for society's well-being. These camps provide convenient access to preventive healthcare services, promoting early detection of health issues and fostering a culture of proactive wellness. By prioritizing their own health through participation in these camps, individuals contribute to a healthier community and exemplify the importance of individual responsibility in creating a better society.



The university organizes regular health check-ups for girls to ensure their well-being.

NSS Camp

The university has organized an NSS (National Service Scheme) camps, demonstrating its commitment to community engagement and social responsibility. Through this camp, students and faculty members engage in various service-oriented activities aimed at addressing local needs and contributing to the welfare of the community.



The NSS volunteers performed a March past at the NSS Camps.

Vaccination in Campus during COVID-19 pandemic

The university is actively contributed to the vaccination drive during the COVID-19 pandemic, recognizing the importance of collective action in combating the spread of the virus and protecting public health. Through collaboration with local health authorities and government agencies, the university has established vaccination centers on campus to facilitate easy access to vaccines for students, faculty, staff, and members of the surrounding



People receiving vaccinations during the COVID vaccination campaigns in university Campus

Oath-taking ceremony on "Meri Maati and Mera Desh"

The university has organized a rally followed by an oath-taking ceremony on "Meri Maati and Mera Desh" to sensitize students and staff members to their responsibilities towards their nation. Through this initiative, students are encouraged to reflect on the importance of patriotism, civic duty, and active citizenship.



Oath-taking ceremony on "Meri Maati and Mera Desh"

Har Ghar Tiranga

The university's NCC unit organized "Har Ghar Tiranga," a patriotic initiative led by both faculty and students. This event aimed to foster a sense of national pride and unity by encouraging households to display the Indian flag. Through this collective effort, participants honored the spirit of patriotism and celebrated the country's rich heritage.



Tiranga Rally organized by NCC unit

Road Safety Awareness Program

Mr. Arun Srivastava, an advisor for TRAY Road Safety NGO, India, and the Indian Alliance of NGOs for Road Safety (IANRS), shed light on a road safety awareness program held on 12.02.2021. His insightful presentation underscored the importance of road safety education and advocacy in mitigating traffic-related accidents and promoting safer roads.



Mr. Arun Srivastava, an advisor for TRAY Road Safety NGO, India, and the Indian Alliance of NGOs for Road Safety (IANRS), illuminated the road safety awareness program

Voter Awareness Rally on

The university has organized a vibrant voter awareness rally led by students, accompanied by an oath-taking ceremony. This initiative aims to underscore the significance of electoral participation and civic responsibility among the student body and the broader community.



Students are taking the oath to vote



Voter Awareness Rally organized by the Electoral Literacy Club

National Voters Day

The National Voters Day was organized by the Rover and Rangers Scout Units, marking a significant occasion to promote voter awareness and participation among youth. This event served as a platform for students to learn about the importance of exercising their democratic right to vote and to understand the role they play in shaping the future of their nation.



The faculty and students are actively participating in an awareness rally organized by the Rover and Rangers Scout Units.

Plantation Drive

Sensitizing students and employees to their responsibility for the environment through a plantation drive is a proactive step towards fostering ecological awareness and sustainable practices. By organizing such an event, participants are encouraged to recognize the crucial role they play in preserving and enhancing the environment for future generations. During the plantation drive, students and employees come together to plant trees, shrubs, or other vegetation in designated areas within the campus or surrounding community.



Registrar - Dr. Rajeev Kumar and Prof. Manu Pratap Singh (Director of IET) are actively contributing to a plantation drive aimed at raising awareness about environmental conservation.

Bhartiya Shikshan Mandal program on Indian Knowledge

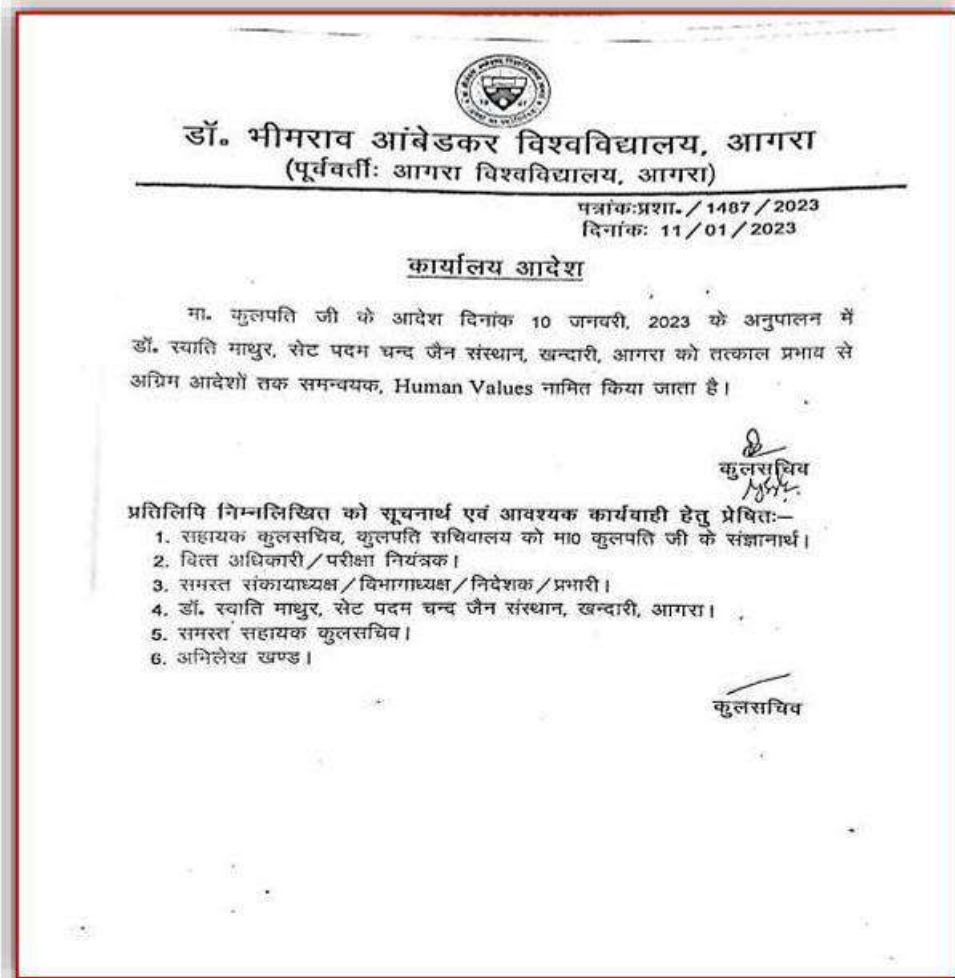
System

The Bhartiya Shikshan Mandal program for students is a comprehensive educational initiative aimed at holistic development and empowerment. The program focuses on nurturing students' academic excellence, character development, leadership skills, and cultural awareness.



Professor Sanjeev Kumar Sharma addressing the audience during the Bhartiya Shikshan Mandal Program

Human Value Cell The university's organization of seminars, workshops, and the establishment of a Human Value Cell demonstrates its dedication to fostering a well-rounded educational experience for students. These initiatives offer opportunities for students to engage in meaningful discussions, reflection, and practical activities focused on universal human values. Through the Human Value Cell and associated activities, the university aims to cultivate a culture of ethical awareness and holistic development, preparing students to become compassionate, ethical leaders in their respective fields.



Office Order of Human Value

Workshop on Universal Human Value towards holistic, value based education 22 April 2023 The Workshop on Universal Human Values towards holistic, value-based education featured Dr. Upasana Mishra as the keynote speaker. Dr. Mishra, the Regional Coordinator for the North Region at AICTE, shared insights from her extensive experience at the Seth Padam Chand Jain Institute of Management Studies. The workshop provided a platform for participants to delve into the essential role of human values in education.



Workshop on Universal Human Value towards holistic, value based education at Seth Padam Chand Jain Institute of Management Studies on 22-04-2023

One Day workshop on Integral Human Values 11 February 2023 The university is hosting a one-day workshop on Integral Human Values on February 11, 2023, for students and staff. This initiative highlights the institution's dedication to fostering a community centered on vital human virtues. By involving both students and staff, the workshop aims to cultivate ethical awareness, social responsibility, and holistic development within the university community.

Invitation



One day workshop on

Integral Human Values

11th. Feb. 2023

Organised by :

Pt. Deen Dayal Upadhyay Shodh Peeth
&

Deen Dayal Upadhyaya Institute of Rural Development
Dr. Bhimrao Ambedkar University, Agra

President :

Prof. Ashu Rani

Vice Chancellor, DBRAU, Agra

Guest of Honor :

Prof. Ajay Taneja

Pro-Vice Chancellor, DBRAU, Agra

Dr. Vinod Kumar
Registrar

Dr. Manoj Kumar Singh
Convener



Venue:

Golden Jubilee Hall, Paliwal Park,
Dr. Bhimrao Ambedkar University, Agra

One Day workshop on Integral Human Values Organised by Pt. Deen Dayal
Upadhyay Shodh Peeth and Deen dayal Upadhyay Institute of Rural development,
DBRAU on 11-02-2023



डा. भीमराव आंबेडकर विश्वविद्यालय, अग्रा
(सुनहरी - समस्त विश्वविद्यालय, अग्रा)
1927

DR. BHIMRAO AMBEDKAR
UNIVERSITY, AGRA

ENERGY AUDIT REPORT

2022-2023

PREPARED BY
EHS ALLIANCE SERVICES

ENERGY AUDIT REPORT

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CERTIFICATE



CERTIFICATE

PRESENTED TO

**DR. BHIMRAO AMBEDKAR UNIVERSITY,
AGRA**

Has been assessed by EHS Alliance Services for the comprehensive study of Energy Audit on institutional working framework to fulfill the requirement of

ENERGY AUDIT

INITIATIVE CARRIED OUT BETWEEN YEAR 2020-2023

The energy-saving initiatives carried out by the institution have been verified in the report submitted and were found to be satisfactory.

The efforts taken by management and faculty towards all types of energy used in the institution and sustainability are highly appreciated and noteworthy.

A handwritten signature in blue ink, appearing to read 'H. Singh'.

SIGNATURE



28.06.2023
DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
WWW.EHSALL.IN | BUSINESS@EHSALL.IN | EHSALLIANCE@GMAIL.COM

ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Dr. Bhimrao Ambedkar University, Agra for assigning this important work of Energy Audit. We appreciate the cooperation to the teams for the completion of the assessment.

First of all, we would like to thank *Prof Ashu Rani, Vice – Chancellor* for allowing us to evaluate the environmental performance of the campus.

We would also like to thank *Prof. B S Sharma - Audit Coordinator*, for his continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Prof. Ajay Taneja

Pro Vice – Chancellor Prof. Sanjeev Kumar

Director, IQAC

Prof. M. P. Singh

Director, I.E.T. Prof.

R K Agnihotri

Professor, Botany



DISCLAIMER

EHS Alliance Services Energy Audit Team has prepared this Energy Audit Report for Dr. Bhimrao Ambedkar University based on input data submitted by the representatives of University complemented with the best judgment capacity of the expert team.

While all reasonable care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express 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.

If you wish to distribute copies of this report external to your organization, then all pages must be included.

EHS Alliance, its staff and agents shall keep confidential all information relating to your organization and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies. EHS Alliance staff, agents and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a ‘need to know’ basis.



Vijay Singh
Lead Auditor EMS & Energy



Dr. Uday Pratap
Co-Auditor EMS & Energy

ABBREVIATION

A	Amps
AC	Air Conditioner
AC	Alternating Current
AMET	Academy of Maritime Education and Training
CFL	Compact fluorescent lamp
CIP	Comprehensive Inspection Program
DC	Direct Current
HSD	High-Speed Diesel
Hz	Hertz
kg	Kilogram
kVA	kilo-volt-ampere
kW	kilo Watts
kWh	kilowatt hour
kWp	Kilowatt peak
LED	Light Emitting Diode
LPG	Liquefied Petroleum Gas
MMS	Module mounting structure
MPPT	Maximum Power Point Tracker
NAAC	The National Assessment and Accreditation Council
SEC	Specific Energy Consumption
SPV	Solar Photovoltaic
STC	Standard Test Condition
TV	Television
V	Volts
W	Watts
W/m²	watt per square meter

OVERVIEW OF THE UNIVERSITY

The foundation – of Dr Bhimrao Ambedkar University (originally known as Agra University) was laid on the 1st of July, 1927, as a result of hectic efforts of a band of enthusiastic educationists like Rev. Canon A.W. Davis, Munshi Narain Prasad Asthana, Dr

L.P. Mathur, Lala Dewan Chand, Rai Bahadur Anand Swaroop and Dr Brajendra Swaroop,.

Original jurisdiction of University extended over United Provinces of Agra, Central India and Rajputana with 14 affiliated colleges and 2530 students of which, 1475 students belonged to United Provinces. Initially, there were only four faculties in the University viz. Arts, Sciences, Commerce and Law. Faculties of Medicine (1936), Agriculture (1938), Home Science (1980), Basic Sciences (1981), Fine Arts (1982) and Management (1994) were added subsequently.



The Agra University, Agra was renamed as Dr Bhimrao Ambedkar University, Agra from 24.09.1995 vide U.P. Govt. Notification No. 33/XVII-V-1-1(ka)-43-1996, dated 06.01.1996). The University now caters to the educational needs of the four districts of Agra Division Agra, Mainpuri,

Firozabad, and Mathura. Besides, the University is proud of having affiliated to it, Sarojini Naidu Medical College, which is one of the oldest and premier Medical Institute of the country. At present university has 6 Govt colleges, 1 constituent college, 27 aided colleges, 540 self financed colleges and 15 residential Institutes spread out in its four residential campuses viz. Paliwal Park, Khandari Campus, Civil Lines Campus, and Chhaleshar Campus. The University is steadily surging ahead as a centre for higher scientific vocational and job oriented education and innovative research. The goal of the University is to innovate in the field of education and to become a centre of excellence both Nationally and Internationally. The University is not only confined to impart quality education but also to satisfy the burning desire of the students who are exploring the creative intellect and learning attitude of the students. The University is making every effort to fulfill the spirit of University motto —Tamsa Ma Jyotirgamay|| moving from darkness to light.

The University has over the years developed a sizeable residential wing consisting of following Institutes & independent Teaching Departments:

- ✓ K. M Institute of Hindi & Linguistics(1953)
- ✓ Institute of Social Sciences (1957)
- ✓ Institute of Home Science (1968)
- ✓ Institute of Basic Science (1984)
- ✓ Department of Library Information Science (1984)
- ✓ Department of History (1985)
- ✓ Department of Adult and Continuing Education & Extension (1989)
- ✓ Department of Physical Education (1989)
- ✓ S.P.C.J. Institute of Commerce, Business Management & Economics (1993)
- ✓ Dau Dayal Institute of Vocational Education (1994)
- ✓ Institute of Engineering & Technology (1998)
- ✓ Deen Dayal Upadhyaya Institute of Rural Development (1998)
- ✓ School of Life Sciences (1998)
- ✓ Department of Contemporary Social Studies & Law (1998)
- ✓ Lalit Kala Sansthan (Institute of Fine Arts) (2000)
- ✓ Institute of Computer and Information Science (2004)
- ✓ Institute of Hotel and Tourism Management (2004)

MISSION, VISION & CORE VALUES

MISSION

- ✓ To make our education relevant and excellent.
- ✓ To contribute to the advancement of knowledge through research, publication and disseminations
- ✓ To develop student aptitudes and skills as well as make them conscious of their duty to the country and to fellow human beings.
- ✓ Promote a culture of excellence in all activities of the University by implementing good practices

VISION

To be a quality higher education Institution by producing students with knowledge, professional skill and ethical values and remain as preferred partner to the Industry and Community for their progress and development

CORE VALUES

- ✓ Academic freedom and flexibility
- ✓ Collegiality and team work
- ✓ Concern for the environment and society
- ✓ Transparency and accountability for all stake holders.



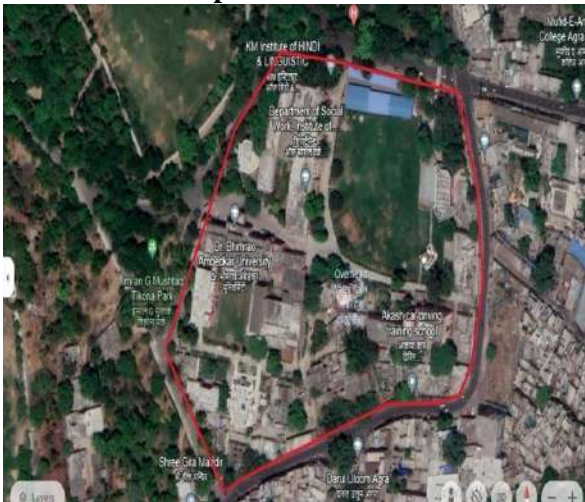
Campus wise map is shown below:



Chhaleshar Campus



Sanskriti Bhawan, Civil Lines Campus



Paliwal Campus



Khandari Campus



Sultan Ganj Campus



Gopal Kunj Residential Campus



AUDIT PARTICIPANTS

On behalf of the University

Name	Designation
Prof Ashu Rani	<i>Vice - Chancellor</i>
Prof. Ajay Taneja	<i>Pro Vice - Chancellor</i>
Prof. B S Sharma	<i>Professor, EVS</i>
Prof. Sanjeev Kumar	<i>Director, IQAC</i>
Prof. Manu Pratap Singh	<i>Professor & Director, IET</i>
Prof. R K Agnihotri	<i>Professor, Botany</i>
Dr. Rajeev Kumar	<i>Registrar</i>
Er. Harimohan	<i>University Engineer</i>

On behalf of EHS Alliance Services

Name	Position	Qualifications
Mr. Vijay Singh	Lead Auditor	<i>M.Sc. M. Tech (Environment Science & Engineering), Energy Auditor, Post Diploma in Industrial Safety Management</i>
Dr. Uday Pratap	Co-Auditor	<i>Ph.D., EMS: Lead Auditor ISO14001:2015, QCI-WASH</i>



EXECUTIVE SUMMARY

The purpose of this Energy Audit was to seek opportunities to improve the energy efficiency of the Dr. Bhimrao Ambedkar University. Reducing the energy consumption despite improving the human comfort, health and safety were of primary concern.

Beyond just identifying the energy consumption pattern, this audit sought to detect and categorize the most energy efficient appliances. Additionally, some daily practices relating common appliances have been shared which may help reducing the energy consumption. Data collection for energy audit of the campus was carried out by the EHS Alliance Team. The Energy Audit Report accounts for the energy consumption patterns of the institution on actual survey and detailed analysis during the audit.

The work comprehends the area wise consumption traced using suitable equipment. The analysis was carried out by our team with the support of the staff members from Dr. Bhimrao Ambedkar University. The report provides a list of possible actions to preserve and efficiently access the available source, resources and their saving potential was also identified. We look forward towards optimization that the authorities, students and staff members would follow the recommendations in the best possible way. The report is based on certain generalizations including the approximations wherever necessary. The views conveyed may not reveal the general opinion. They merely represent the opinion of the team guided by the interviews of clients. We are happy to submit this Energy audit report to the Dr. Bhimrao Ambedkar University.

ENERGY AUDIT - ANALYSIS

1. ENERGY CONSUMPTION

To understand the Energy Consumption trends and to analyze the average monthly consumption we have collected electricity energy bills from July 2022 to June 2023

The details of “Meter Connection” at “Dr. Bhimrao Ambedkar University” are as follows-

Name - The Registrar, Agra University

Account Details - A/C 670001311, A/C

674052283

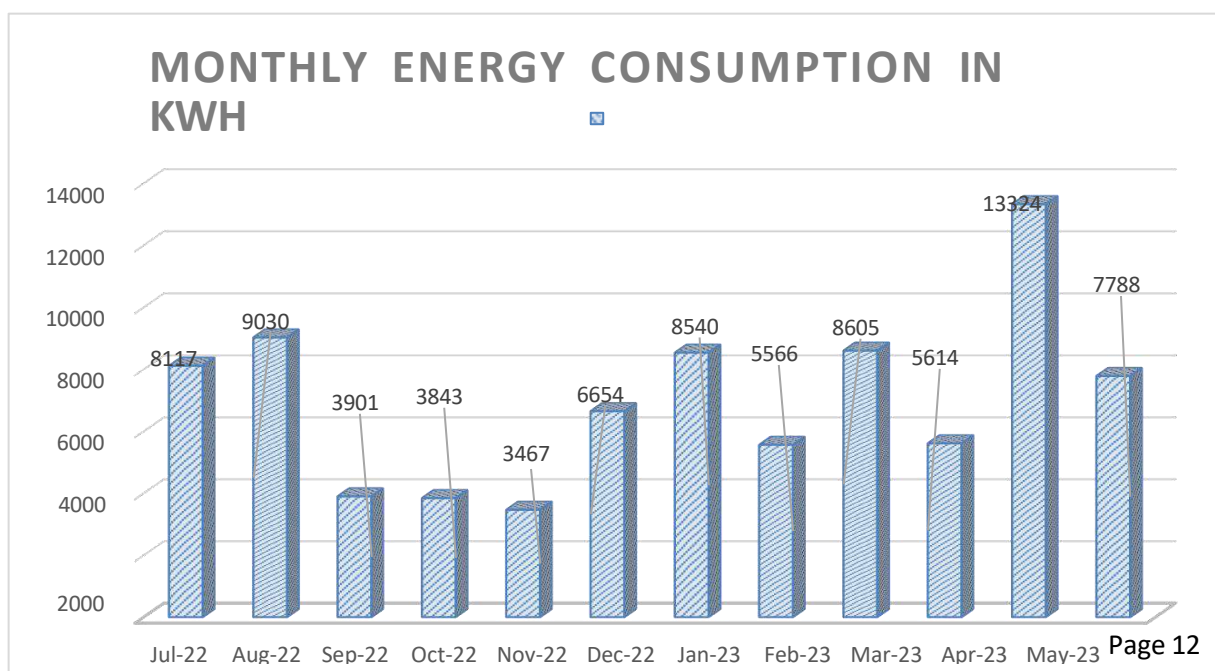
A/C 670002133, A/C 670011354

A/C 670036906, A/C 670014505

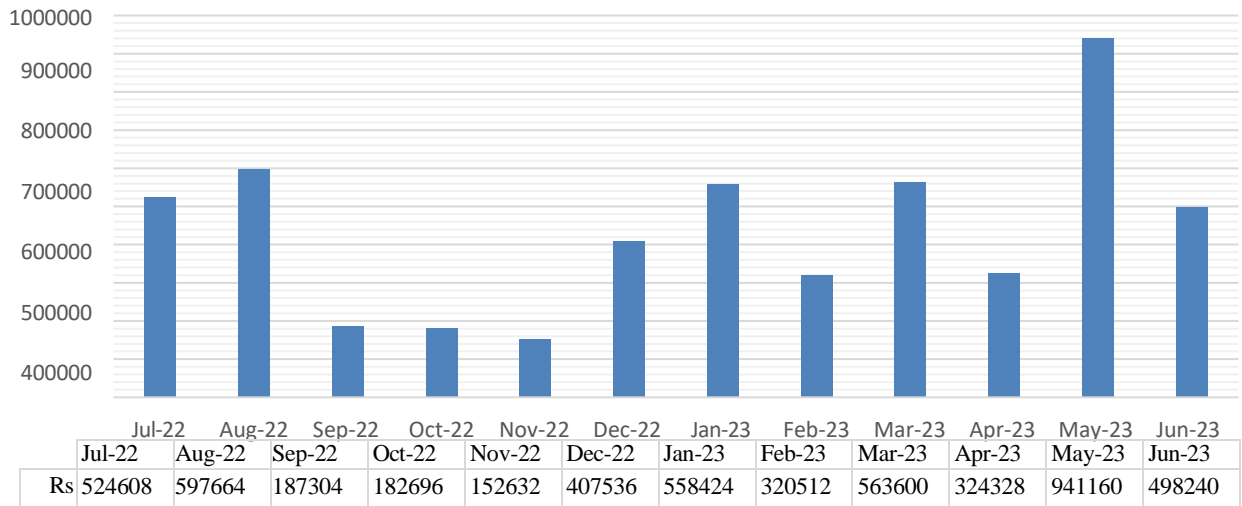
1.1 Summary of Monthly Electricity Consumption and Total Bill Amount

To understand the Energy consumption trend and to develop the baseline parameter we have collected monthly energy bill for the 12 months i.e. from July 2022 to June 2023

Month	Grid Billing	Solar PV	Total Readings	Rate INR	Amount in INR
Jul-22	65576	15600	81176	8.00	524608
Aug-22	74708	15600	90308	8.00	597664
Sep-22	23413	15600	39013	8.00	187304
Oct-22	22837	15600	38437	8.00	182696
Nov-22	19079	15600	34679	8.00	152632
Dec-22	50942	15600	66542	8.00	407536
Jan-23	69803	15600	85403	8.00	558424
Feb-23	40064	15600	55664	8.00	320512
Mar-23	70450	15600	86050	8.00	563600
Apr-23	40541	15600	56141	8.00	324328
May-23	117645	15600	133245	8.00	941160
Jun-23	62280	15600	77880	8.00	498240
SUM	657338	187200	844538		5258704



Monthly Expense - from July 2022 to June 2023



Below are the campus-wise consumption details (kWh)

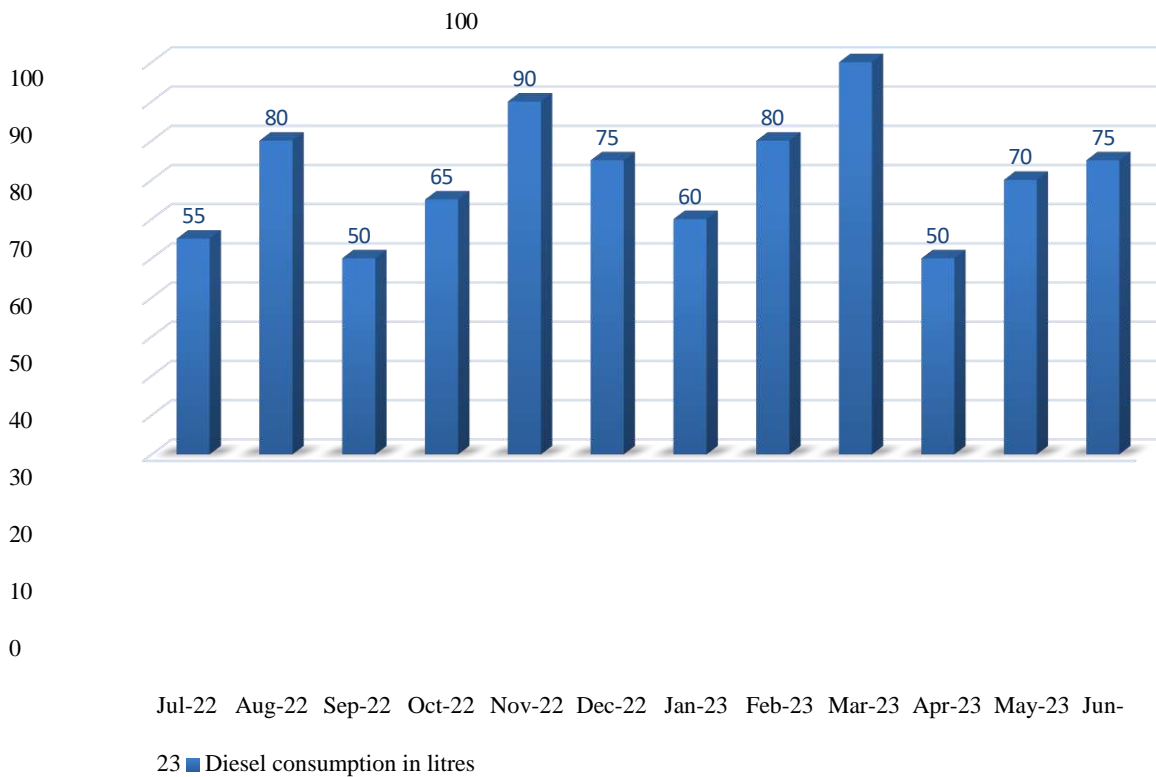
Month	Campus-1	Campus-2	Campus-3	Campus-4	Campus-5	Campus-6
Jul-22	13874	1305	14091	26404	4951	4951
Aug-22	21598	9821	6452	15080	9406	12351
Sep-22	10341	919	494	4501	6361	797
Oct-22	11383	1054	666	5255	1228	3251
Nov-22	10104	768	316	4389	662	2840
Dec-22	11664	4678	13364	8371	9302	3563
Jan-23	30713	18302	4225	14129	1480	954
Feb-23	19321	1344	579	8459	720	9641
Mar-23	12985	2823	5262	7138	26397	15845
Apr-23	12422	10000	1365	1374	18742	6638
May-23	31288	15054	24231	6711	25813	4548
Jun-23	32353	2356	1287	16248	3506	6530
SUM	218046	68424	72332	118059	108568	71909

2. DIESEL CONSUMPTION

Below is the diesel consumption details in liters from July 2022 to June 2023.

Period	Diesel consumption (in litres)
Jul-22	55
Aug-22	80
Sep-22	50
Oct-22	65
Nov-22	90
Dec-22	75
Jan-23	60
Feb-23	80
Mar-23	100
Apr-23	50
May-23	70
Jun-23	75
Total	850

**Diesel Consumption (Litres)
July 2022 to June 2023**



3. ANALYSIS OF DG SETS

In the campus, there is only one Diesel Generator (DG) set for its electrical power needs in case of Grid power failure. DG sets capacity is 250 kVA.

Description	Unit	Description	DG Station -1	DG Station -2
Design details:		Rated capacity		
Rated capacity	kVA	Hz	5 kVA	62 kVA
Hz		Sl No.	50	50
Sl No.		Make	Not Clear	7839K
Make		Volts	Field Marshal	Kirloskar
Volts	Volts	PF	230	415
PF		Phase	0.8	0.8
Phase		RPM	1	3
RPM		Amps	800	1200
Amps	Amps	Mfg.	33.5	35.7
Mfg.		Mfg.	Very Old	22.03.2014

DG Set Operation details		
Operating hours during testing	Hours	0.50
% Loading	%	62.76
Energy Generation	kWh	32.24
Load	kVA	86.74
Fuel consumption during testing	Litre	8
Specific energy generation	kWh/litre	3.02

Observation and Suggestions: -

The institution has installed 2 DG sets for power backup, out of which 1 are very old. We recommend to replace both the DG sets (5kVA).

As per the trial taken during the energy audit, the percentage loading of DG set is 62.76% which is ok and the specific energy consumption of DG Sets 3.02 kWh/Litre which is satisfactory because as per manufacturer recommendation, best practices for SEC in DG sets range from 3.0 to 3.5 kWh/Litre and above.

We recommend University to initiate periodic maintenance schedules and stack monitoring of DG set (62 kVA) through an authorized lab.



4. AC SYSTEM

Energy Efficiency Ratio (EER): Performance of smaller chillers and rooftop units is frequently measured in EER rather than kW/ton. EER is calculated by dividing a chiller's cooling

Capacity (in Btu/h) by its power input (in watts) at full-load conditions. The higher the EER, the More efficient the unit. The cooling effect produced is quantified as tons of refrigeration (TR). The above TR is also called as air-conditioning tonnage.

There are Split, windows and Cassette ACs installed in Dr. Bhimrao Ambedkar University in various areas of various capacity which detail is given below:-

SI No.	Location/ Identification	AC Type	count	TR	Room Temp. (°C)	AC-Tout (°C)	AC-Tin (°C)	Room-RH (%)	Area (m2)	Air velocity (m/s)	Enthalpy Hout	Enthalpy Hin	Heat Load in TR	KW supplied	(Eff.)Power per Ton (KW/TON)	EER
1	Camp Office/ Bungalow	S	2	1.5	24	11	19	52	0.03	2.6	24	37	0.38	0.57	1.52	2.31
2	Camp Office/ Bungalow	W	2	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98
3	Campus-1	S	12	1.5	24	10	18	52	0.03	2.4	24	37	0.35	0.53	1.53	2.3
4	Campus-1	S	4	2.0	23	12	22	52	0.03	2.3	24	43	0.46	0.76	1.67	2.11
5	Campus-1	S	2	4.0	23	12	20	52	0.03	2.5	25	38	0.34	0.63	1.87	1.88
6	Campus-1	S	6	8.0	24	11	18	53	0.03	2.4	22	37	0.38	0.67	1.78	1.97
7	Campus-1	W	16	1.5	23	11	19	52	0.03	2	22	37	0.33	0.58	1.74	2.02
8	Campus-1	W	2	2.0	23	12	22	52	0.03	2.3	24	43	0.46	0.76	1.67	2.11
9	Campus-1	C	1	20.0	23	12	20	52	0.03	2.5	25	38	0.34	0.63	1.87	1.88
10	Campus-2	S	4	1.5	23	12	20	52	0.03	2.3	25	38	0.33	0.55	1.67	2.11
11	Campus-2	W	8	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98
12	Campus-3	S	10	1.5	23	11	19	52	0.03	2	22	37	0.33	0.58	1.74	2.02
13	Campus-3	S	4	2.0	23	12	22	52	0.03	2.3	24	43	0.46	0.76	1.67	2.11
14	Campus-3	S	4	8.0	24	11	18	53	0.03	2.4	22	37	0.38	0.67	1.78	1.97
15	Campus-3	W	14	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98
16	Campus-4	S	8	1.5	23	13	20	52	0.03	2.3	26	38	0.31	0.53	1.74	2.02
17	Campus-4	W	12	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98
18	Campus-5	S	16	1.5	23	12	20	52	0.03	2.2	25	38	0.32	0.55	1.74	2.03
19	Campus-5	S	4	2.0	23	12	22	52	0.03	2.3	24	43	0.46	0.76	1.67	2.11
20	Campus-5	S	4	4.0	23	12	20	52	0.03	2.5	25	38	0.34	0.63	1.87	1.88
21	Campus-5	S	4	8.0	24	11	18	53	0.03	2.4	22	37	0.38	0.67	1.78	1.97
22	Campus-5	S	1	12.0	24	11	18	53	0.03	2.4	22	37	0.38	0.67	1.78	1.97
23	Campus-5	W	22	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98
24	Campus-5	W	2	2.0	23	12	22	52	0.03	2.3	24	43	0.46	0.76	1.67	2.11
25	Campus-6	S	16		23	12		52	0.03	2.3	24	37	0.33	0.58	1.74	2.02
26	Campus-6	S	4	8.0	24	11	18	53	0.03	2.4	22	37	0.38	0.67	1.78	1.97
27	Campus-6	W	18	1.5	24	11	20	52	0.03	2.3	22	38	0.38	0.68	1.77	1.98

Remarks: - We have checked Energy Efficiency Ratio of AC's and EER of AC's is fairly OK. But in future you should purchase 5-Star rated inverter based split AC's because power consumption of inverter-based BEE 5-Star rated AC's is less than non-star rated AC's.

Also, we recommend Dr. Bhimrao Ambedkar University to organize periodic maintenance schedule and take corrective actions for insulating of AC's refrigerant lines in order to protect energy losses.



5. FANS ANALYSIS

In the Dr. Bhimrao Ambedkar University, there are 1596 fans installed, of different wattage. Details of the same are shown below.

Sl No.	Location/ Identification	Ceiling Fan-	Ceiling Fan-	Ceiling Fan-	Ceiling Fan-	Ceiling Fan-	Ceiling Fan-	Pedestal 45W	Pedestal 60W	Pedestal 100W
1	VC Bungalow	3	4	1	0	0	0	1	0	0
2	Campus-1	3	45	76	14	46	8	12	2	2
3	Campus-2		56	79	22	32	12	10	6	3
4	Campus-3		52	134	18	71	4	6	5	0
5	Campus-4		76	54	9	19	4	14	0	0
6	Campus-5		88	200	42	60	7	5	0	2
7	Campus-6		112	97	21	51	4	4	0	0
	TOTAL	6	433	641	126	279	39	52	13	7

Observation and Suggestions: -

In the University, all the ceiling fans and pedestal fans are of different wattage. BEE 5 Star Rated of 30W Ceiling Fans are present in the market. We recommend replacing the high- wattage fans (70W, 80W and 100W) to BEE 5 Star-rated 30W fans.

Total no of Ceiling Fans (60W)	Nos.	654
Total no of Ceiling Fans (70W)	Nos.	126
Total no of Ceiling Fans (Other W)	Nos.	810
Total wattage of 60W Ceiling Fans	Watt	39240
Total wattage of 70W Ceiling Fans	Watt	8820
Total wattage of Other W Ceiling Fans	Watt	50910
Total wattage of BEE 5 Star rated Fans (30W)	Watt	47700
Total saving in Wattage after replacement	Watt	51270
Operating hours per day	Hours	6
Operating days per annum	Days	180
Energy charges per unit in Rs.	INR	8
Saving in Rs./annum	INR	442973
Investment INR	INR	1950000
Payback period:- Months	YEARS	4.40

Note:- Energy savings will increase or decrease if the operating hours of the machine

/equipment will be increased or decreased and the payback period will also

increase or decrease if cost of investment (Cost of machine/equipment/accessories of the machine) will increase or decrease because cost of investment is taken on a tentative basis.

6. ANALYSIS OF LIGHTING SYSTEM

6.1 Brief description of the existing system

For assessing the energy efficiency of the lighting system, an Inventory of the Lighting System has been noted/collected, with the aid of a lux meter, measurement and documentation of the lux levels at various locations at the working level have been done.

6.2 Inventory of Lighting

Sl. No.	Location/ Identification	50W Flood Light	18W LED Flood Lights	9W LED	10W LED	18W LED Light	20W LED	12W LED Round	36W LED	36W Tube Lights
1	VC Bungalow	1	8	17	31	36	32	13	73	31
2	Campus-1	2	17	34	25	64	46	6	87	64
3	Campus-2	4	21	34	48	87	63	13	150	50
4	Campus-3	4	24	14	22	25	36	14	231	34
5	Campus-4	4	6	11	46	62	73	20	199	91
6	Campus-5	4	17	18	25	45	34	11	190	112
7	Campus-6	4	8	11	64	56	57	17	339	76
	TOTAL	23	101	139	262	375	342	92	1268	458

1.1 Lux Measurement

Description	Lux	Remark
Class Rooms	120 to 235	Acceptable
Offices	130 to 240	Acceptable
Corridors	35 to 90	Acceptable
Washrooms	45 to 76	Acceptable
Outdoor	36 to 95	Acceptable
Computer Lab	150 to 289	Acceptable
Parking area	45 to 94	Acceptable
Canteen	69 to 185	Acceptable

Observation

The university has initiated LED based lighting solution, but still there are 458 (36W) tube lights. LEDs save energy, the life span is much greater and emit virtually no heat. We recommend replacing the tube lights with LEDs. Additionally, we recommend to install motion sensor-based lights in common areas such as library, washrooms, corridors, etc. We also recommend to use solar lights for open areas like parking, ground, street lights, etc. Table below shows the performance characteristics comparison of all luminaries.

Table - Luminous Performance Characteristics of Commonly Used Luminaries					
Type of Lamp	Lumens/Watt		Colour Rendering Index	Typical Application	Typical Life
	Range	Avg.			
Incandescent	8-18	14	Excellent (100)	Homes, restaurants, general lighting emergency lighting	1000
Fluorescent lamps	46-60	50	Good w.r.t coating (67-77)	Offices, shops, hospitals, homes	5000
Compact fluorescent Lamps (CFL)	40-70	60	Very Good (85)	Hotels, shops, homes, offices	8000-10000
High pressure mercury (HPMV)	44-57	50	Fair (45)	General lighting in factories, garages, car parking, flood lighting	5000
Halogen lamps	18-24	22	Excellent (100)	Display, flood lightening, stadium exhibition grounds, construction areas	2000 - 4000
High pressure sodium (HPSV) SON	67-121	90	Fair (22)	General lighting in ware houses, factories, street lighting	6000 - 12000
Low pressure sodium (LPSV) SOX	101-175	150	Poor (10)	Roadways, tunnels, canals, street lighting	6000 - 12000
Metal halide lamps	75-125	100	Good (70)	Industrial bays, spot lighting, flood lighting, retail stores	8000
LED Lamps	30-50	40	Good (70)	Reading lights, desk lamps, night lights, spotlights, security lights, signage lights, etc.	40000 - 100000

2. OTHER POWER CONSUMPTION

2.1 Inventory of IT Infrastructure

Department / Institute	Xerox Machine	Number of Computers in the Department /Institute
Lalit Kala Sansthan	1	5
Department of library and information science	1	16
History and culture	1	6
KM Institute of Hindi and Linguistics	1	45
University Computer Centre , IBS, Khandari Campus	1	35
Physics	1	20
Institute of Tourism and Hotel Mgt	1	9
Institute of Social Sciences	1	35
Seth Padam Chand Jain institute of management	1	8
Department of Zoology, School of Life Science	1	8
Department of Chemistry	1	22
Department of Botany, School of Life Sciences, Khandari Campus, DBRAU Agra, U.P.	1	6
Dept. Of Computer Science	1	30
Department of Biotechnology, School of Life Sciences,	1	3
Department of Environmental Studies SLS	1	4
Central Library, Sanskriti Bhawan	1	10
Institute of Pharmacy and Paramedical Sciences	1	7
Department of Physical Education	0	1
Mathematics	1	40
Institute of Home Science	1	9
Department of Microbiology, School of Life Sciences	1	3
Department of Biochemistry SLS Dr. Bhimrao Ambedkar University Agra	1	3
DDU. Institute of Rural Development	1	1
Dau Dayal Institute of Vocational Education	1	25
Department of Forestry, School of Life Sciences, Khandari Campus, DBRAU, Agra, U.P.	0	1
Institute of Engineering & Technology, Khandari Campus, Agra	2	250
Central Library	1	10
Administrative Block	5	41
Total	31	653



डा. भीमराव आंबेडकर विश्वविद्यालय, अग्रा
(पूर्वतः - कानूनी विश्वविद्यालय, अग्रा)
1927



**DR. BHIMRAO AMBEDKAR
UNIVERSITY, AGRA**

GREEN AUDIT REPORT

2022-2023

PREPARED BY
EHS ALLIANCE SERVICES

GREEN AUDIT REPORT

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CERTIFICATE



CERTIFICATE

PRESENTED TO

DR. BHIMRAO AMBEDKAR UNIVERSITY, AGRA

Has been assessed by EHS Alliance Services for the comprehensive study of environmental impacts on institutional working framework to fulfill the requirement of

GREEN AUDIT

INITIATIVE CARRIED OUT BETWEEN YEAR 2020-2023

The green initiatives carried out by the institution have been verified on the report submitted and was found to be satisfactory.

The efforts taken by the management and the faculty towards environment and sustainability are appreciated and noteworthy.

A handwritten signature in blue ink, appearing to read "H. Das".

SIGNATURE



28.06.2023
DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
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ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Dr. Bhimrao Ambedkar University, Agra, Agra, Agra, Agra for assigning this important work of Green Audit. We appreciate the cooperation to the teams for the completion of the assessment.

First of all, we would like to thank *Prof Ashu Rani, Vice – Chancellor* for allowing us to evaluate the environmental performance of the campus.

We would also like to thank *Prof. B S Sharma - Audit Coordinator*, for his continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

*Prof. Ajay Taneja Pro Vice –
Chancellor Prof. Sanjeev Kumar
Director, IQAC*

Prof. M. P. Singh Director, I.E.T.

*Prof. R K Agnihotri Professor,
Botany*



DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Dr. Bhimrao Ambedkar University, Agra based on input data submitted by the representatives of university complemented with the best judgment capacity of the expert team.

While all sensible care has been taken in its preparation, details contained in this report have been compiled in good faith based on the information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express 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.

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EHS Alliance staff, agents and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.



Signature

LEAD

AUDITOR

CONCEPT AND CONTEXT

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. 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. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding Green auditing, the university management decided to conduct an external environment assessment study by a competent external professional auditor. The green audit aims to examine environmental practices within and outside the university campus, which impact directly or indirectly on the atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. It was initiated with the intention of reviewing the efforts within the institutions whose exercises can cause risk to the health of inhabitants and the environment.

Through the green audit, a direction as how to improve the structure of environment and inclusion of several factors that can protect the environment can be commenced. This audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the institution. The concepts, structure, objectives, methodology, tools of analysis, objectives of the audit as below:



INTRODUCTION

Now a days, the educational institutions are becoming more thoughtful towards the environmental aspects and as a result new and innovative concepts are being introduced to make them sustainable and eco-friendly. To preserve the environment within the institution, a number of viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the saving the energy, waste recycle, water consumption reduction, water harvesting and many more...

The activities carried out by the institution can also create adverse environmental impacts. Green audit is defined as an official inspection of the effects an institution has on the environment. Green Audit is conducted to evaluate the actual scenario at the institution campus. Green audit can be a useful tool for a university /college to determine how and where they are using the most of the energy or water or resources; the institution can then decide how to implement changes and make savings. It can also be used to determine the nature and volume of waste, which can be used for a recycling project or to improve waste minimization plan.

Green auditing and the application of mitigation measures is a win-win situation for all the institutions, the learners and the mother earth. It can also result in health awareness and can promote the environmental awareness, values and beliefs. It provides a better understanding to staff and students about the Green impact on institution. Green auditing also upholds financial savings through reduction of resource usage. It gives an opportunity to the students and teachers for the development of ownership of the personal and social responsibility. The audit process involves primary data collection, site walk through with the team of university /college including the assessment of policies, activities, documents and records



OVERVIEW OF THE UNIVERSITY

The foundation – of Dr Bhimrao Ambedkar University (originally known as Agra University) was laid on the 1st of July, 1927, as a result of hectic efforts of a band of enthusiastic educationists like Rev. Canon A.W. Davis, Munshi Narain Prasad Asthana, Dr L.P. Mathur, Lala Dewan Chand, Rai Bahadur Anand Swaroop and Dr Brajendra Swaroop,.

Original jurisdiction of University extended over United Provinces of Agra, Central India and Rajputana with 14 affiliated colleges and 2530 students of which, 1475 students belonged to United Provinces. Initially, there were only four faculties in the University viz. Arts, Sciences, Commerce and Law. Faculties of Medicine (1936), Agriculture (1938), Home Science (1980), Basic Sciences (1981), Fine Arts (1982) and Management (1994) were added subsequently.



The Agra University, Agra was renamed as Dr Bhimrao Ambedkar University, Agra from 24.09.1995 vide U.P. Govt. Notification No. 33/XVII-V-1-1(ka)-43-1996, dated 06.01.1996). The University now caters to the educational needs of

the four districts of Agra Division Agra, Mainpuri, Firozabad, and Mathura. Besides, the University is proud of having affiliated to it, Sarojini Naidu Medical College, which is one of the oldest and premier Medical Institute of the country. At present university has 6 Govt colleges, 1 constituent college, 27 aided colleges, 540 self financed colleges and 15 residential Institutes spread out in its four residential campuses viz. Paliwal Park, Khandari Campus, Civil Lines Campus, and Chhaleshar Campus.

The University is steadily surging ahead as a center for higher scientific vocational and job- oriented education and innovative research. The goal of the University is to innovate in the field of education and to become a center of excellence both Nationally and Internationally. The University is not only confined to imparting quality education but also to satisfy the burning desire of the students who are exploring the creative intellect and learning attitude of the students. The University is making every effort to fulfill the spirit of University motto —Tamsa Ma Jyotirgamay|| moving from darkness to light.

The University has over the years developed a sizeable residential wing consisting of following Institutes & independent Teaching Departments:

- ✓ K. M Institute of Hindi & Linguistics (1953)
- ✓ Institute of Social Sciences (1957)
- ✓ Institute of Home Science (1968)
- ✓ Institute of Basic Science (1984)
- ✓ Department of Library Information Science (1984)
- ✓ Department of History (1985)
- ✓ Department of Adult and Continuing Education & Extension (1989)
- ✓ Department of Physical Education (1989)
- ✓ S.P.C.J. Institute of Commerce, Business Management & Economics (1993)
- ✓ Dau Dayal Institute of Vocational Education (1994)
- ✓ Institute of Engineering & Technology (1998)
- ✓ Deen Dayal Upadhyaya Institute of Rural Development (1998)
- ✓ School of Life Sciences (1998)
- ✓ Department of Contemporary Social Studies & Law (1998)
- ✓ Lalit Kala Sansthan (Institute of Fine Arts) (2000)
- ✓ Institute of Computer and Information Science (2004)
- ✓ Institute of Hotel and Tourism Management (2004)

MISSION, VISION & CORE

MISSION

- ✓ To make our education relevant and excellent.
- ✓ To contribute to the advancement of knowledge through research, publication and disseminations
- ✓ To develop student aptitudes and skills as well as make them conscious of their duty to the country and to fellow human beings.
- ✓ Promote a culture of excellence in all activities of the University by implementing good practices

VISION

To be a quality higher education Institution by producing students with knowledge, professional skill and ethical values and remain as preferred partner to the Industry and Community for their progress and development

CORE VALUES

- ✓ Academic freedom and flexibility
- ✓ Collegiality and team work
- ✓ Concern for the environment and society
- ✓ Transparency and accountability for all stake holders.

Geo Location

Geo Coordinates from Google maps:
27.2155253, 78.0252238



Administrative Block

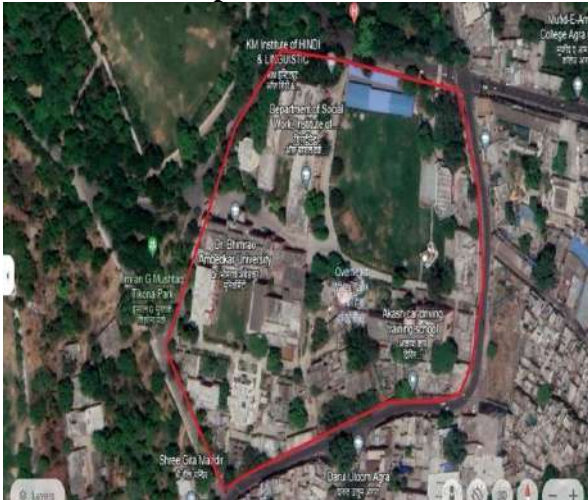
Campus wise map is shown below:



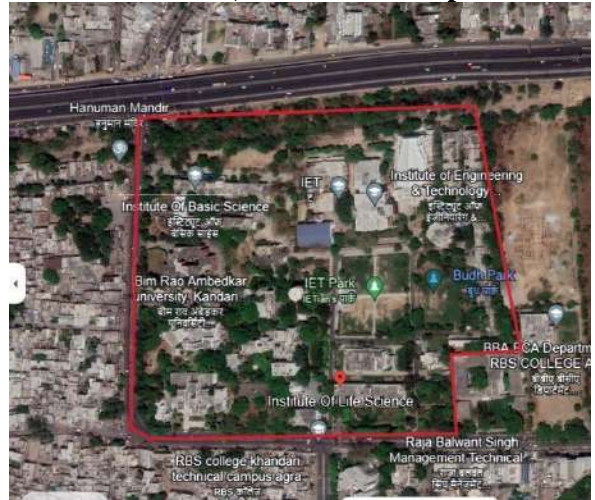
Chhaleshar Campus



Sanskriti Bhawan, Civil Lines Campus



Paliwal Campus



Khandari Campus



Sultan Ganj Campus



Gopal Kunj Residential Campus



AUDIT PARTICIPANTS

On behalf of Dr. Bhimrao Ambedkar University, Agra

Name	Designation
Prof Ashu Rani	<i>Vice - Chancellor</i>
Prof. Ajay Taneja	<i>Pro Vice - Chancellor</i>
Prof. B S Sharma	<i>Professor, EVS</i>
Prof. Sanjeev Kumar	<i>Director, IQAC</i>
Prof. Manu Pratap Singh	<i>Professor & Director, IET</i>
Prof. R K Agnihotri	<i>Professor, Botany</i>
Dr. Rajeev Kumar	<i>Registrar</i>
Er. Harimohan	<i>University Engineer</i>

On behalf of EHS Alliance Services

Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	<i>Ph.D., PDIS, QCI – WASH, Lead Auditor ISO 14001:2015</i>
Ms. Pooja Kaushik	Co-Auditor	<i>M.Sc., Field Expert, QCI – WASH</i>

EXECUTIVE SUMMARY

Green auditing is an essential step to identify and determine whether the institutional practices are sustainable and ecological. Traditionally, we were upright and efficient users of natural resources. But over the period of time, excessive usage of resources like water, electricity, petrol, etc. have become habitual for everyone especially, in urban and semi-urban areas. It is actually the right time to check if we (our process) are consuming more than required resources? Whether we are using resources sensibly?

Green audit standardizes all such practices and provides an efficient way to use natural resources. In the time of climate change and resource exhaustion it is necessary to re-check the processes and convert them into green and sustainable. Green audit provides an approach for the same. It also increases overall awareness among the folks working in institution towards the eco-friendly environment.

This is the first attempt to conduct green audit of this campus for fulfilment of NAAC criteria. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity and fossil fuel, quality of soil, water usage, vegetation, waste management practices and carbon foot print of the campus. Initially a questionnaire was shared to know about the existing resources of the campus and resource consumption pattern of the students and staff in the campus

GREEN AUDIT - ANALYSIS

1.1 GENERAL INFORMATION

1. Does any Green Audit conducted earlier?

No, this is the first external audit organized by the University

2. What is the total strength (people count) of the Institute?

Students

Male: 2629 Female: 1427 Total: 4056

Teachers

Male: 111 Female: 96 Total: 207

Non-Teaching Staff

3. What is the total number of working days of your campus in a year?

There are one hundred eighty working days in a year.

4. Where is the campus located?

All campus is located in the city of Agra (U.P.) 282004 (India)

5. Which of the following are available in your institute?

<i>Garden area</i>	<i>Available</i>
<i>Playground</i>	<i>Available</i>
<i>Kitchen</i>	<i>Available</i>
<i>Toilets</i>	<i>Available</i>
<i>Garbage Or Waste Store Yard</i>	<i>Available</i>
<i>Laboratory</i>	<i>Available</i>

6. Which of the following are found near your institute?

<i>Municipal dump yard</i>	<i>Not in the vicinity of institute</i>
<i>Garbage heap</i>	<i>No Garbage heaps</i>
<i>Public convenience</i>	

<i>Stagnant water</i>	<i>No stagnant water</i>
<i>Open drainage</i>	<i>No</i>
<i>Industry – (Mention the type)</i>	<i>No</i>

1.2 WASTE MINIMIZATION AND RECYCLING

1. Does your institute generate any waste? If so, what are they?

Yes, Solid waste, Canteen waste, paper, plastic, horticulture, laboratory waste, e-waste, etc.

2. What is the approximate amount of waste generated per day? (in Kg approx.)

*Biodegradable waste - 100 Kg
Non-biodegradable waste -10 Kg
Hazardous Waste - 2 Kg*

3. How is the waste managed in the institute? By Composting, Recycling, Reusing, Others (specify)

Dr. Bhimrao Ambedkar University, Agra, Agra is doing the following activities for waste management

- *composting for solid waste management*
- *34 water harvesting pits are there for water conservation.*
- *Lab waste is managed according to the defined SOP.*
- *Energy & water conservation awareness campaigns for students and faculty*
- *Composting is done for horticulture waste management.*
- *Diluted solutions are used instead of concentrated solutions in laboratories*
- *One side of printed Paper is re-used for internal communication.*
- *Solid waste is taken by Municipal Corporation after collecting the BMW separately*
- *Single-use plastic is banned in the campus*

4. Do you use recycled paper in the institute?

Yes

5. How would you spread the message of recycling to others in the community?

- *Poster competition activities*
- *Campaigns*
- *Rally*
- *Webinars and seminars*

6. Can you achieve zero garbage in your institute? If yes, how?

Not yet achieved, possible through waste management, policy and planning

1.3 GREENING THE CAMPUS

1. Is there a garden in your institute?

Yes, about 871200 sq. ft areas are developed as Gardens.

2. Do students spend time in the garden?

Yes, students spend around 2-4 Hours during winter.

3. Total number of Plants in Campus?

<i>Plant type with approx. count</i>	
<i>Full-grown Trees</i>	<i>1231</i>
<i>Small Trees</i>	<i>1440</i>
<i>Hedge Plants</i>	<i>17616</i>
<i>Grass Cover sqm</i>	<i>871200 sq. ft</i>

4. Is the College campus have a Horticulture Department? (If yes, give details)

Yes, 22 staff (maali) deployed in the horticulture department

5. How many Tree Plantation Drives are organized by campus per annum?

*3 Plantation Drives are carried out in the academic year. A total of 450 plants were planted.
The survival rate is more than 60%.*

6. Is there any Plant Distribution Program for Students and Community?

Yes

8. Is there any Plant Ownership Program?

No

1.4 WATER AND WASTEWATER MANAGEMENT

1. List uses of water in your institute

Basic use of water on campus:

Drinking – 150.11 KL/month

Gardening – 1503.71 KL/month

Kitchen and Toilet – 868.51 KL/month

Others – 294.49 KL/month

Hostel – 356.40 KL/month

2. How does your institute store water? Are there any water-saving techniques followed in your institute?

The university stores water in an overhead tank, with a capacity 7,50,000 litres.

Saving Techniques

- *Avoid overflow of water-controlled valves are provided in the water supply system.*

3. Locate the point of entry of water and point of exit of waste water in your institute.

Entry - Water comes from Municipal corporation and borewell

Exit- From Canteen, Toilets, Hostel, bathrooms and Labs through covered drainage which is

4. Write down ways that could reduce the amount of water used in your institute

Basic ways:

- *Close the taps after usage*
- *Water Conservation awareness for new students*
- *Maintenance and monitoring of valves in supply system to avoid overflow, leakage*

1.5 ANIMAL WELFARE

1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)

Around 15 dogs, 10 Cats, 100+ butterfly species, 300+ Squirrels and 300+ Birds are found in campus. A variety of bird's species and other flora and fauna are available, so the institute is doing their bit for biodiversity conservation.

2. Does your institute have a Biodiversity Program or a KARUNA CLUB?

Yes, Dr. Bhimrao Ambedkar University, Agra's Eco club/ EVS Department actively organizes awareness through various campaigns and activities including seminars, poster competitions, etc.

1.6 CARBON FOOTPRINT - EMISSION & ABSORPTION

1. Electricity used per year - CO2 emission from Electricity

(electricity used per year in kWh/1000) x 0.84

= 657338 /1000x0.84

2. LPG/PNG used per year - CO2 emission from LPG/PNG

(LPG/PNG used per year in KG) x 2.99

= 8860.8 x 2.99

3. Diesel used per year CO2 emission from HDS (Diesel)

(Diesel used per year in litres) x 2.68

= 850 x 2.68

4. Transportation per year (car) CO2 emission from transportation (Bus and Car)

There are 9 University owned vehicles, 7 cars, 1 van and 1 others

*=(7*2*2*180/100)*0.01 + (10*4*2*180/100)*0.02*

Total CO2 emission per year is 581.48 tons

After considering the carbon absorption capacity of the campus, the total carbon emission is 509.28 tons

CARBON ABSORPTION BY FLORA IN THE INSTITUTION

There are 1231 full-grown trees and 1440 semi-grown trees of different species, on the campus spread over 871200 sq ft.

The carbon absorption capacity of one full-grown tree 22 kg CO₂ Therefore Carbon absorption capacity of 1231 full-grown trees 1231 x 22 kg CO₂ = 27.08 tons of CO₂. The carbon absorption capacity of 1440 semi-grown trees is approx. 30% of that of full-grown trees. Hence the carbon absorption 1440 x 6.8 kg of CO₂ = 9.79 tons of CO₂

There are approximately Hedge Plants 17616 of various species being raised in the gardens and grown in the areas where no buildings are built Carbon absorption of bush plants varies widely with their species. Certain bushes absorb very high level of CO₂ where as some others absorb very low level of CO₂. In the absence of a detailed scientific study, 200g of CO₂, absorption is taken per bush (in consultation with Environmental Science specialists). Based on this, total carbon absorption of bushes is 17616 x 200 g = 3.52 ton of CO₂

The lawns on the campus have buffalo grass, Mexican grass and indigenous grass species and cover a total area of 871200 sq. ft. Carbon absorption

capacity of a 10 sq. ft. area of lawn is 1 g per day Therefore, carbon absorption by lawn area $871200 \times 365 \times 0.1 \text{ g CO}_2 = 31.80 \text{ tons CO}_2$ per year.

The total carbon absorption capacity of the campus is 72.20 tons.

S.no	Common Name	Botanical Name	Number of trees
1	Ashok	<i>Polyalthia longifolia</i>	621
2	Neem	<i>Azadirachta indica</i>	232
3	Peepal	<i>Ficus religiosa</i>	27
4	katsagon	<i>Heterophragma adenophyllum</i>	91
5	Putranjiva	<i>Putranjiva roxburghii</i>	12
6	Populus	<i>Populus deltoides</i>	3
7	Mahua	<i>Madhuca longifolia</i>	3
8	Gular	<i>Ficus racemosa</i>	2
9	Mango	<i>Mangifera indica</i>	1
10	Sagon	<i>Tectona grandis</i>	42
11	Balam kheera	<i>Kigelia pinnata</i>	3
12	Mollshree	<i>Ficus benjamina</i>	185
13	Bargad	<i>Ficus benghalensis</i>	20
14	Ber gola	<i>Ziziphus mauritiana</i>	16
15	Bel	<i>Aegle marmelos</i>	5
16	kassod	<i>Cassia siamea</i>	77
17	Harad	<i>Terminalia chebula</i>	1
18	Jacaranda	<i>Jacaranda mimosifolia</i>	11
19	Kalp vriksha	<i>Adansonia digitata</i>	3
20	Baheda	<i>Terminalia bellerica</i>	3
21	Lasora	<i>cordia mixa</i>	3
22	Sahjan	<i>Moringa olefera</i>	3
23	Eucalyptus	<i>Eucalyptus globulus</i>	23
24	Chilbil	<i>Haloptelea integrifolia</i>	50
25	Jatropha	<i>Jatropha integerrima</i>	43
26	Karanj	<i>Pongamia pinnata</i>	170
27	Shahtoot	<i>Morus alba</i>	35
28	Bakain	<i>Melia azadirachta</i>	1
29	Amla	<i>Phyllanthus emblica</i>	42
30	Bottlebrush	<i>Callistemon citrinus</i>	16
31	Amaltas	<i>Cassia fistula</i>	38
32	Nimboo	<i>Citrus lemon</i>	18
33	Shisham	<i>Dalbergia sissoo</i>	31
34	Gulmohar	<i>Delonix regia</i>	42
35	Amrood	<i>Psidium guajava</i>	58
36	Sirus	<i>Acacia lebeck</i>	6
37	Jamun	<i>Syzygium cumini</i>	35
38	Yellow kaner	<i>Thevetia peruviana</i>	42
39	Thuja	<i>Thuja occidentalis</i>	23
40	Pakhad	<i>Ficus virens</i>	30
41	Kanak Champa	<i>Plumeria obtusa</i>	70
42	Mahaneem	<i>Ailanthus excelsa</i>	30
43	Silver Oak	<i>Grevillea robusta</i>	5
44	Saptaparni	<i>Alstonia scholaris</i>	206
45	She Oak	<i>Casuarina equisetifolia</i>	13
46	Arjun	<i>Terminalia arjuna.</i>	20

47	Bachain	Melia azedarach L. ·	78
48	Ber	Ziziphus jujuba	5
49	Dak	Butea monosperma.	6
50	Desi Babool	Acacia nilotica (L.) Willd. ex Delile	17
51	Grevia	Grevillea robusta A. Cunn.	3
52	Imli	Tamarindus indica.	6
53	Kachnar	Bauhinia variegata	3
54	Kadam	Anthocephalus Cadamba	5
55	Kaner	Thevetia peruviana Schum.	2
56	Kashaund	Cassia siamea	62
57	Khajur	Phoenix sylvestris.	5
58	Kigelia	Kigelia pinnata (Lam.) Benth.	8
59	Pine	Pinus roxburghii.	16
60	Semal	Bombax ceiba.	28
61	Subabool	Leucaena leucocephala	16
	Total		2671

GREEN INITIATIVES

- The institution has composting pits for organic solid waste management.
- There is a ban on single-use plastic and plastic crockery in the campus.
- University has a separate storeroom for the safe storage of electronic waste. After a certain interval of time, University disposes of the E-waste to concerned agencies through the auction process.
- The University has 34 rainwater harvesting pits for better groundwater recharge.
- The University has installed approximately solar panels (130 kWp) and is in the process of installing 500 kWp solar panels.
- Solar lights are also used for street lights.
- Usually, Personal Vehicles (Students) are not allowed in the campus
- The university has initiated an air quality monitoring program.

RECOMMENDATIONS

- Green building guidelines for future expansion projects of the campus.
- Environmental parameters shall be included in the purchase policy to achieve a cradle-to-grave approach for sustainability.
- University should start the use of Sprinklers for gardening purposes
- Increase plantation drives in nearby villages, local bodies, NGOs and Municipal Corporations in order to balance the carbon emission and absorption.
- Arrange training programs on environmental management systems and nature conservation for schools and local people.
- Involve lower hierarchy staff in environmental awareness programs and campaigns.
- Increase in Environmental promotional activities for spreading awareness at the campus.
- Enhance recycling. This can be done by creating a group where students can recycle papers, personal clothes, and other materials for needy students. This can be an initiative under the green program.
- Regular workshops related to Plastic free campus, plantation drives, 3R implementation, e-waste collection, menstrual hygiene, etc. should be carried out.
- Messages should be displayed at various locations to Aware the People about Energy Savings and water conservation.
- The university has initiated sprinklers for the irrigation of green belts, and grass cover areas.

CONCLUSION

This audit involves considerable team discussions and meetings with key staff members on a variety of environmental-related topics. The eco club/ EVS Department of Dr. Bhimrao Ambedkar University, Agra promotes the conservation of resources.

More than 60% of Dr. Bhimrao Ambedkar University, Agra is for landscaping. The University makes a significant effort to act in an environmentally responsible manner and takes into account the environmental effects of the majority of its activities. The recommendations in this report suggest some more ways in which the University can work to improve its practices and develop into a more sustainable institution.

It's important to begin a few things, more conservation awareness messages displayed at different locations on campus. Additionally, we strongly advise increasing awareness amongst the students, staff, and local societies for 3R to 5R principle and conservation of water and energy.

REFERENCE

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

- Relevant Indian Standard Code practices.

Recognition Certificate From Hunkar Foundation



ANNEXURE – ENVIRONMENT CONSCIOUSNESS PHOTOS



Lush green campus



Well maintained campus



Lush green campus



Sports Ground



Auditorium



Classes



Rainwater harvesting pit



Computer labs



Ornamental Plants



Indoor plants



Paved pathways



Plantation drive by
faculties



Poster Competition



Earth Day - Only One Earth



Awareness Campaign

कुलपति ने किया वृक्षारोपण

राष्ट्रिय स्वच्छता दिवस

आजकाल पर्यावरण की सुरक्षा के लिए हमें अपने-आपके योगदान देना पड़ेगा। हमें अपने-आपके योगदान देना पड़ेगा। हमें अपने-आपके योगदान देना पड़ेगा।

कुलपति ने स्वच्छता के दिवस के अवसर पर वृक्षारोपण किया।

वृक्षारोपण के लिए कुलपति ने अपने-आपके योगदान देना पड़ेगा।

कुलपति ने स्वच्छता के दिवस के अवसर पर वृक्षारोपण किया।

वृक्षारोपण के लिए कुलपति ने अपने-आपके योगदान देना पड़ेगा।

Plantation news in media



Cleanliness Drive

Environment Day rally

Students walking competition and rally organized by the Department of Environmental Studies, School of Life Sciences, University of Jammu.

Rally by Students



Waste to wealth



Van mahotsav



Herbal garden



Earth Day awareness posters



Solar lights



Awareness stickers

***** **END OF THE REPORT** *****



डॉ. भीमराव आंबेडकर विश्वविद्यालय अग्रा
(पूर्वसी. काशी विश्वविद्यालय अग्रा)
1927



**DR. BHIMRAO AMBEDKAR
UNIVERSITY, AGRA**

ENVIRONMENT AUDIT REPORT

2022-2023

PREPARED BY
EHS ALLIANCE SERVICES

ENVIRONMENT AUDIT REPORT

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CERTIFICATE

PRESENTED TO

**DR. BHIMRAO AMBEDKAR UNIVERSITY,
AGRA**

Has been assessed by EHS Alliance Services for the comprehensive study of environmental impacts of institutional working framework to fulfill the requirement of

ENVIRONMENT AUDIT

INITIATIVE CARRIED OUT BETWEEN YEAR 2020-2023

The environment legal compliances and initiatives carried out by the institution have been verified on the report submitted and were found to be satisfactory.

The efforts taken by management and faculty towards environment and sustainability are highly appreciated and noteworthy.

A handwritten signature in blue ink, appearing to read "H. J. Singh".

SIGNATURE



28.06.2023
DATE OF AUDIT

ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Dr. Bhimrao Ambedkar University, Agra, Agra for assigning this important work of Environment Audit. We appreciate the cooperation to the teams for the completion of the assessment.

First of all, we would like to thank *Prof Ashu Rani, Vice – Chancellor* for allowing us to evaluate the environmental performance of the campus.

We would also like to thank *Prof. B S Sharma - Audit Coordinator*, for his continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

*Prof. Ajay Taneja Pro Vice –
Chancellor Prof. Sanjeev Kumar
Director, IQAC*

*Prof. M. P. Singh Director, I.E.T.
Prof. R K Agnihotri Professor, Botany*



DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Dr. Bhimrao Ambedkar University, Agra based on input data submitted by the representatives of university complemented with the best judgment capacity of the expert team.

While all sensible care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express 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.

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EHS Alliance staff, agents and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.



LEAD AUDITOR

CONCEPT AND CONTEXT

In India, the process for environmental audit was first mentioned under the Environment Protection Act, 1986 by the Ministry of Environment of forests on 13th march, 1992. As per this act, every person owning an industry or performing an operation or process needs a legal consent and must submit an environmental report or statement.

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the sustainable environment.

In view of the NAAC circular regarding environment auditing, the university management decided to conduct an external environment assessment study by a competent external professional auditor.

The term ‘Environmental audit’ means differently to different people. Terms like ‘assessment’, ‘survey’ and ‘review’ are also used to describe similar activities. Furthermore, some organizations believe that an ‘environmental audit’ addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environment Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

—A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects.¶

This audit focuses on the environment legal compliances and implementation of rules defined by MoEFCC or state pollution control board. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit are discussed below.

INTRODUCTION

Nature is very precious gift for all life forms. Disturbance in the nature causes environmental Problems. These are increasing day by day as a result of development of urbanization and industrialization on earth. Because of unplanned utilization of resources, our planet is facing tremendous pressure results a sharp rise in temperature. Therefore, there is an urgent need to plan the consumption of the resources in sustainable manner in order to conserve natural resources for future generation.

Sustainable development is becoming popular in the world for saving the earth. Utilizing resources in judiciously can save the earth's precious resources. Measurement of environmental components is the most effective step to conserve and protect natural resources.

Environmental auditing had begun in the early 1970s with provision of civil lawsuits for non-compliance with environmental regulations. Environment auditing involves on site visit, collection of samples, performing analyses, and report results to competent authorities.

Industry, the corporate world is initiating auditing for saving natural resources. Academic institutions also can contribute to the preservation and conservation of resources within their premises.

In this "Environment Audit" report would help everyone to think about preserving resources, show willingness to learn their importance, adopt steps to minimize resource use and set an example for others to follow the path of eco-friendly practices to achieve the goal of sustainable development. Effective implementation of environmental auditing helps in minimization of environmental risks at low cost.

OVERVIEW OF THE UNIVERSITY

The foundation – of Dr Bhimrao Ambedkar University (originally known as Agra University) was laid on the 1st of July, 1927, as a result of hectic efforts of a band of enthusiastic educationists like Rev. Canon

A.W. Davis, Munshi Narain Prasad Asthana, Dr L.P. Mathur, Lala Dewan Chand, Rai Bahadur Anand Swaroop and Dr Brajendra Swaroop,.

Original jurisdiction of University extended over United Provinces of Agra, Central India and Rajputana with 14 affiliated colleges and 2530 students of which, 1475 students belonged to United Provinces. Initially, there were only four faculties in the University viz. Arts, Sciences, Commerce and Law. Faculties of Medicine (1936), Agriculture (1938), Home Science (1980), Basic Sciences (1981), Fine Arts (1982) and Management (1994) were added subsequently.



The Agra University, Agra was renamed as Dr Bhimrao Ambedkar University, Agra from 24.09.1995 vide U.P. Govt. Notification No. 33/XVII-V-1-1(ka)-43-1996, dated 06.01.1996). The University now caters to the educational needs of the four districts of Agra Division Agra, Mainpuri, Firozabad, and Mathura. Besides, the University is proud of having affiliated to it, Sarojini Naidu Medical College, which is one of the oldest and premier Medical Institute of the country. At present university has 6 Govt colleges, 1 constituent college, 27 aided colleges, 540 self

financed colleges and 15 residential

Institutes spread out in its four residential campuses viz. Paliwal Park, Khandari Campus, Civil Lines Campus, and Chhaleshar Campus.

Furthermore, these universities affiliate colleges of Homeopathy, extending all over the State of U.P. The University is steadily surging ahead as a centre for higher scientific vocational and job oriented education and innovative research. The goal of the University is to innovate in the field of education and to become a centre of excellence both Nationally and Internationally. The University is not only confined to impart quality education but also to satisfy the burning desire of the students who are exploring the creative intellect and learning attitude of the students. The University is making every effort to fulfill the spirit of University motto —Tamso Ma Jyotirgamay|| moving from darkness to light.

The University has over the years developed a sizeable residential wing consisting of following Institutes & independent Teaching Departments:

- ✓ K. M Institute of Hindi & Linguistics(1953)
- ✓ Institute of Social Sciences (1957)
- ✓ Institute of Home Science (1968)
- ✓ Institute of Basic Science (1984)
- ✓ Department of Library Information Science (1984)
- ✓ Department of History (1985)
- ✓ Department of Adult and Continuing Education & Extension (1989)
- ✓ Department of Physical Education (1989)
- ✓ S.P.C.J. Institute of Commerce, Business Management & Economics (1993)
- ✓ Dau Dayal Institute of Vocational Education (1994)
- ✓ Institute of Engineering & Technology (1998)
- ✓ Deen Dayal Upadhyaya Institute of Rural Development (1998)
- ✓ School of Life Sciences (1998)
- ✓ Department of Contemporary Social Studies & Law (1998)
- ✓ Lalit Kala Sansthan (Institute of Fine Arts) (2000)
- ✓ Institute of Computer and Information Science (2004)
- ✓ Institute of Hotel and Tourism Management (2004)

MISSION, VISION & CORE VALUES

MISSION

- ✓ To make our education relevant and excellent.
- ✓ To contribute to the advancement of knowledge through research, publication and disseminations
- ✓ To develop student aptitudes and skills as well as make them conscious of their duty to the country and to fellow human beings.
- ✓ Promote a culture of excellence in all activities of the University by implementing good practices

VISION

To be a quality higher education Institution by producing students with knowledge, professional skill and ethical values and remain as preferred partner to the Industry and Community for their progress and development

CORE VALUES

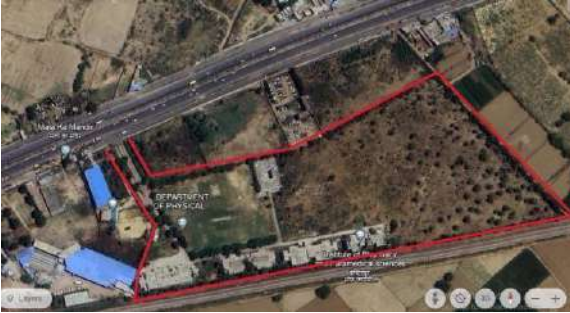
- ✓ Academic freedom and flexibility
- ✓ Collegiality and team work
- ✓ Concern for the environment and society
- ✓ Transparency and accountability for all stake holders.

Geo Location

Geo Coordinates from Google maps:
27.2155253, 78.0252238



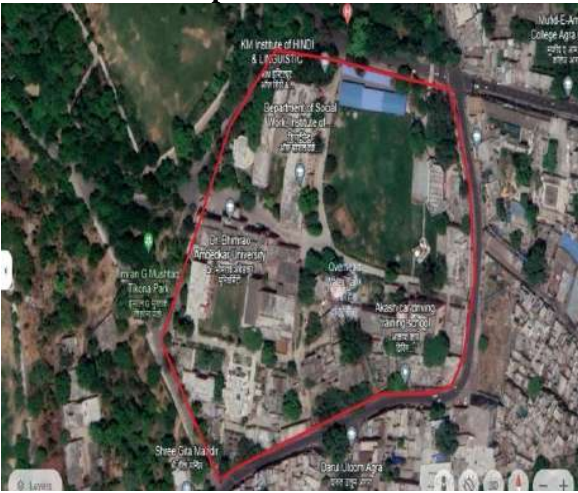
Administrative Block



Chhaleshar Campus



Sanskriti Bhawan, Civil Lines Campus



Paliwal Campus



Khandari Campus



Sultan Ganj Campus



Gopal Kunj Residential Campus



AUDIT PARTICIPANTS

On behalf of Dr. Bhimrao Ambedkar University, Agra

Name	Designation
Prof. Ashu Rani	<i>Vice - Chancellor</i>
Prof. Ajay Taneja	<i>Pro Vice - Chancellor</i>
Prof. B S Sharma	<i>Professor, EVS</i>
Prof. Sanjeev Kumar	<i>Director, IQAC</i>
Prof. Manu Pratap Singh	<i>Professor & Director, IET</i>
Prof. R K Agnihotri	<i>Professor, Botany</i>
Dr. Rajeev Kumar	<i>Registrar</i>
Er. Harimohan	<i>University Engineer</i>

On behalf of EHS Alliance Services

Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	<i>Ph.D., PDIS, QCI – WASH, Lead Auditor ISO 14001:2015</i>
Ms. Pooja Kaushik	Co-Auditor	<i>M.Sc., Field Expert, QCI – WASH</i>



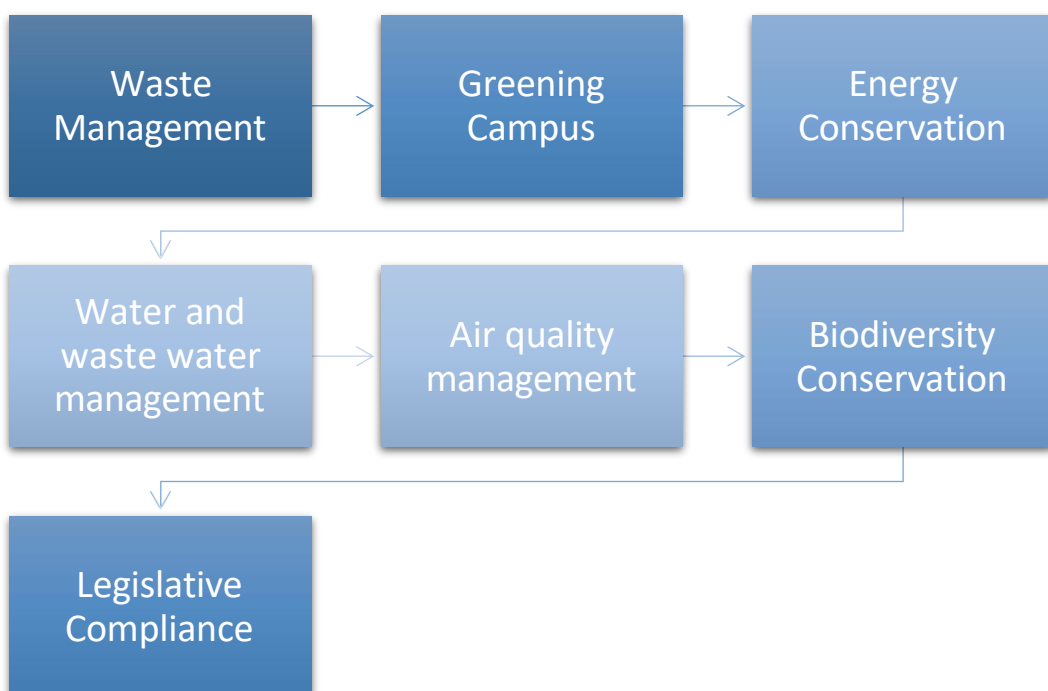
**WORLD
ENVIRONMENT DAY**

EXECUTIVESUMMARY

The environment audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes out-dated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. Our approach to promote a Green Campus to inculcate the sustainable value systems among the students, so that they carry the learning and practices them in their future endeavours. This will ensure that Sustainability and Environmental practices get embedded in all the institutions and organizations in the country.

A Green Campus is a place where environmentally friendly practices and education combine to promote sustainability in the campus which ultimately offers an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind.

This is very first environment audit of university for doing their bit towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.



WASTEMANAGEMENT

TYPES OF WASTE ON UNIVERSITY CAMPUS

To create effective waste management plans, university first need to know the types of waste they produce. Below, we have compiled a list of various kinds of waste commonly generated on institutional campuses:

1. **Food Waste** - The university campus generates food waste. The average mess and canteen generates approximately 30 kg of food waste a day. The reasons for food waste on an educational campus may be over-purchasing food to ensure a sufficient supply and then throwing it away, especially in canteen/cafeteria where plentiful stores are essential. And in the cafeteria, students may pile food onto their ample trays, find it unappealing once they sit down and dutifully scrape it into the garbage. Immediate attention is given to the food waste minimization techniques.
2. **Recyclable Paper, Cardboard, Plastic, Glass and Cans** -Campus tends to produce vast quantities of these recyclables. Even in the digital age, many students, professors and staff members still prefer handwritten notes and end up with piles of unwanted paper once their courses and projects are complete. The snacks so essential for socializing tend to come in recyclable plastic, glass or aluminium containers. And shipments of necessary items throughout the year are likely to arrive in recyclable plastic and cardboard packaging. The same is sold/auctioned to the scrap vendors time to time.
3. **Student Clothes and Housewares** - As we have mentioned above, many students find it more convenient to throw away their clothes and dorm furnishings at the end of the year than donate or recycle them.
4. *E – Waste - Student and facility electronics often form a large portion of a campus’s waste*
— **As campus continually upgrade their computing facilities and office computers to keep up with the latest technology, the old computers have to go somewhere. Same is the case with old printers, phones, copy machines and other electronics that receive upgrades over the years. Discarded student electronics often become part of a university’s waste stream as well. Students may throw away old phones, TVs, tablets, laptops and printers, along with cords and other accessories. Recycling is a much more eco-friendly option — the metals in old electronics often have a high reuse value. university has tie-up with external authorised agency details mentioned in legislation compliances.**
5. **Maintenance Waste** - In the maintenance department, spent paints, solvents, adhesives and lubricants all form potentially hazardous waste. Because they are difficult to recycle, spent incandescent light bulbs usually become landfill waste. Spent fluorescent light bulbs, which

contain small amounts of mercury, typically require special handling because of the environmental and health risks they pose.

6. **Furniture** - Furniture waste on a university campus has a couple different sources. The campus itself may also get rid of old furniture as it modernizes its classrooms, cafeterias, computer labs and study spaces. Annually sold to junk dealer.
7. **Answer Books/Magazines/Newspapers** – Old answer books accounted for solid waste generation and university often generate tons of old answer book waste. Students of Dr. Bhimrao Ambedkar University, Agra donates their textbooks and notes to junior students, or else are auctioned to resellers or recyclers.
8. **C & D Waste** - Expansion of university campus building and renovation works result significant amount of construction and demolition waste that should be either used for back filling or disposed off through authorized dumping site by CPCB/SPCB.
9. **Solid Waste** - The university is managing solid waste by providing it to the MCD.

ENERGY CONSERVATION

1. *List ten ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.*

- *Using Energy efficient appliances*
- *Switching off the electrical equipment when not in use*
- *Use of Air conditioners at optimum temperatures as per the utilization schedule*
- *LED lights*

2. *Are there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some*

Yes, Dr. Bhimrao Ambedkar University, Agra has adopted energy-saving techniques

- *LEDs installed*
- *Use of Air conditioners at optimum temperatures as per the class timetable*
- *Car pooling*

3. *How many CFL/LED bulbs has your institute installed?*

Dr. Bhimrao Ambedkar University, Agra has replaced almost 70% of the conventional bulbs and tube lights with LED Lights.

4. Do you run “switch off” drills at the institute?

Yes

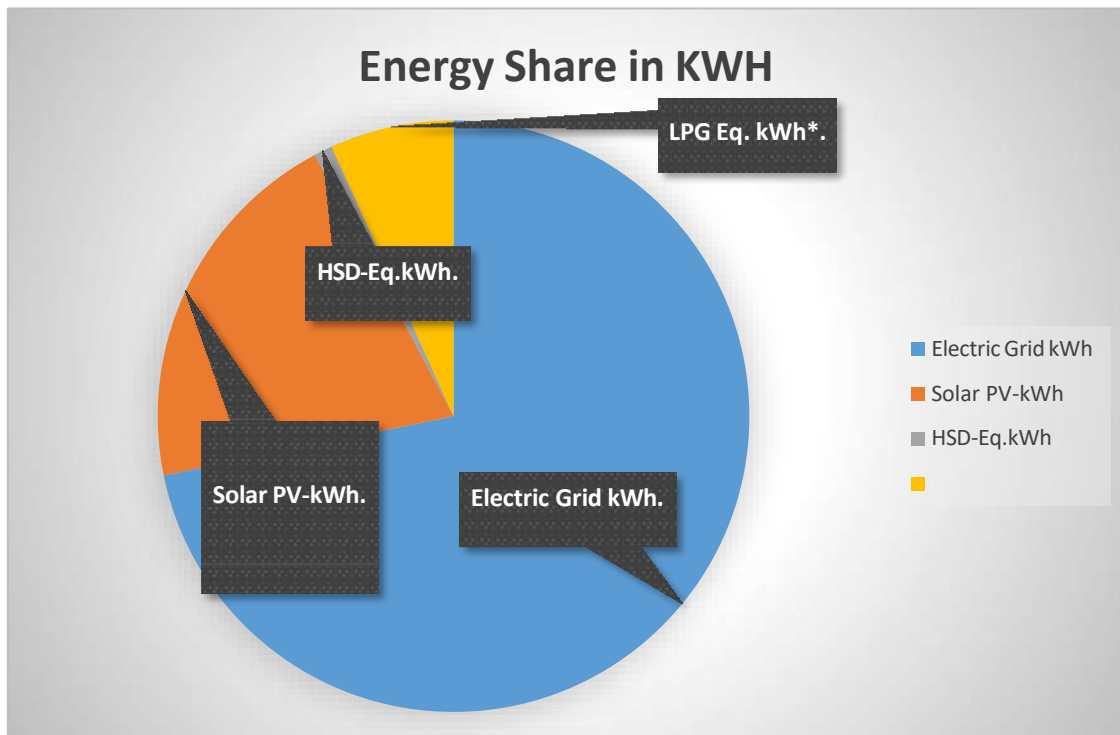
5. Are your computers and other equipment put on power-saving mode?

Yes, Dr. Bhimrao Ambedkar University, Agra put the equipment on power-saving mode

6. Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?

Yes

Energy Share	kWh	Percentage (%)
Electric Grid kWh	657338.00	71.79%
Solar PV-kWh	187200.00	20.44%
HSD-Eq. kWh	9316.00	1.02%
LPG Eq. kWh	61848.38	6.75%
Total -kWh	915702.38	100%



WATER AND WASTEWATER MANAGEMENT

1. List uses of water in your institute

Basic use of water on campus:

Drinking – 150.11 KL/month

Gardening – 1503.71 Kl/month

Kitchen and Toilets – 868.51

KL/month Others – 294.49 KL/month

Hostel – 356.40 KL/month

2 How does your institute store water? Are there any water-saving techniques followed in your institute?

The university stores water in an overhead tank with a storage capacity of 750 KL.

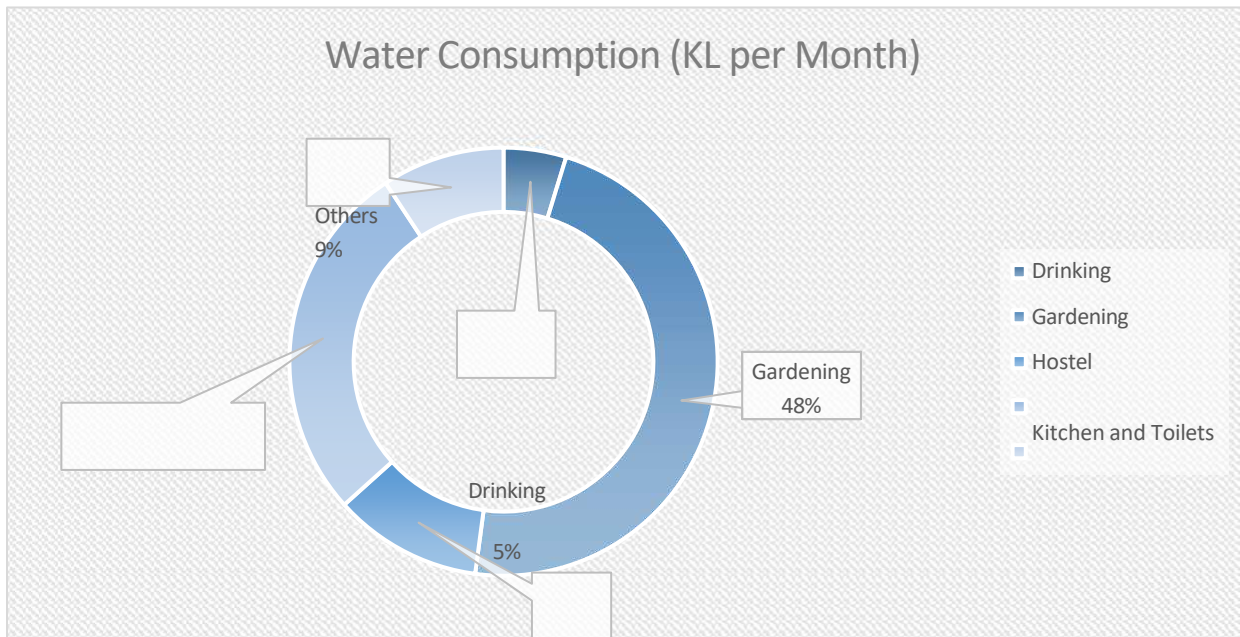
Saving Techniques

Avoid overflow of water-controlled valves are provided in water supply system.

3. Locate the point of entry of water and point of exit of waste water in your institute. (Entry and Exit)

Entry - Water comes from Municipal Corporation and Borewell.

Exit- From the Canteen, Toilets, Hostel and bathrooms through covered drainage which is connected to Public sewage system of Agra municipal corporation.



4. Write down ways that could reduce the amount of water used in your institute

Basic ways:

- *Close the taps after usage*
- *Water Conservation awareness for new students*
- *Maintenance and monitoring of valves in the supply system to avoid*

5. Does your institute harvest rainwater?

Yes, there are 34 rainwater harvesting pits on campus for rainwater storage and better groundwater recharge

6. Is there any water recycling System?

No

AIR QUALITY MANAGEMENT

1. Are the Rooms in Campus Well Ventilated?

Yes, as per National Building Code, guidelines

2. Window Floor ratio of the Rooms?

Very Good, ample daylight utilization because of big windows.

3. What is the ownership of the vehicles used by your campus?

Dr. Bhimrao Ambedkar University, Agra owns 9 vehicles

4. Provide details of college-owned vehicles.

<i>Details of University-owned vehicles</i>	<i>Buses</i>	<i>Cars</i>	<i>Vans</i>	<i>Other</i>	<i>Total</i>
<i>No. of vehicles</i>	<i>0</i>	<i>7</i>	<i>0</i>	<i>2</i>	<i>9</i>

5. PUC done?

Yes

6. Specify the type of fuel used by your campus's vehicles

7 Cars – Diesel

8. Air Quality Monitoring Program (If, Any)

Yes, the university's EVS department is monitoring indoor & outdoor air quality.

ENVIRONMENT LEGISLATIVE COMPLIANCE

1. Are you aware of any environmental Laws Pertaining to different aspects of environmental management?

Yes

2. Does your institute have any rules to protect the environment? List possible Rules you could include.

Yes, the eco club/ EVS Department of Dr. Bhimrao Ambedkar University, Agra is conscious about environment protection and takes proper measures in terms of awareness campaigns, activities, webinars, seminars, etc.

3. Does Environmental Ambient Air Quality Monitoring conducted by the Institute?

Yes, by internal teams

4. Does Environmental Water and Waste water Quality monitoring conducted by the Institute?

Yes

5. Does stack monitoring of DG sets conducted by the Institute?

No

6. Is any warning notice, letter issued by state government bodies?

No

7. Does any Hazardous waste generated by the Institute?

Yes, the concerned departments have SOP for lab waste disposal as per regulations.

GENERAL INFORMATION

1. Does your institute have any rules to protect the environment? List possible rules you could include.

Yes, Dr. Bhimrao Ambedkar University, Agra eco club/ EVS department carries out various programs for environment protection periodically on the campus.

2. Are students and faculties aware of environmental cleanliness ways? If Yes Explain

Yes, University organizes various activities for environment cleanliness

- Reduce carbon footprints by opting energy saving methods & using public commutes.
- Recycling of waste products
- Avoid single use plastic
- Less use of paper

3. Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?

Yes, World Environment Day, Ozone Day, Earth Day, and more are celebrated by campus. Furthermore, Dr. Bhimrao Ambedkar University, Agra organizes different activities like plantation drives, awareness rallies and many more.

4. Does Institute participate in National and Local Environmental Protection Movement?

Yes

5. Does Institute have any Recognition or certification for environment friendliness?

Yes

7. Does Institution conduct a green or environmental audit of its campus?

This is the first external audit carried out by the University.

8. Has the institution been audited /accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?

Yes, University is accredited as NAAC grade B++ rated University

BEST PRACTICES

- The institution has opted for composting for organic solid waste management.
- There is a ban on single-use plastic and plastic crockery in the campus.
- University has a separate storeroom for the safe storage of electronic waste. After a certain interval of time, the University disposes of the E-waste to concerned agencies through the auction process.
- The central area of the building of the University has a rainwater harvesting system for better groundwater recharge.
- The University has installed approximately solar panels (130 kWp) and has a plan to install 500 kWp in the future and solar lights are also used for street lights.
- The university is in practice to organize multiple awareness campaigns for environment protection.

RECOMMENDATIONS

- Provide a sanitary waste disposal facility as per the CPCB guidelines for the management of sanitary waste (as per Solid Waste Management Rules, 2016). Installation of an Incinerator is recommended in campus
- Green building guidelines with ECBC compliance should be adopted for future expansion projects of the University.
- Environmental Monitoring i.e. (Stack Monitoring of DG sets, Water monitoring need to be conducted by State Pollution Control Committee, approved laboratory) should be conducted periodically.
- Eco-friendly parameters should be included in the purchase of articles and goods for the campus.

CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on a wide range of issues related to Environmental aspects. Dr. Bhimrao Ambedkar University, Agra has an eco-club/ EVS department for sustainable use of resources.

The audit has identified some observations for making the campus premises more environmental friendly. The recommendations are also mentioned with observations for the University campus team to initiate actions. The audit team opines that the overall site is well maintained from an environmental perspective.

REFERENCES

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

ANNEXUREPHOTOGRAPHS



Koshambi Foundation, India

Registration No : KF-II/282/2019-20
Award ID : KFIA/2022/302
Award Year : 2022-2023

Certificate of Award

It is our great pleasure to certify that Dr. Bhimrao Ambedkar University, Agra has been honored with the "Best Clean & Green Campus Award" for maintaining the cleanliness and greenery at the university campus and offering an eco-Friendly environment under the leadership of Vice Chancellor Prof. Ashu Rani for the year 2022-2023.



Ch. Gajendra Singh
National Secretary
Koshambi Foundation

Mr. Lakshya Chaudhary
National President
Koshambi Foundation

Head Office : Koshambi Complex , Plot No-11, 175 Ft. Road, Shastripuram Industrial Area, Opp. Lakhapur, NH2- NH11 Bypass, Sikandra, Agra (UP) India - 07
www.koshambifoundation.org info@koshambifoundation.org +91-9675909440

AWARD ID : P/2022/105
AWARD YEAR : 2022 - 2023

REGD No - AQ4897
ESTD : 2009



PARIJAT
Make a Wish, Spark a Change

Certificate of Award

*It Is Our Great Pleasure To Certify
That Dr. Bhimrao Ambedkar University, Agra
Has Been Honored With The 'best Clean & Green Campus Award'
For Maintaining The Cleanliness And Greenery
At The University Campus And Offering An Eco-friendly Environment
Under The Leadership Of Vice Chancellor Prof. Ashu Rani
For The Year 2022-2023.*



DR. ANURADHA CHAUHAN
PRESIDENT



D.M. Singhal
DR. DHEERAJ MOHAN SINGHAL
SECRETARY

parijatng009@gmail.com
Parijat, 73A, Kishna Nagar, Agra Cantt, UP-282001



डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा
(पूर्ववर्ती: आगरा विश्वविद्यालय, आगरा)



कार्यवृत्त

विश्वविद्यालय के आवासीय संस्थानों/विभागों में अप्रयुक्त ई-वेस्ट सामग्री के निस्तारण हेतु गठित समिति की बैठक दिनांक 28.10.2022 का कार्यवृत्त

मा० कुलपति जी के आदेश दिनांक 25.10.2022 के द्वारा गठित e-waste material समिति की बैठक दिनांक 28.10.2022 को निदेशक कक्ष, दाऊ दयाल संस्थान, खंदारी परिसर में पूर्वाह्न 01:00 बजे आहूत की गयी।

बैठक में निम्नलिखित सदस्य उपस्थित हुये:-


1. प्रो० शरद उपाध्याय, निदेशक, दाऊ दयाल संस्थान, खंदारी।
2. प्रो० मनु प्रताप सिंह, निदेशक, आई०ई०टी०, खंदारी।
2. प्रो० अनिल गुप्ता, प्रभारी, विश्वविद्यालय कम्प्यूटर केन्द्र, खंदारी।
3. सहायक कुलसचिव, प्रशासन।


सर्वप्रथम बैठक में समन्वयक द्वारा सभी सदस्यों का स्वागत किया गया तदोपरान्त बैठक प्रारम्भ किये जाने का अनुरोध किया।

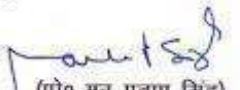
बैठक में विश्वविद्यालय के विभिन्न परिसरों के संस्थानों/विभागों में भारी मात्रा में अप्रयुक्त e-waste material (कम्प्यूटर, फोटोस्टेट मशीन, माइक, माउस, प्रिन्टर, लाइटें, यू०पी०एस०, ए०सी०, इन्वर्टर, टी०वी० इत्यदि) के निस्तारण किये जाने हेतु निम्नलिखित सुझाव/निर्णय लिये गये हैं:-

1. सर्वप्रथम बैठक में निर्णय लिया गया कि e-waste material के निस्तारण हेतु विशाल ट्रेडिंग कम्पनी, आगरा द्वारा प्राप्त कराये गये प्रस्ताव के संदर्भ में विशाल ट्रेडिंग कम्पनी, आगरा एवं डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा के साथ अनुबन्ध (MoU) करने पर सहमति प्रदान की गयी।
2. विशाल ट्रेडिंग कम्पनी, आगरा एवं विश्वविद्यालय के मध्य होने वाले MoU का प्रस्ताव सर्वसम्मति के साथ तैयार किया गया। (प्रस्ताव संलग्न)
3. समिति के द्वारा यह भी निर्णय लिया गया कि विश्वविद्यालय के आवासीय परिसरों में जो ई-वेस्ट सामग्री एवं सॉलिड वेस्ट सामग्री अप्रयुक्त रूप से रखी है जिसके निस्तारण हेतु विशाल ट्रेडिंग कम्पनी एवं डॉ० भीमराव आंबेडकर विश्वविद्यालय, आगरा के मध्य हुये MoU के अनुसार निस्तारण कराया जाये।

उपरोक्त के कियान्वयन हेतु मा० कुलपति जी से अनुमोदन प्राप्त किया जाना भी उचित होगा।


सहायक कुलसचिव,
प्रशासन


(प्रो० अनिल गुप्ता)


(प्रो० मनु प्रताप सिंह)


(प्रो० शरद उपाध्याय)

28/10/2022

ANNEXURE –PHOTOS



Well ventilated Campus



Well maintained Campus



Classrooms



Well equipped labs



Plantation drive

पौधे लगाने के साथ उनके संरक्षण के लिए प्रेरित किया

अमर उजाला ब्यूरो

अमरा। विश्व पर्यावरण दिवस पर सोनवार को डॉ. भीमराव अंबेडकर विश्वविद्यालय स्थित अन्य शिक्षण संस्थानों में पौधरोपण किया। गया। इस दौरान लोगों को पौधे लगाने के साथ उसके संरक्षण के लिए प्रेरित किया गया। वृक्षों को महत्त्व बताया गया।

अमरा कॉलेज में एमबीबीए आर्मी विंग की ओर से 'पर्यावरण संरक्षण में युवाओं की भूमिका' विषय पर वेबिनार का आयोजन किया गया। केन्द्रीय कृषि अनुसंधान संस्थान के सहयोगक निदेशक डॉ. डी. डी. ने काता कि प्रकृति से को गैर, छेड़छाड़ को तब्यारी के रूप बापराने मिलती



विधि सहित शिक्षण संस्थाओं में किया गया पौधरोपण

'पर्यावरण संरक्षण में युवाओं की भूमिका' विषय पर वेबिनार

कुलपति ने रुद्राक्ष का पौधा लगाया

विधि के खरोरी परीक्षा स्थित स्कूल और स्वच्छ पर्यावरण में कुलपति डॉ. अशोक मिश्र ने रुद्राक्ष का पौधा लगाया। इसके क्रम में परीक्षा निदेशक डॉ. रावीश कुमार, वित्त अधिकारी एके सिंह ने भी पौधरोपण किया। डॉ. अमरा कला, डॉ. सीके सिंह, डॉ. मनोज शीकलार, डॉ. भुवेंद्र शर्मा

World Environment Day Celebration



Awareness campaign -
Say No to plastic



Best out of waste activity



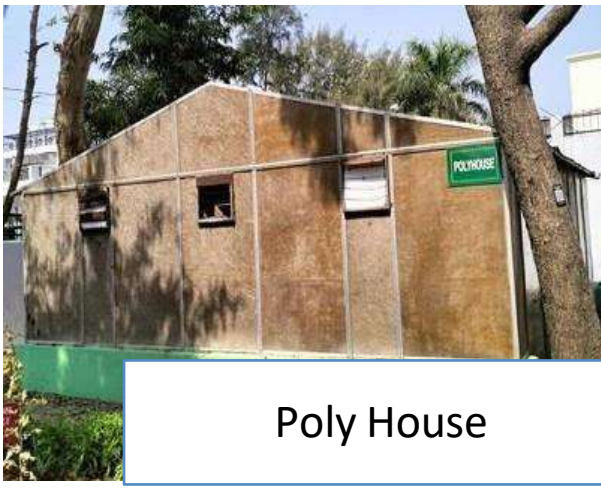
Best out of waste
initiative



International yoga day
celebration



Green House



Poly House



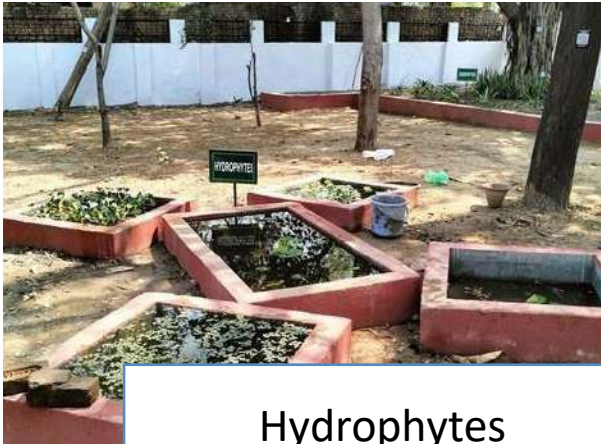
Water storage overhead tank



Urinals for water conservation



Composting pit



Hydrophytes



Herbal Garden



Plants with name plate for spreading awareness



Herbal Garden



Water conservation message display



Energy conservation message display



Solar PV installed on roof



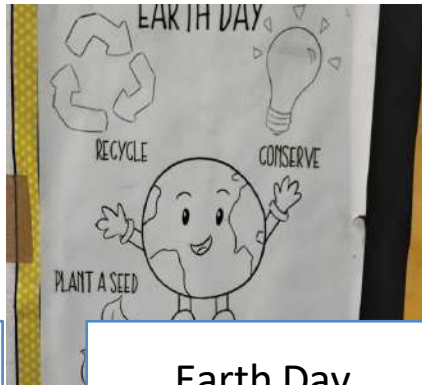
Solar lights for energy conservation



Colour coded Dustbins



Washing Machine to save water



Earth Day

वेस्ट प्लास्टिक की बोटलों से संस्थान में की सजावट

खंडवारी में विद्यार्थियों ने प्लास्टिक की बोटलों से की सजावट को देखते लोग। सच

आगरा। संयुक्त राष्ट्र पर्यावरण कार्यक्रम ने वर्ष 2023 के लिए 'प्लास्टिक प्रदूषण को समाधान' थीम दिया है। इस पर डॉ. भीमराव अंबेडकर विश्वविद्यालय के स्कूल ऑफ लाइफ साइंस (एसएलएस) के पर्यावरण अध्ययन विषय के विद्यार्थियों ने काम किया। अपशिष्ट (वेस्ट) प्लास्टिक की बोटलों से कृत्रिम पेड़ और प्राकृतिक जलवायु संरक्षण की सजावट की है। पर्यावरण अध्ययन विभागध्यक्ष प्रो. भरींदर खरकप जयार्ज ने निवेदन किया कि प्लास्टिक को पुनर्चक्रित करके नए सामान तैयार किए जा सकते हैं।

Plastic in reuse in Newspapers



Best bout of Waste



Reuse in practice



OPS Monitor

***** **END OF THE REPORT** *****

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