





COLLEGE OF TEACHER EDUCATION, BHOPAL

کالج آف ٹیچرایجو کیشن، بھو پال **REPORT** 

OF

# STUDENTS' IDEAS ON WASTE MANAGEMENT AND CLEAN ENERGY PROJECTS 1<sup>st</sup> September to 15<sup>th</sup> September 2024



#### Students' ideas on waste management and clean energy projects

To celebrate the Swachhta Pakhwada from 1st to 15th September 2024, and to encourage students to innovate for a cleaner future, MANUU Bhopal campus is invited innovative ideas from students of B.Ed, M.Ed, and Ph.D. courses. The focus is on waste management and clean energy projects to raise awareness about the importance of cleanliness and waste management, to encourage students to propose creative ways to reduce, reuse, and recycle waste and to foster teamwork and problem-solving skills in tackling real-world environmental issues. All the students were encouraged to actively participate and contribute their innovative solutions for a cleaner, healthier future.

All the students actively participated in the campaign and modeled innovative ideas for sustainable tomorrow.

Mrs. Sayeeda Jabeen B.Ed first semester posed some innovative ideas for the Swachhta Campaign 4.0 focusing on Reduce, Reuse, and Recycle:



#### 1. Reduce

Zero-Waste Cafeteria: Implement a no-plastic policy in school or office cafeterias by encouraging the use of steel or bamboo utensils and providing food in reusable containers.

Smart Waste Sensors: Install smart bins with sensors that alert when they are full, ensuring timely waste collection and reducing overflow.

Paperless Campus/Office: Transition to fully digital communications, reducing the use of paper for notices, invitations, and forms.

Minimal Packaging: Collaborate with local stores to reduce packaging waste, encouraging customers to bring their own containers for products.

#### 2. Reuse

Old Cloth for Bags: Collect old clothes from the community to sew reusable bags for shopping, replacing plastic bags.

Furniture Repurposing: Turn discarded or old furniture into new, functional items like desks, shelves, or outdoor seating for public spaces.

Refill Stations: Set up refill stations for essentials such as shampoo, detergent, and other liquids to encourage reuse of bottles and reduce plastic waste.

Community Repair Workshops: Organize regular events where people can bring broken household items like electronics or clothing for repair rather than discarding them.

#### 3. Recycle

Plastic Bottle Bricks: Use non-recyclable plastic bottles filled with smaller waste to create "eco-bricks" that can be used for construction in local parks or public spaces.

E-Waste Drives: Collect old electronics and send them to certified e-waste recycling centers. Use the proceeds to fund green initiatives like planting trees.

Recycled Art Installations: Encourage schools or offices to hold competitions where participants create art from recycled materials, raising awareness and promoting creativity.

Organic Waste Composting: Set up composting bins for food waste in the community and use the compost in local gardens or parks.

#### 4. Community Engagement

Waste-to-Energy Projects: Propose small-scale biogas plants using organic waste to generate energy for community kitchens or local schools.

School Waste Champions: Create student-led waste management teams to promote reducing, reusing, and recycling efforts among peers.

Swap Markets: Organize swap events where people can exchange used clothes, books, or household items instead of throwing them away.

#### 5. Awareness Campaigns

Social Media Challenges: Create challenges like a "Plastic-Free Week" on social media, encouraging people to reduce their plastic use and share creative ways to reuse materials.

Waste Education Sessions: Hold workshops that teach students and community members how to properly segregate waste and the importance of recycling.

These ideas combine practicality and innovation to make Swachh Pakwada impactful and sustainable.

Urooj Fatma B.Ed first year suggested that we should make BIRD HOUSES and birds feeder so that birds can get a suitable place to lay eggs and raise their babies.

Saleha Nigar B.Ed first year gave some innovative ideas



#### 1. Donation Bank

"Let's Create a Community Fund!"

We'll set up a donation box where you can contribute any amount to help keep our neighborhood clean and add more dustbin with those donatiom. Every little bit counts!

#### 2. Plant More Plants

"Greenify Our Neighborhood!"

We'll use the donated funds to add more plants, trees, and flowers to our streets. This will make our neighborhood look beautiful and feel fresh.

#### 3. Composting Program

"Turn Trash into Treasure!"

We'll start a composting program to turn food waste into nutrient-rich soil for our plants. This will reduce waste and help our community garden grow.

#### 4. Community Clean-Up Events

"Join the Clean-Up Crew!"

We'll organize regular clean-up events where we'll come together to pick up trash, sweep streets, and keep our neighborhood tidy.

#### 5. Cloth Swap

"Swap, Share, and Save!"

Organize a clothing swap event where you can:

- Bring gently used clothes to exchange
- Take home new-to-you items
- Reduce waste and support sustainability

These initiatives aim to foster community engagement, sustainability, and neighborhood beautification.

#### Some other ideas were also given by the students

**Smart Waste Bins with AI Sorting:** Smart waste bins equipped with AI and sensors can automatically sort recyclables, compostable, and non-recyclables. This reduces human error in recycling and ensures materials are processed correctly.

**Plastic-to-Fuel Conversion:** Technologies like pyrolysis can convert plastic waste into fuel or other useful chemicals. This reduces landfill waste while providing a renewable energy source.













**Biodegradable Packaging from Organic Waste:** Packaging materials may be developed from organic waste like agricultural byproducts (e.g., banana leaves, coconut husks). These biodegradable materials can replace plastic packaging, reducing landfill impact.

#### **Microbial Waste Treatment:**

Genetically engineered microbes may be used to break down hazardous waste or convert organic waste into useful products like biofuels or bioplastics.

#### **Trash-to-Art Initiative:**

Waste materials (plastic bottles, cardboard, aluminum cans) may be transformed into art installations that raise awareness about pollution and recycling. This can be part of an art show or a campaign on sustainable practices.

#### Waste Audit & Reduction Campaign:

Waste audit may be conducted of our college to identify major sources of waste. Based on the findings, we can create campaigns to reduce waste, improve recycling rates, and encourage the use of reusable materials. We can use data analytics to track waste over time and measure the success of the campaign through visual graphs and reports.

## **Clean Energy Innovations:**

#### 1. Algae-Based Biofuels:

Cultivate algae using wastewater from agricultural runoff or sewage treatment. Algae can be processed into biofuels, providing both waste management and a clean energy source.

#### 2. Energy-Generating Landfills:

Design landfills to harvest methane gas emitted by decomposing waste. This methane can be captured and converted into electricity, reducing greenhouse gas emissions and generating power.

All the students showed lot of enthusiasm and displayed their imaginative bent of mind.





Convener Dr. Talmeez Fatma Naqvi Associate Professor

Co-convener Dr. Shabana Ashraf Assistant Professor

Designed by Dr. Tarannum Khan Assistant Professor



Prof. Noushad Husain Principal











# COLLEGE OF TEACHER EDUCATION, BHOPAL کالج آف ٹیچرا یجو کیشن، بھویال

# REPORT

## OF

# Preparatory Phase of Special Campaign 4.0 for Institutionalizing Swachhta and Disposal of Pending References

16<sup>th</sup> to 30<sup>th</sup> September 2024



#### Preparatory Phase of Special Campaign 4.0 for Institutionalizing Swachhta and Disposal of Pending References

Swachhata Campaign has become a part of regular functions of MANUU Bhopal campus

The Bhopal Campus is again geared up to make Special Campaign 4.0 (2nd October, 2024-31st October, 2024) successful. All the faculty members, non-teaching staff and students have been appealed to make this campaign exemplary successful. Pre identification of pendency is to start from 16.09.2024 to 30.09.2024 and thereafter the campaign to start in full energy in the campus.

The Special campaign 3.0 (2nd October – 31st October, 2023) was very successful in the College. During this period a number of campaigns were organized and detailed report has been submitted to the concerned authority. The staff and students actively participated in the campaign enthusiastically.

#### Campaign 4.0

#### 1. Background

The Government of India has consistently emphasized the importance of cleanliness (Swachhta) and the efficient disposal of pending issues, public grievances, appeals, and references. The "Special Campaign 4.0" builds on previous initiatives, focusing on two key areas:

- Institutionalizing Swachhta across office.
- Accelerating the disposal of pending references, including students' grievances, and other administrative matters.

As a matter of fact the preparatory phase is somehow critical to ensure a smooth and impactful execution of the campaign since this phase will set the foundation for systematic planning, engagement, and implementation.

2. Objectives of the Preparatory Phase

Institutionalizing Swachhta

Ensure cleanliness standards are not just observed during campaigns but are integrated into daily practices within institutions.

Develop guidelines and standard operating procedures (SOPs) for maintaining cleanliness and hygiene across all departments.

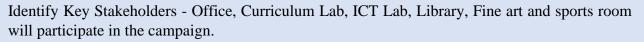
Disposal of Pending References

Identify, categorize, and prioritize all pending public grievances and references.

Develop strategies for expediting their resolution in a systematic and transparent manner.

3. Key Components of the Preparatory Phase

A. Stakeholder Identification and Engagement

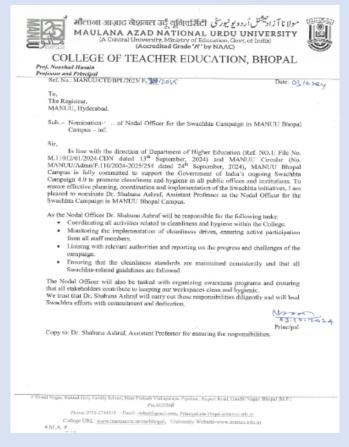




Engagement Workshops: Organize virtual or in-person workshops to familiarize stakeholders with the objectives of the campaign, specific goals for Swachhta, and the process for resolving pending references.



Nominate Nodal Officers: Appoint dedicated nodal officers within the college responsible for coordinating the Swachhta initiatives and the disposal of pending references.



#### B. Baseline Data Collection

Swachhta Audit: Conduct cleanliness audits of office spaces to assess the current level of cleanliness and identify areas for improvement.

Inventory of Pending References and Categorization Each lab will prepare an inventory of all pending public references and classify pending references into urgent, priority, and routine categories for efficient processing.

#### **Inventory of Pending References and Categorization for Swachhta Abhiyan**

Sr No	Referen ce No./ID	Date of Referen ce	Source	Category	Brief Description of the task	Status	Deadline/Timeli ne
1.	REF01	16/9/24	Office	Cleanlines s Drive and waste manageme nt	Cleanliness and weeding out unused files (digital and hard form), cleaning parks, and removal grass, weed and debris	In progre ss	20/10/24

REF02	18/9/24	Library	Cleanlines s Drive and waste manageme nt	Dispose of old newspapers, removing/weedi ng out of old files/records	In progre ss	28/10/24
REF03	22/9/24	ICT lab	Cleanlines s Drive and waste manageme nt	removing/weedi ng out of old files/records	Pendin g	22/10/24
REF04	16/9/24	Curriculu m Lab	Cleanlines s Drive and waste manageme nt	weeding out of old records	In progre ss	20/10/24
REF05	30/9/24	Co- curricular committe e	Awareness Campaign	Organizing community awareness program	Pendin g	25/10/24

#### C. Creation of Campaign Guidelines

Swachhta SOPs-- SOPs will be developed for cleanliness and waste management, emphasizing sustainability and eco-friendly practices.

## Standard Operating Procedures (SOPs) for Cleanliness and Hygiene

#### Daily Cleaning Procedures:

- **Floors:** Sweep and mop all floors using appropriate cleaning agents.
- ✤ Surfaces: Wipe down desks, tables, counters, and other high-touch surfaces with disinfectant.
- Restrooms: Clean toilets, sinks, and mirrors using disinfectants. Restock soap, paper towels, and toilet paper.
- ◆ Garbage: Empty all waste bins, dispose of trash properly, and replace liners.

#### Weekly Deep Cleaning Procedures:

- Dusting: Dust shelves mainly book shelves in library, office and labs, window sills, ceiling fans, and other hard-to-reach areas.
- **Windows**: Clean windows and glass surfaces with appropriate cleaning solutions.
- Disinfection and Sanitization of High-Touch Areas: Regularly disinfect areas such as light switches, handrails, door handles, and faucets.
- > Monthly/bi-monthly Deep Cleaning Procedures:

- ♦ Water tank- Cleaning underground and overhead tank
- **Trainage** cleaning and disinfecting drainage for proper water flow
- Water coolers- Empty the water cooler, exterior and interior cleaning, scrub around the spigots, drip tray,
- Desert coolers Empty the Water Tank, Clean the Cooling Pads, disinfect the tank to eliminate mosquito larva, bacteria, algae, or mold.
- Documentation and Record-Keeping:
- ✤ Maintain logs for daily and weekly cleaning schedules to track tasks completed.
- Report any issues such as malfunctioning equipment, pest sightings, or shortages of cleaning supplies.

Reference Disposal Guidelines: Prepare a comprehensive strategy for the disposal of pending references, ensuring accountability and time-bound action.

D. Infrastructure and Logistics Preparation

Physical Infrastructure for Cleanliness—resources will be allocated for the procurement of cleaning supplies, waste management systems to maintain cleanliness across offices.

4. Communication Strategy

Awareness Campaign—awareness will be raised about the objectives of Special Campaign 4.0 and its long-term vision for institutionalizing Swachhta in all the stakeholders.

Regular Updates: Labs, office and Library will provide regular progress updates to the nodal officer and ensure transparency in operations.

Best Practices Sharing- Highlight exemplary cases of cleanliness drives and successful disposal of pending references to encourage participation and adoption of best practices across the campus.

#### 5. Training and Capacity Building

Swachhta and pending reference disposal Training Programs- College will organize capacitybuilding programme for faculty and supporting staff on best practices for cleanliness, waste management, and creating a hygienic work environment efficient disposal of references, grievance redressal procedures, and use of technology to streamline processes.

6. Timeline and Milestones

Week 1-2: Stakeholder Engagement & Nodal Officer Appointment

Week 3-4: Baseline Data Collection (Swachhta Audits and Inventory of Pending References)

Week 5: Creation of SOPs and Guidelines

Week 6: Training & Capacity Building Programs

Week 7: Official Launch of Special Campaign 4.0

7. Monitoring and Evaluation

Daily/Weekly Reports- Nodal officer will submit progress reports to the Principal.

Mid-Phase Review- Conduct a mid-preparatory phase review to assess progress and address any challenges.

End-of-Phase Audit- A final audit before the launch of Special Campaign 4.0 to ensure all preparatory work is completed satisfactorily.

**Swachhta Audit:** Swachhta Audit was conduct of office, Library, curriculum lab, water tank and open spaces to assess the current level of cleanliness and identified the areas for improvement.





Convener Dr. T.F. Naqvi

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