Green Audit Report

2023-24

Government Tilak PG College Katni (MP)

"प्रधानमंत्री कॉलेज ऑफ एक्सीलेंस"
कार्यालय- प्राचार्य शासकीय तिलक स्नातकोत्तर महाविद्यालय कटनी
• 26.09.18 को नैक द्वारा B++ ग्रेड प्राप्त • अग्रणी महाविद्यालय, जिला- कटनी •
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कटनी, दिनांक 11.09.2024

// आदेश वनस्पतिशास्त्र विभाग//

प्राचार्य जी के आदेशानुसार महाविद्यालय परिसर के पौधों की नंबरिंग व उन्हें नामांकित करने के लिए वनस्पतिशास्त्र विभाग (हरित कोर) के लिए कार्य करने हेतु निम्नलिखित प्राध्यापकों/अतिथि विद्वानों को कार्य करने का दायित्व सौंपा जा रहा हैं। (2 Parts)

नाम

1. श्रीमती ज्योत्सना आठ्या
2. डॉ. ज्ञानेन्द मोहन श्रीवास्तव
3. डॉ. सुचि सिंह
4. डॉ. शैजला बरसैंया
5. डॉ. ज्योत्सना पाठक
6. सुश्री माधुरी सिंह
7. डॉ अनिल गौतम

प्राचार्य
(डॉ. एस. के. खरे)

Introduction

The term "Green" actually refers to practices, products, and initiatives that are environmentally friendly and aimed at supporting the environment. It includes a wide range of activities and concepts that promote sustainability, conservation, and the use of natural resources in a way that minimizes harm to the planet. It can be abbreviated as “readiness on a global scale to ensure ecological neutrality” (Green). Green accounting refers to the systematic process of identifying, quantifying, recording, reporting and analysing the various components of ecological diversity. The approach being referred to in the context of green audit focuses on incorporating environmental factors into traditional accounting methods. This provides a comprehensive understanding of how business activities affect the environment. This integration not only increases transparency about environmental impacts but also encourages organizations to make decisions that are more sustainable, which ultimately contributes to better environmental management. "Green auditing" is an umbrella term that also goes by the name “Environmental auditing". There is a provision for Green Audit in the college campus.

The provision of green audits on a college campus involves systematically evaluating the environmental performance of the institution. beside conducting green audits, colleges can improve the environment around them, and present themselves as a model for sustainability in the community while educating students about the importance of environmental protection. This process typically involves the following major components:

1. Resource Assessment:

Evaluating the use of energy, water, and materials in campus facilities to identify areas for improvement.

1.1. Energy Audit:

Data Collection: Gather data on energy consumption from utility bills, metering systems, and building management systems.

Analysis: Assess energy use patterns to identify peak usage times and areas of excessive consumption.

Benchmarking: Compare energy use against similar institutions or industry standards to identify inefficiencies.

Recommendations: Propose energy-saving measures such as upgrading to energy-efficient lighting, improving insulation, and implementing smart building technology.

1.2. Water Audit:

Usage Assessment: Measure water consumption in various facilities, including dormitories, dining rooms, and recreation areas.

Leak Detection: Identify leaks in plumbing systems and fixtures that contribute to water waste.

Efficiency Assessment: Review irrigation practices and landscaping options to ensure water-efficient methods are implemented.

Recommendations: Suggest water-saving fixtures, rainwater harvesting systems, and xeriscaping to reduce overall water use.

1.3. Materials Audit:

Inventory Assessment: Inventory the materials used in campus operations, including building materials, office supplies, and food services.

Waste Analysis: Evaluate waste generation and disposal practices to identify recycling and composting opportunities.

Source Review: Assess the sustainability of sourced materials, focusing on local, recycled, or sustainably produced options.

Recommendations: Encourage the use of sustainable materials, implement a comprehensive recycling program, and promote the reduction of single-use items.

1.4. Stakeholder Involvement:

Involve students, faculty, and staff in the assessment process to gather insights and foster a sense of ownership over sustainability initiatives.

1.5. Reporting and Action Plan:

Compile findings into a comprehensive report that outlines current use, identifies inefficiencies, and provides actionable recommendations for improvement.

2. Waste Management:

Analyzing waste generation and disposal practices, including recycling and composting efforts, to increase sustainability.

2.1. Waste Audit:

Data Collection: Conduct a comprehensive waste audit to measure the type and amount of waste generated in campus facilities. This may include collecting waste samples over specified periods to classify it into recyclable, compostable, and landfill waste.

Identifying Sources: Determine the primary sources of waste, such as dining services, dormitories, academic buildings, and programs, to understand where improvements can be made.

2.2. Evaluating Disposal Practices:

Review Current Practices: Evaluate current waste disposal methods, including how waste is sorted, collected, and processed. This includes evaluating the effectiveness of current recycling and composting programs.

Contamination Analysis: Identify common contaminants in recycling and composting streams, which may hinder the effectiveness of these programs and lead to an increase in landfill waste.

2.3. Recycling Efforts:

Program Assessment: Evaluate the current recycling program, including the types of materials accepted, accessibility of recycling bins, and level of participation among students and staff.

Education and Awareness: Analyze the effectiveness of educational campaigns aimed at promoting recycling and proper sorting practices. Consider implementing workshops or informational sessions to increase awareness.

2.4. Composting Initiatives:

Composting Program Review: Assess current composting efforts, including the type of organic waste collected (e.g., food scraps, yard waste) and methods used for composting (e.g., on-site compost bins, partnerships with local composting facilities).

Expansion Opportunities: Identify opportunities to expand composting efforts, such as increasing the number of collection points or incorporating composting into dining services.

2.5. Waste Reduction Strategies:

Behavior Change: Encourage practices that reduce waste generation, such as promoting reusable containers, reducing single-use plastics, and implementing digital solutions to reduce paper use.

Policy Development: Consider developing policies that support waste reduction, such as banning certain single-use items or requiring sustainable purchasing practices.

2.6. Reporting and Recommendations:

Comprehensive Report: Compile findings into a detailed report that outlines current waste generation and disposal practices, identifies areas for improvement, and provides actionable recommendations to increase recycling and composting efforts.

Implementation Plan: Develop a plan to implement recommendations, including timelines, responsible parties, and metrics to measure success.

2.7. Monitoring and Continuous Improvement:

Ongoing Evaluation: Establish a framework for regular monitoring and evaluation of waste management practices to track progress and make necessary adjustments.

Feedback Mechanisms: Create channels for feedback from the campus community to continually improve waste management initiatives.

3. Sustainable Practices:

Reviewing current practices related to transportation, landscaping, and procurement to promote environmentally friendly options.

3.1. Transportation:

Evaluate the use of fuel-efficient vehicles, promote carpooling and public transportation, and consider the implementation of electric or hybrid vehicles. Additionally, optimizing routes for delivery and service can reduce emissions and fuel consumption.

3.2. Landscaping:

Focus on sustainable landscaping practices such as xeriscaping, which reduces water use, and using native plants that require less maintenance and are more resilient to the local climate. Implementing organic gardening techniques and reducing chemical fertilizers and pesticides can also contribute to environmental sustainability.

3.3. Procurement:

Review procurement policies to prioritize environmentally friendly products and materials. This includes sourcing from local suppliers to reduce transportation emissions, selecting products with minimal packaging, and choosing items made from recycled or sustainable materials. Establishing criteria for vendors that align with sustainability goals can further enhance procurement practices.

4. Compliance and Standards:

Ensuring that the campus complies with relevant environmental regulations and standards, as well as identifying opportunities for certification.

4.1. Regulatory compliance:

Conduct a comprehensive review of local, state, and federal environmental regulations that apply to campus operations. This includes regulations related to waste management, water quality, air emissions, and energy use. Regular audits and assessments should be conducted to ensure continued compliance.

4.2. Sustainability standards:

Familiarize the campus community with established sustainability standards, such as LEED (Leadership in Energy and Environmental Design) for buildings, ISO 14001 for environmental management systems, and other relevant certifications. This knowledge can guide future projects and renovations.

4.3. Certification opportunities:

Identify and pursue certification programs that align with campus sustainability goals. This may include certifications for energy efficiency, waste reduction, or sustainable landscaping. Connecting with organizations that offer these certifications can provide valuable resources and guidance.

4.4. Training and awareness:

Implement training programs for staff and students to increase awareness of environmental regulations and sustainability practices. This can foster a culture of compliance and encourage active participation in sustainability initiatives.

4.5. Monitoring and reporting:

Establish a system for monitoring environmental performance and compliance. Regular reporting on sustainability metrics can help identify areas of improvement and demonstrate a commitment to environmental protection.

4.6. Collaboration and partnerships:

Collaborate with local environmental agencies, nonprofit organizations, and other academic institutions to share best practices and resources. This can increase the campus' ability to meet regulatory requirements and achieve certification.

5. Stakeholder engagement:

Involve students, faculty, and staff in the audit process to raise awareness and promote a culture of sustainability.

5.1. Establish a sustainability committee:

Form a committee that includes representatives from students, faculty, and staff. This committee can oversee the audit process, ensure diverse perspectives, and foster a sense of ownership among participants.

5.2. Educational workshops and training:

Hold workshops and training sessions to educate the campus community about sustainability practices, the importance of audits, and how their involvement can make a difference. This can help build the knowledge and skills needed for effective participation.

5.3. Practical participation:

Encourage active participation by involving students, faculty, and staff in data collection and analysis during audits. This can include conducting surveys, assessing energy use, or evaluating waste management practices. Practical participation can increase understanding and commitment.

5.4. Awareness campaigns:

Launch awareness campaigns that highlight the audit process and its importance. Use posters, social media, and campus events to communicate goals, progress, and results while keeping the community informed and engaged.

5.5. Incentives and recognition:

Create incentives for participation, such as recognition programs or competitions that reward departments or groups for their contributions to sustainability efforts. Recognizing individual and collective efforts can motivate continued participation.

5.6. Feedback mechanism:

Establish a feedback mechanism where participants can share their experiences and suggestions during the audit process. This can help refine practices and demonstrate that their input is valued.

5.7. Integration into the curriculum:

Collaborate with faculty to integrate sustainability topics into relevant courses. This can provide students with academic credit for their participation in the audit process, making it a meaningful part of their educational experience.

5.8. Display results:

After the audit is complete, share the findings and recommendations with the entire campus community. Highlight successes and areas of improvement, and outline next steps to implement changes based on the audit results.

6. Reporting:

The report outlines the strengths, weaknesses and actionable recommendations for improving environmental performance. The report compiles the recent environmental performance audit conducted on the campus. It outlines the strengths and weaknesses identified during the audit process and provide actionable recommendations aimed at improving overall environmental performance.

6.1. Purpose:

The purpose of this audit is to assess the existing environmental practices on campus, identify areas of improvement and promote a culture of sustainability among students, faculty and staff. The audit focused on key areas including the involvement of various stakeholders and compliance with environmental regulations.

6.2. Strengths:

6.2.1. Commitment to Sustainability: There is a strong commitment to promote sustainability initiatives on the part of the college administration, as evident from the existing programs and policies.

6.2.2. Stakeholder Engagement: Sustainability efforts at the college have seen active participation of students, faculty and staff, especially in awareness campaigns and programs.

6.2.3. Existing Infrastructure: The college campus has many buildings and green spaces that contribute positively to environmental performance.

6.2.4. Waste Management Programs: The college campus has effective recycling and composting programs in place, which reduce landfill contributions.

6.3. Weaknesses:

6.3.1. Limited Transportation Options: There is a lack of comprehensive public transportation options and incentives to carpool or use alternative modes of transportation.

6.3.2. Inconsistent Practices: Some practices do not align with sustainability principles, such as the use of non-native plants and chemical fertilizers.

6.3.3. Policies: Current practices do not consistently prioritize environmentally friendly products, leading to missed sustainability opportunities.

6.3.4. Regulatory Compliance Gaps: Some areas of campus operations do not fully comply with local environmental regulations, particularly in waste disposal and energy use.

7. Actionable Recommendations:

7.1. Transportation:

7.1.1. Increase Public Transportation Accessibility: Initiate collaboration with local transportation authorities to improve public transportation routes and timetables serving the college campus.

7.1.2. Promote carpooling: Implement a carpooling program near the college campus that includes incentives for participants, such as preferred parking spots or discounts on campus services.

7.2. Construction:

7.2.1. Adopt sustainable building practices: Move toward xeriscaping and the use of native plants to reduce water consumption and maintenance needs on the college campus.

7.2.2. Implement organic practices: Reduce or eliminate the use of chemical fertilizers and pesticides in favor of various organic options recommended by the Department of Botany.

7.3. Recycled material procurement:

7.3.1. Revise procurement policies: Establish guidelines that prioritize the purchase of sustainable products and materials, including products and materials made from recycled content.

7.3.2. Vendor engagement: Work with suppliers to identify and obtain environmentally friendly alternatives, and consider sustainability criteria in vendor selection processes.

7.4. Regulatory Compliance:

7.4.1. Conduct Regular Compliance: Schedule periodic audits to ensure compliance with environmental regulations on the college campus and identify areas needing improvement.

7.4.2. Training Program: Develop training for staff on compliance requirements and best practices for environmental management.

7.5. Next Steps:

Present to the college campus governance and sustainability committee for review and approval. Develop a timeline for implementing the recommendations and assign responsibilities to relevant stakeholders. Regularly report on results to monitor progress and maintain accountability. The findings of this environmental performance audit highlight both strengths and areas for improvement within the campus' sustainability efforts. By implementing the actionable recommendations outlined in this report, the campus can enhance its environmental performance, promote a culture of sustainability, and ensure compliance with relevant regulations.

8. Implementation of changes:

Develop a plan to implement the recommendations, which may include initiatives such as energy efficiency upgrades, water conservation measures, and enhanced recycling programs. This implementation plan outlines the steps needed to implement the recommendations from the environmental performance audit. This plan focuses on three major initiatives: energy efficiency upgrades, water conservation measures, and enhanced recycling programs. Each initiative includes specific tasks, timelines, responsible parties, and required resources. This implementation plan provides a structured approach to enhance the campus' environmental performance through targeted initiatives in energy efficiency, water conservation, and

recycling. By engaging the campus community and monitoring progress, we can foster a culture of sustainability and achieve our environmental goals.

8.1. Energy Efficiency Upgrades:

Objective: Reduce energy consumption and greenhouse gas emissions in campus facilities.

Actions:

1. Conduct energy audits

    Timeline: Month 1-2

    Responsible Party: Facility Management

    Resources Needed: Energy audit consultant, funds for assessments

2. Upgrade lighting

    Timeline: Month 3-6

    Responsible Party: Facility Management

    Resources Needed: Budget for LED lighting, installation contractor

    Action: Replace all incandescent and fluorescent lights with LED fixtures.

3. Implement smart building technology

    Timeline: Month 7-12

    Responsible Party: IT department and facility management

    Resources Needed: Budget for smart thermostats, sensors, and software

    Action: Install smart thermostats and occupancy sensors to optimize heating, cooling, and lighting.

4. Promote energy conservation awareness

    Timeline: Ongoing

Responsible Party: Sustainability Committee

Resources Needed: Marketing materials, workshops

Action: Launch campaign to educate campus community on energy-saving practices.

8.2. Water Conservation Measures:

Objective: Reduce water use and promote sustainable water management practices.

Action:

1. Conduct water audit

   Timeline: Month 1-2

   Responsible Party: Facility Management

   Resources Required: Water audit consultant, funds for evaluation

2. Install low-flow fixtures

   Timeline: Month 3-6

   Responsible Party: Facility Management

   Resources Required: Budget for low-flow faucets, showerheads, and toilets

   Action: Replace existing fixtures with low-flow alternatives in all campus buildings.

3. Implement rainwater harvesting systems

   Timeline: Month 7-12

   Responsible Party: Facility Management

   Resources Required: Budget for installation, maintenance

Action: Install rainwater collection systems for irrigation and non-potable uses.

4. Promote water conservation awareness

Timeframe: ongoing

Responsible Party: Sustainability Committee

Resources Required: marketing materials, workshops

Action: Educate the campus community about water-saving practices and the importance of conservation.

8.3. Enhanced recycling program:

Objective: Increase recycling rates and reduce waste sent to landfills.

Actions:

1. Conduct waste audits

Timeframe: month 1-2

Responsible Party: Sustainability Committee

Resources Required: waste audit consultant, funds for assessment

2. Expand recycling infrastructure

Timeframe: month 3-4

Responsible Party: Facility Management

Resources Required: budget for recycling bins, signage

Action: Increase the number of recycling bins across campus and ensure clear labeling.

3. Implement composting programs

Timeline: Month 5-8

Responsible Party: Sustainability Committee and Dining Services

Resources Needed: Budget for compost bins, training materials

Action: Install composting stations in dining areas and provide training for staff and students.

4. Launch recycling awareness campaign

Timeline: Ongoing

Responsible Party: Sustainability Committee

Resources Needed: Marketing materials, workshops

Action: Educate the campus community about proper recycling practices and the benefits of recycling.

8.4. Monitoring and Evaluation:

Objective: Track progress and assess the effectiveness of implemented initiatives.

Action:

1. Establish Key Performance Indicators (KPIs)

Timeline: Month 1

Responsible Party: Sustainability Committee

Resources Required: Data Collection Tools

2. Regular Progress Reports

Timeline: Quarterly

Responsible Party: Sustainability Committee

Resources Required: Reporting Tools, Data Analysis Software

Action: Prepare and distribute reports on progress toward energy savings, water conservation, and recycling rates.

3. Feedback Mechanism

Timeline: Ongoing

Responsible Party: Sustainability Committee

Resources Required: Surveys, Suggestion Box

Action: Gather feedback from the campus community to identify areas of improvement and celebrate successes.

9. Monitoring and review:

Establish a framework for ongoing monitoring and periodic reviews to track progress and make necessary adjustments. This framework outlines a systematic approach to the continuous monitoring and periodic review of campus environmental performance initiatives. The goal is to ensure continuous improvement, track progress against established goals, and make necessary adjustments to strategies and actions based on data and feedback. This framework establishes a robust system for continuous monitoring and periodic review of the campus' environmental performance initiatives. By tracking progress, engaging stakeholders, and making data-driven adjustments, the campus can foster a culture of sustainability and continually improve its environmental impact.

9.1. Objectives:

Track progress: Monitor the effectiveness of implemented initiatives in energy efficiency, water conservation, and recycling.

Ensure accountability: Establish clear responsibilities for data collection, analysis, and reporting.

Facilitate continuous improvement: Use data-driven insights to make informed adjustments to strategies and initiatives.

Involve stakeholders: Involve the campus community in the monitoring process to promote a culture of sustainability.

9.2. Monitoring Framework:

9.2.1. Key Performance Indicators (KPIs)

Establish specific KPIs for each initiative to measure progress. Examples include:

Energy Efficiency: Percentage reduction in energy consumption (kWh) per building. Number of energy audits completed.

Water Conservation: Percentage reduction in water use (gallons) per building. Number of low-flow appliances installed.

Recycling Program: Percentage increase in recycling rates (weight of recyclables collected). Number of compost stations installed.

9.2.2. Data Collection Methods

Automated Systems: Use smart meters and building management systems to collect real-time data on energy and water use.

Surveys and Feedback: Conduct regular surveys to collect feedback from students, faculty, and staff on sustainability initiatives.

Waste Audits: Conduct periodic waste audits to assess recycling rates and identify areas of improvement.

9.3. Periodic Review Process:

9.3.1. Review Schedule

Quarterly Reviews: Conduct quarterly reviews to assess progress against KPIs and identify trends.

Annual Comprehensive Review: Conduct a detailed annual review that includes a comprehensive analysis of all initiatives, stakeholder feedback, and recommendations for the upcoming year.

9.3.2. Review Meetings

Stakeholder Meetings: Conduct quarterly meetings with the Sustainability Committee and relevant stakeholders to discuss progress, challenges, and opportunities for improvement.

Community Engagement: Host annual sustainability forums to share results with the campus community and gather input on future initiatives.

9.4. Reporting:

9.4.1. Progress Reports

Quarterly Reports: Prepare concise quarterly reports summarizing progress on KPIs, challenges faced, and actions taken. Distribute these reports to stakeholders and the campus community.

Annual Sustainability Report: Prepare a comprehensive annual report that includes detailed analysis, success stories, and future goals. This report should be made publicly available on the campus website.

9.5. Adjustments and Continuous Improvement:

9.5.1. Action Plan Adjustments

Data-Driven Decisions: Use insights gained from monitoring and review to make informed adjustments to initiatives. This may include reallocating resources, revising strategies, or launching new programs.

Feedback Integration: Incorporate feedback from the campus community into the decision-making process to keep initiatives relevant and effective.

9.5.2. Training and Capacity Building

Ongoing Training: Provide training sessions for staff and students on the importance of sustainability practices and monitoring efforts.

Empowerment: Encourage departments and student organizations to take ownership of specific sustainability initiatives and report on their progress.

Green Audit of College Campus

The outlined framework serves as a strategic guide to maintain the campus' commitment to sustainability, while allowing adaptability to changing conditions and opportunities for improvement. A dedicated committee has been established to oversee the conservation and planting of vegetation on campus. Following recommendations from the Internal Quality Assurance Cell (IQAC), the Department of Botany has been tasked to conduct a "Green Audit" in collaboration with state environmental experts. The findings of this audit have been compiled into a report by the Department of Botany, Government Tilak Postgraduate College, Katni.

Established on August 4, 1958 by Late Shri Durga Ranulambar and Lok Shri Baman Rao, the college started as a private institution and was later taken over by the Government of Madhya Pradesh on February 7, 1971. It is accredited by NAAC, Bengaluru with a 'B' grade. The main campus is spread over about 18 acres, with 31% dedicated to greenery, which includes a wide variety of herbs, shrubs and trees, many of which are medicinal plants. The Green Audit Committee has systematically identified over 1,000 plant species on the campus. The findings of the Green Audit Report have been shared with environmental experts of Katni district and the state, who have made suggestions to enhance the greenery of the campus. The college is actively promoting environmental awareness among its students.

The college actively organises various events every year through its NSS, NCC, Eco Club, Green Core Committee and student participation. Initiatives such as tree plantation are promoted by the Principal and Department Heads to increase greenery and reduce carbon dioxide emissions. The garden located at the main entrance of the college is regularly renovated with the financial assistance of the Public Participation Committee, while the Environment Committee oversees the maintenance of the existing gardens. Additionally, the college organises extension programmes aimed at increasing environmental awareness and promoting biodiversity conservation among students and the wider community.

The activities organized for creating and preserving greenery in the campus are-

1. Plantation of diverse species

2. Vegetative propagation

3. Use of medicinal plants

4. Identification of plant species

5. Organic building

6. Mushroom cultivation

7. Preparation of vermicompost

1. Plantation of diversified species:-

The college actively promotes plants of diverse species to enhance greenery and promote an eco-friendly atmosphere on the campus. Every year, tree planting programmes are organised with the participation of students and staff. This session, the Van Mahotsav programme was organised, resulting in the planting of about 100 ornamental, avenue and medicinal plants, including rare and exotic trees, in the botanical garden and other areas of the campus. To ensure the sustainability of this greenery, the gardens are regularly maintained by paid gardeners under the supervision of the Green Core Committee.

2. Vegetative propagation:-

Vegetative propagation is a method of plant reproduction that involves using parts of existing plants to grow new plants. To enhance the understanding and skills of students in this field, an annual training program is conducted by subject experts. During this program, students learn various techniques of vegetative propagation, including cuttings, grafting, and layering (gooty). These practical experiences equip students with practical knowledge that can be applied in gardening and horticulture.

3. Uses of medicinal plants:-

The botanical garden has a diverse range of medicinal plants available for study. Knowledgeable staffs assist students in identifying these plants and educate them about their medicinal properties. This practical experience enhances students' understanding of herbal medicine and the importance of these plants in healthcare.

Geographical status of GTC Katni, Google Satellite Map

4. Identification of plants species:-

A wide variety of plant species are found on the college campus. Faculty members of the Botany Department conducted an audit to identify these different species, using the available botanical resources to aid their research. This initiative contributes to understanding and documenting the botanical diversity of the campus.

5. Organic forming:-

Subject experts visited the college to interact with the students, providing valuable insights and practical information about organic farming. During their address, they presented essential details that enhance the students' understanding of organic farming practices, and promote sustainable farming methods.

6. Cultivation of mushroom:-

Apart from organic farming, Mr. Prakash Dubey also informed the students about mushroom cultivation and highlighted it as an emerging field of science. This knowledge will not only enhance their agricultural skills but will also provide valuable opportunities for self-employment in the mushroom industry.

7. Preparation of vermicompost:-

Subject experts trained the students on vermicomposting, highlighting its potential as a viable means of self-employment. This training equips students with practical skills in sustainable waste management and organic farming, opening up entrepreneurial opportunities in this sector.

General information:-

Does any green audit conducted earlier?

Yes in 2017-18, 2020-21, 2021-22, 2022-23, 2023-24,

Total strength

Total students-4210

Total teaching staff - 42

Non-teaching staff- 24

Technical staff - 11

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

187 days

Where is the cumpus located?

Shahdol road khirahanikatni

Which of the following are available in your institute?

Garden area- available

Play ground- available

Toilates- available

Garbage or waste store yard- available

Laboratory- available

Which of the following are found near your institute?

Katni railway station- (aprox 3 km)

Bus stand- (aprox5 km)

Greening the campus

Is there garden in your institute?

Yes

Do students spend time in the garden?

Yes

(Students spend time around 1-3 hours during college time).

Total number of plants in campus

Total 115 species from 50 families' plants available in college campus with economic rate 231.

Small Plants: Shrubs& Herbs are located in the Fire Range (Transform to Stadium)

S.No.	Local Name	*Botanical name*	Family	No. of Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Gardening
1	Shiv Babul	*Vachellia nilotica*	Fabaceae	4	√	√				√
2	Aeschynomene	*Aeschynomene*	Fabaceae	3						√
3	Amala	*Emblica officinalis*	Euphorbiaceae	3	√		√	√		
4	Badam	*Terminalia catappa*	Rosaceae	1	√	√		√		√
5	Ber	*Zizipus jujube*	Rhanaceae	5	√			√		
6	Corchorus	*Corchorus olitorius*	Malvaceae	7	√					√
7	Kadan	*Anthocephalus cadamba*	Rubi Aceae	2		√				√
8	Leucaena	*Leucaena leucocephala*	Fabaceae	2	√	√	√			√
9	Madar	*Calotropis gigantea*	Apocynaceae	2	√				√	
10	Mill	*Ficus nymphaeifolia*	Moraceae	1	√	√				
11	Neem	*Azadiraccta indica*	Meliaceae	6	√	√				
12	Shami	*Prosopis cineraria*	Fabaceae	3	√	√				√
13	Sheesham	*Cassia siamea*	Ceasalpiniaceae	10		√				
14	Showpatti	*Coleus*	Lamiaceae	1						√
		Total Plants		**50**						

Big Plants : Trees are located in the Fire Range (Transform to Stadium)

S.No.	Local Name	Botanical name	Family	No. of Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Gardening
1	Shiv Babul	*Vachellia nilotica*	Fabaceae	10	√	√				√
2	Aam	*Mengifera indica*	Anacardiace	2		√		√		
3	Acacia holding	*Acacia auriculiformis*	Fabaceae	6	√				√	√
4	*Alvaradoa*	*Alvaradoa amorphoides*	Picramniaceae	1	√	√				
5	Amala	*Emblica officinalis*	Euphorbiaceae	9	√		√	√		
6	Babool	*Accacia nelotica*	Mimosoidae	4	√	√				
7	Bauhinia	*Bauhinia variegata*	Fabaceae	2	√	√				
8	Ber	*Zizipus jujube*	Rhanaceae	3	√			√		
9	Chinese tallow	*Triadica sebifera*	Euphorbiaceae	3						√
10	Ear leaf	*Colocasia esculenta*	Araceae	10						√
11	Kadam	*Neolamarckia cadamba*	Rubiaceae	3		√				√
12	Karanji	*Pongamia pinnata*	Papilionaceae	14	√		√			
13	Madar	*Calotropis gigantea*	Apocynaceae	10	√				√	
14	Mahua	*Madhuca longifolia*	Sapotaceae	4	√	√	√	√	√	
15	Moringa	*Moringa oleifera*	Moringa oleifera	5	√			√		
16	Neem	*Azadiraccta indica*	Meliaceae	10	√	√				
17	Picta	*Plantago picta*	Plantaginaceae	1	√				√	
18	Pipal	*Ficus religiosa*	Moraceae	2	√	√				
19	Pongame oiltree	*Millettia pinnata*	Fabaceae	5	√		√			
20	Portia tree	*Thespesia populnea*	Malvaceae	1						√
21	Sheesham	*Dalbergia sissoo*	Papilionaceae	8		√				
22	Weeping fig	*Ficus benjamina*	Moraceae	4					√	√
		Total Plants		**117**						

Big Plants : Girls Hostel

S.No.	Local Name	Botanical name	Family	No. of Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Gardening
1	Babool	*Accacia nelotica*	Mimosoidae	15	√	√				
2	Bamure	Dracaena sanderiana	Asparagaceae	1	√					√
3	Ber	*Zizipus jujube*	Rhanaceae	18	√			√		
4	Gulmohar	*Delonix regia*	Ceasalpiniaceae	1	√	√				
5	Karanji	*Pongamia pinnata*	Papilionaceae	45	√		√			
6	Liptis	Eucalyptus globulus	Myrtaceae	24	√	√	√			
7	Neem	*Azadiraccta indica*	Meliaceae	37	√	√				
8	Pipal	Ficus religiosa	Moraceae	1	√	√				
		Total		**142**						

Front on Principal Office

S.No.	Local Name	Botanical name	Family	No. of Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Gardening
1	Amala	*Emblica officinalis*	Euphorbiaceae	1	√		√	√		
2	Amrood	*Psidium guajava*	Myrtaceae	2	√			√		
3	Arjun	*Terminalia arjuna*	Combretaceae	1	√	√				
4	Ashok	*Polyanthinlongi folia*	Annonaceae	4						√
5	Australiana Cacia	*Accacia melanoxylon*	Mimosaceae	4						√
6	Basil	*Ocimum basilicum*	Lamiaceae	3	√		√	√		√
7	Chandni	*Tabernaemonta coronoria*	Apocynaceae	3			√		√	
8	Goodhal	*Hibiscus syriacus*	Malvaceae	2					√	
9	Ixora	*Ixora coccinea*	Rubiaceae	2			√		√	√
10	Kachnar	*Bauhonia variegata*	Ceasalpiniaceae	9	√		√		√	√
11	Madhumalti	*Rangoon creeper*	Combretaceae	1					√	√
12	Mangnolia	*Magnolia × alba*	Magnoliaceae	2					√	√
13	Milkwood	*Tabernaemontana*	Dogbane	1					√	√
14	Mimosa	*Mimosa pudica*	Fabaceae	3						√

15	Mongra Bela	*Jasminum sambac*	Oleaceae	4			√		√	√
16	Moringa	*Moringa oleifera*	Moringa oleifera	1	√			√		
17	Neem	*Azadiraccta indica*	Meliaceae	4	√	√				
18	Palm tree	*Roystonea regia*	Arecaceae	8						√
19	Sada suhagan	*Catharanthus roseus*	Apocynaceae	9					√	√
20	Sagon	*Teclona grandis*	Verbenaceae	3	√	√				
21	Shahtoot	*Morus alba*	Moraceae	1	√			√		√
22	Showpatti	*Coleus*	Lamiaceae	25						√
23	Sinduri	*Bixa arellana*	Bixaceae	1	√					
24	Snake plant	*Dracaena trifasciata*	Asparagaceae	17						√
25	Vaidya singha	*Justicia gendarussa*	Acanthaceae	4	√					√
26	Vidya	*Thuja occidentalis*	Cupressaceae	1						√
		Total Plants		**116**						

Indoor: Department of Science

S.No.	Local Name	Botanical name	Family	No. of Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Decoration
1	Aam	*Mengifera indica*	Anacardiace	1		√		√		
2	Aloe vera	*Aloe barbadensis*	Asphodelaceae	2	√					√
3	Amrood	*Psidium guajava*	Myrtaceae	6	√			√		
4	Ashok	*Polyanthinlongi folia*	Annonaceae	13						√
5	Bans palm	*Borassus aethiopum*	Arecaceae	2						√
6	Chandni	*Tabernaemonta coronoria*	Apocynaceae	3			√		√	
7	Duranta	*Duranta repens*	Verbenaceae	1					√	√
8	Gulab	*Rosa rubiginosa*	Rosaceae	2			√		√	√
9	Japani indigo	*Persicaria tinctoria*	Polygonaceae	1					√	√
10	Kachnar	*Bauhonia variegata*	Ceasalpiniaceae	2	√		√		√	√
11	Neem	*Azadiraccta indica*	Meliaceae	2	√	√				
12	Patharchatta	*Kalanchoe pinnata*	Crassulaceae	0	√					
13	Pudina	*Mentha spicata*	Lamiaceae	0	√		√			
14	Reetha	*Sapindus mukorrossi*	Sapindaceae	1	√			√		√
15	Spider lily	*Hymenocallis littoralis*	Amaryllidaceae	1					√	√
16	Vidya	*Thuja occidentalis*	Cupressaceae	2						√
17	Others			14						
		Total Plants		**53**						

Ground Side

S.No.	Local Name	Botanical name	Family	Plants	Medicinal	Woody	Ornamental	Fruit	Flower	Decoration
1	Aam	*Mengifera indica*	Anacardiace	1		√		√		
2	Aeschynomene	*Aeschynomene*	Fabaceae	2						√
3	Aloe vera	*Aloe barbadensis*	Asphodelaceae	2	√					√
4	Amala	*Emblica officinalis*	Euphorbiaceae	6	√		√	√		
5	Babool	*Accacia nelotica*	Mimosoidae	6	√	√				
6	Ber	*Zizipus jujube*	Rhanaceae	7	√			√		
7	Ficus	*Ficus panda*	Moraceae	4			√			√
8	Gulmohar	*Delonix regia*	Ceasalpiniaceae	1	√	√				
9	Kachnar	*Bauhonia variegata*	Ceasalpiniaceae	15	√		√		√	√
10	kanta Kusum	*Argemone mexicana*	Fabaceae	2	√				√	
11	Karanji	*Pongamia pinnata*	Papilionaceae	119	√		√			
12	Kesiar	*Crocus sativus*	Iridaceae	7	√				√	√
13	Moringa	*Moringa oleifera*	Moringa oleifera	5	√			√		
14	Neem	*Azadiraccta indica*	Meliaceae	37	√	√				
15	Shiv Babul	*Vachellia nilotica*	Fabaceae	2	√	√				√
16	Vidya	*Thuja occidentalis*	Cupressaceae	11						√
17	Others			4						
			Total Plants	**231**						

Medicinal Plants in Vidya Van GTC, Katni MP				Date of Plantation			Total Plants
S.No.	**Local Name**	**Botanical name**	**Family**	**14-7-24**	**30-7-24**	**7-8-24**	
1	Amala	*Emblica officinalis*	Euphorbiaceae	2		1	3
2	Amrood	*Psidium guajava*	Myrtaceae	2	1		3
3	Arjun	*Terminalia arjuna*	Combretaceae	1	2	1	4
4	Badam	*Terminalia catappa*	Rosaceae	2		1	3
5	Bramhi	*Bacopa monnieri*	Plantaginaceae		2		2
6	Gandhraj	*Gardenia actinocarpa*			1		1
7	Gulmohar	*Delonix regia*	Ceasalpiniaceae	1		1	2
8	Jamun	*Syzygium cuminii*	Myrtaceae	1	1		2
9	Kachnar	*Bauhonia variegata*	Ceasalpiniaceae		1	1	2
10	Mahua	*Madhuca longifolia*	Sapotaceae	1	1		2
11	Nimbu	*Citrus limon*		1	1		2
12	Shami	*Prosopis cineraria*	Fabaceae	2		1	3
13	Shyam Tulsi	*Ocimum tenuiflorum*		1	2	1	4
14	Tejpatta	*Cinnamomum tamala*	Lauraceae		2	1	3
			Total Plants	**14**	**14**	**8**	**36**

Food's Plants in Vidya Van GTC, Katni MP				Date of Plantation			Total Plants
S.No.	**Local Name**	**Botanical name**	**Family**	**14-7-24**	**30-7-24**	**7-8-24**	
1	Aam	*Mengifera indica*	Anacardiace		1	1	2
2	Amala	*Emblica officinalis*	Euphorbiaceae	2			2
3	Amrood	*Psidium guajava*	Myrtaceae	1	1		2
4	Badam	*Terminalia catappa*	Rosaceae	2		1	3
5	Bel	*Aegle marmelos*		2			2
6	Jamun	*Syzygium cuminii*	Myrtaceae	1	1		2
7	Kathal	*Artocarpus heterophyllus*		1		1	2
8	Mahua	*Madhuca longifolia*	Sapotaceae	1			1
9	Nimbu	*Citrus limon*		1	1		2
10	Tejpatta	*Cinnamomum tamala*	Lauraceae		1	1	2
			Total Plants	**11**	**5**	**4**	**20**

Others Plants in Vidya Van GTC, Katni MP				Date of Plantation			Total Plants
S.No.	**Local Name**	**Botanical name**	**Family**	**14-7-24**	**30-7-24**	**7-8-24**	
1	Begum Bahar	*Tibouchina urvilleana*		2		1	3
2	Cadamba	*Neolamarckia cadamba*		1	2		3
3	Din-ka-Raja	*Cestrum diurnum*		1		1	2
4	Elokeshi	*Alocasia odora*	Araceae		1	1	2
5	Gulab	*Rosa rubiginosa*	Rosaceae	1	2	2	5
6	Ixora	*Ixora coccinea*	Rubiaceae	1	1	2	4
7	Julie Cypress	*Cupressus sempervirens*		1		1	2
8	Jungle Flame	*Ixora coccinea*		1	2	1	4
10	Kadam	*Anthocephalus cadamba*	Rubiaceae	1		2	3
11	Madhukamini	*Murraya paniculata*	Rutaceae		1	1	2
12	Maulshri	*Mimusop selengi*	Sapotaceae	1		1	2
13	Mendi Gulab	*Lawsonia inermis*	Lythraceae		1	2	3
14	Mongra Bela	*Jasminum sambac*	Oleaceae		1		1

15	Raat-rani	*Cestrum nocturnum*		1		1	2
16	Rakhi Phool	*Passiflora Caerulea*		1	1		2
17	Raykaronda	*Carissa carandas*		1	1	1	3
18	Rubber	*Ficus elastica*	Moraceae		1	1	2
19	Sawni	*Lagerstroemia speciosa*	Lythraceae		2	1	3
20	Vidya	*Thuja occidentalis*	Cupressaceae	1	2	2	5
21	Wolias	*Wolffia globosa*	Araceae		1		1
22	Yellow Bael	*Tecoma stans*	Bignoniaceae	1		1	2
			Total Plants	**15**	**19**	**22**	**56**
			Sub Total Plants	**40**	**38**	**34**	**112**
			Grand Total Plants	**112**			**112**