



# Maa Bharti P. G. College, Kota

Mahaveer Nagar III, Sector-8Kota-

324005Rajasthan

E-mail-mbpgcollege@yahoo.com

## Green Audit Details

### Green Audit Certificate

This is to certify that Maa Bharti P.G. College, Kota, Rajasthan has conducted "Green Audit" on 20<sup>th</sup> October 2023 to assess the Green initiative planning. Efforts and activities implemented in the college campus like plantation, waste management, conservation of energy and various environment awareness programs. This green audit was aimed to assess the impact of green initiatives for maintenance of the campus in eco-friendly manner. The activities and measures carried out by college have been physically verified based on the report submitted and was found to be competent. The efforts taken by the faculty and students towards environment protection and sustainability were commendable and highly appreciated

Place-Kota Date- 20-10-2023

*Kiran*  
**Dr. Kiran Choudhary**  
**President**  
Society for Conservation  
of Historical & Ecological  
Resources, Kota  
**(ISCHER)**

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## **1. Green Vision of the institute**

- a) The curriculum includes environmental studies and is compulsory for all UG Programs.
- b) Activities like plantation are organized in college.
- c) Promote environmental ethics among students, faculty, and employees.
- d) College utilizes energy-efficient electronic devices including solar power and LED bulbs.
- e) The college has implemented green and clean campus efforts, such as maintaining the gardens, and adding vegetation to the sides of the road.
- f) The college has developing an efficient rainwater harvesting system.
- g) Generate awareness among students to reduce the use of non-biodegradable plastic.

## **2. Scope and Goals of Green Auditing**

Maa Bharti P.G. College is one of the best colleges in Hadoti Region of Rajasthan, with a beautiful green campus. Clean and healthy environment in the campus helps to promote learning among the students. The Green audit, apart from providing an evaluation of the compliance of the campus with the environment also moulds promising citizens who acknowledge responsibility towards the planet and the ecosystem. Green audit is a kind of professional care that involves the responsibility of each individual who is part of social and environmental processes. Conducting a green audit on a college campus is essential because it enables the students to learn about the practice and develop into responsible citizens. We have planted a variety of plants in the college campus listed below. Green audit conducted by SCHER Society with students and faculty of Botany Dept.

## Flora of the college with QR Code

1. Syagrusweddelliana	बेबी कोकोस पाम
2. Melaleucaalternifolia	चायपौधा
3. Ficusretusa L.	अंजीर
4. Plumeriaalba L.	चमेली/चम्पा श्वेत
5. Syagrusromanzoffiana	क्वीन पाम
6. Acalyphawilkesiana	कुप्पी
7. Murrayapaniculata (L.)	कामिनी
8. Avertrhoabilimbi L.(Cucumber Tree)	ककड़ी का पेड़
9. Prosopisfarcta (Shami)	समी
10. Bryophyllumpinnatum (Ranakalli)	पथरचट्टा
11. Syzygiumcumini (L.) (Jamun)	जामुन
12. Nerium oleander L. (kaner)	कनेर
13. Ligustrumovalifolium (Agnimanth)	गनियारी
14. Dracaena hyacinthoides L. (Snake Plant)	सांप का पौधा
15. Jatrophaintegerrima (Shanghai beauty)	रतनजोत
16. Hibiscus rosa-sinensis L. (China Rose)	गुड़ल
17. PterocarpussantalinusL.f. (Red sandalwood)	रक्त चन्दन
18. Euphorbia continifolia L. (Caribbean copper plant)	कैरेबियन तांबे का पौधा
19. Psidiumguajava L. (Guava)	अमरूद
20. Araucaria columnaris(Christmas Tree)	क्रिसमस पौधा
21. Livistonachinensis (Chinese Fan Palm)	चीनी फैन पाम
22. Ficusreligiosa(Pipul Tree)	पिप्पल
23. Plumeriapudica (Bridal Bouquet)	क्षीर चम्पा
24. Elettariacardamomum (L.) (Elaichi)	इलायची
25. Tredescantiaspathacea (Boat lily)	लिली
26. Costusspiralis (Spiral Ginger)	सर्पिल अदरक
27. Cordylinefruticosa L. (Palm Lily)	पाम लिली
28. Albizialebeck L. ( Indian siris )	शिरीष
29. Hesperocyparislusitanica (Mexican cypress)	कंधारी
30. Punicagranatum L. ( Anar)	अनार
31. Tabernamontanadivaricata L. ( Crepe Jasmine)	क्रेप जैस्मीन
32. Aucuba Japonica ( Gold Dust Plant)	जापानी लॉरेल

33. Delonix regia ( Gul Mohr)गुल मोहर
34. Ficus bengolensis L.( Indian banyan)बरगद
35. Ficus racemosa L. ( Goolar)गूलर
36. Aloe barbadensis miller (Aloe vera)घृत कुमारी
37. Tinospora cordifolia (Giloy)गिलोय
38. Rosa rubiginosa (Rose)गुलाब
39. Adansonia digitata L. (Baobab/Kalpavriksh)गोरखचिंच
40. Tagetes erecta (Genda)गेंदा

### 3. Benefits of Green Auditing

- Improved resource management.
- To turn the campus green.
- To make waste management possible by lowering waste creation, reusing solid waste, and using recycled water.
- To avoid the use of single use plastic from campus.
- Give organizations the tools they need to create improved environmental performance.
- Increase awareness of environmental regulations and obligations
- Promote environmental education by using a methodical approach to environmental management and raising environmental standards.
- Financial savings from a decrease in resource use.
- Growing a sense of responsibility for the College and its surroundings on a personal, social, and institutional level.
- Developing environmental ethics and value systems among students.
- Minimum usage of packed items.

## **4. Practices**

**Target areas included in this green auditing are –**

- Water
- Energy
- Waste
- Biodiversity

## **5. Auditing for Water**

Around the world, people have become more aware of how important water is to their daily lives. Auditing of water is a method of water conservation that will become more important as water demand rises. Related processes include environmental management systems, resource conservation, flow monitoring, water quality and Water pollution. Any institution that cares about the environment must therefore carefully consider its water usage methods. Water auditing is done to assess raw water intake facilities and identify facilities for water treatment and reuse. Rainwater collection is one of the main benefits of water auditing. The college has Bore well and maintains the various water points in the campus. The College is developing own rainwater harvesting system.


## 6. Auditing for Energy

An energy audit establishes the baseline for any improvements in an organization's energy use. It provides a comprehensive and systematic method for targeting cost effective efficiency gains. The campus uses 40 KW Solar Power on grid system. The Grid system was established in the year 2016 under RRECL (Rajasthan Renewable Energy Corporation Limited). The system was purchased by Green Ripples Pvt. Ltd.

- From the time of establishment to the present the system is working very efficiently.
- From June 2018 to April 2023 the system has produced 177320 Units of electricity as per the record.
- Campus is becoming self-sufficient in energy generation through sustainable methods like renewable energy.
- Saving environment through efficient energy usage as well as saving energy costs for the institution.
- Maintenance of electrical/electronic equipment is done regularly in the campus to optimize the power uses.
- For energy saving incandescent bulbs, CFL lamps and tube lights are being replaced by LED light.
- Students and staff members are motivated to switch off lights, fans etc when they leave the room to save the energy.
- Awareness programs are conducted for students to save the energy.
- Institute is promoting the use of Star rated Electric/Electronic Appliances like air conditioner, refrigerator etc.



Kota, Rajasthan, India  
933MPA, Mahaveer Nagar-II, 933MPA, Mahaveer Nagar, Kota, Rajasthan 324005, India  
Lat 25.138794°  
Long 75.839466°  
06/04/24 11:28 AM GMT +05:30

 **GPS Map Camera**



Kota, Rajasthan, India  
Maa Bharti P.G. College 89, Mahaveer Nagar Housing Board Colony, Mahaveer Nagar,  
Kota, Rajasthan 324005, India  
Lat 25.137483°  
Long 75.837988°  
25/04/24 09:01 AM GMT +05:30

 **GPS Map Camera**

## **7. A. Solid waste management**

1. Waste bins are kept across the campus in locations such as lecture halls, faculty offices, administrative offices, computer labs, libraries, corridors, lavatories, communal areas, etc.
2. Old and un used documents, files, homework, etc. are donated to other for recycling.
3. The college's NSS unit consistently pursues cleanliness. It organizes a cleaning initiative on campus every week to collect trash and solid waste from the campus and its surroundings.
4. Collected solid waste is handed over to the municipal council for further processing

## **B. Liquid Waste Management:**

Washrooms and toilet waste is disposed of in septic tanks at various locations across the campus.

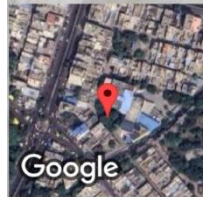
## **C. e-waste Management:**

1. The college makes use of a variety of technological devices, including computers, printers, LCD projectors, and others. Due to technological improvement, these goods become obsolete within a few years. The institution takes the initiative to dispose of electronic trash properly after becoming aware of its risks.
2. After refilling, inkjet cartridge is also utilized. The amount of e-waste generated is also decreased with this technique.

Use of coal/ wood/ kerosene etc. is strictly prohibited. In the Department of Chemistry, LPG gas burners are used instead of gas plants based on coal/wood/diesel/petrol etc., thus reducing carbon emissions.



 GPS Map Camera



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### Kota, Rajasthan, India

Maa Bharti P.G. College 89, Mahaveer Nagar Housing Board Colony,  
Mahaveer Nagar, Kota, Rajasthan 324005, India

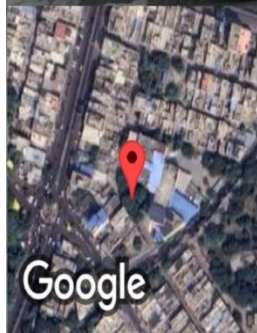
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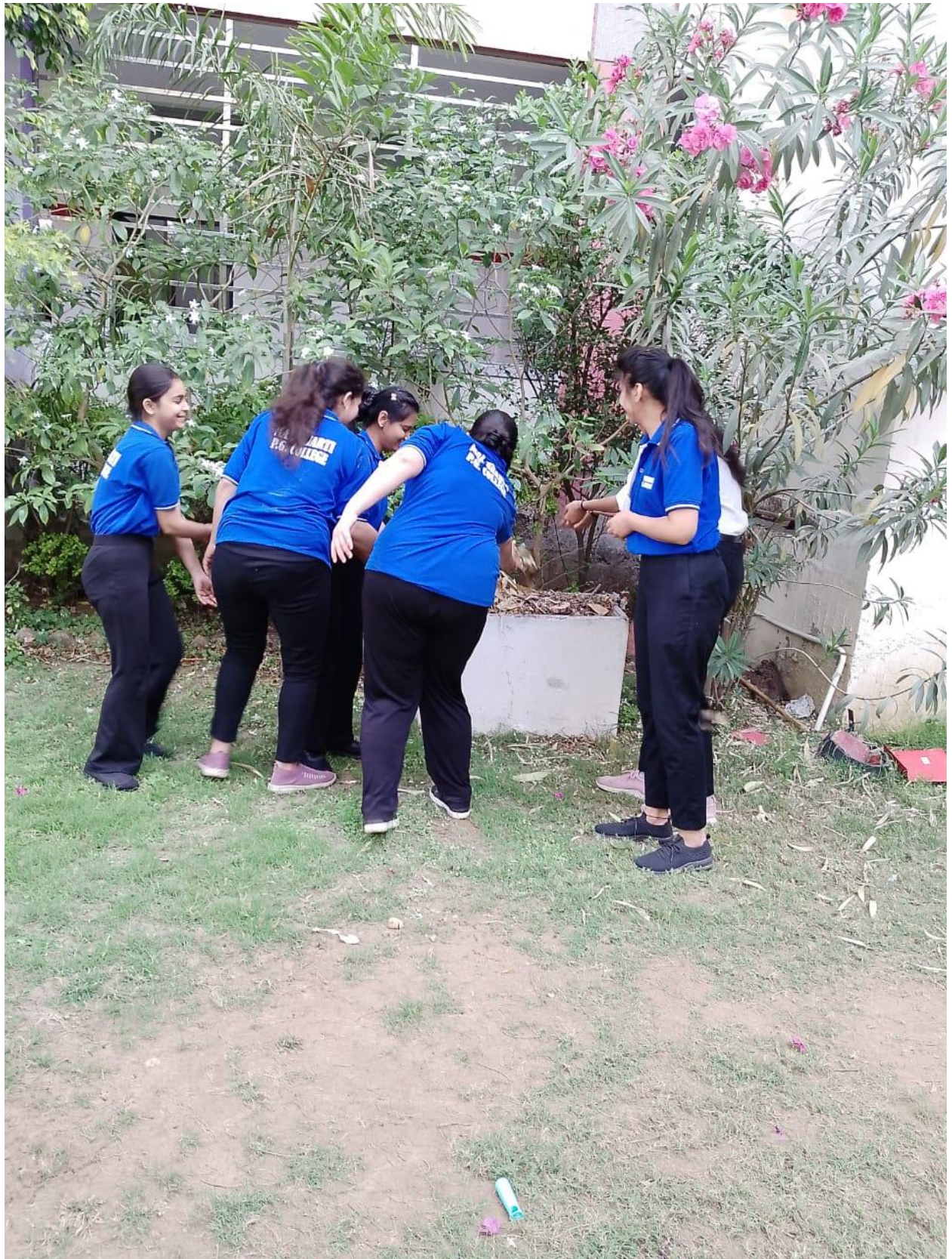
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Kota, Rajasthan 324005, India

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Long 75.837988°

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**Kota, Rajasthan, India**

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Kota, Rajasthan 324005, India

Lat 25.137483°

Long 75.837988°

29/04/24 09:53 AM GMT +05:30



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G. College 89, Mahaveer Nagar Housing Board Colony, Mahaveer Nagar,  
an 324005, India

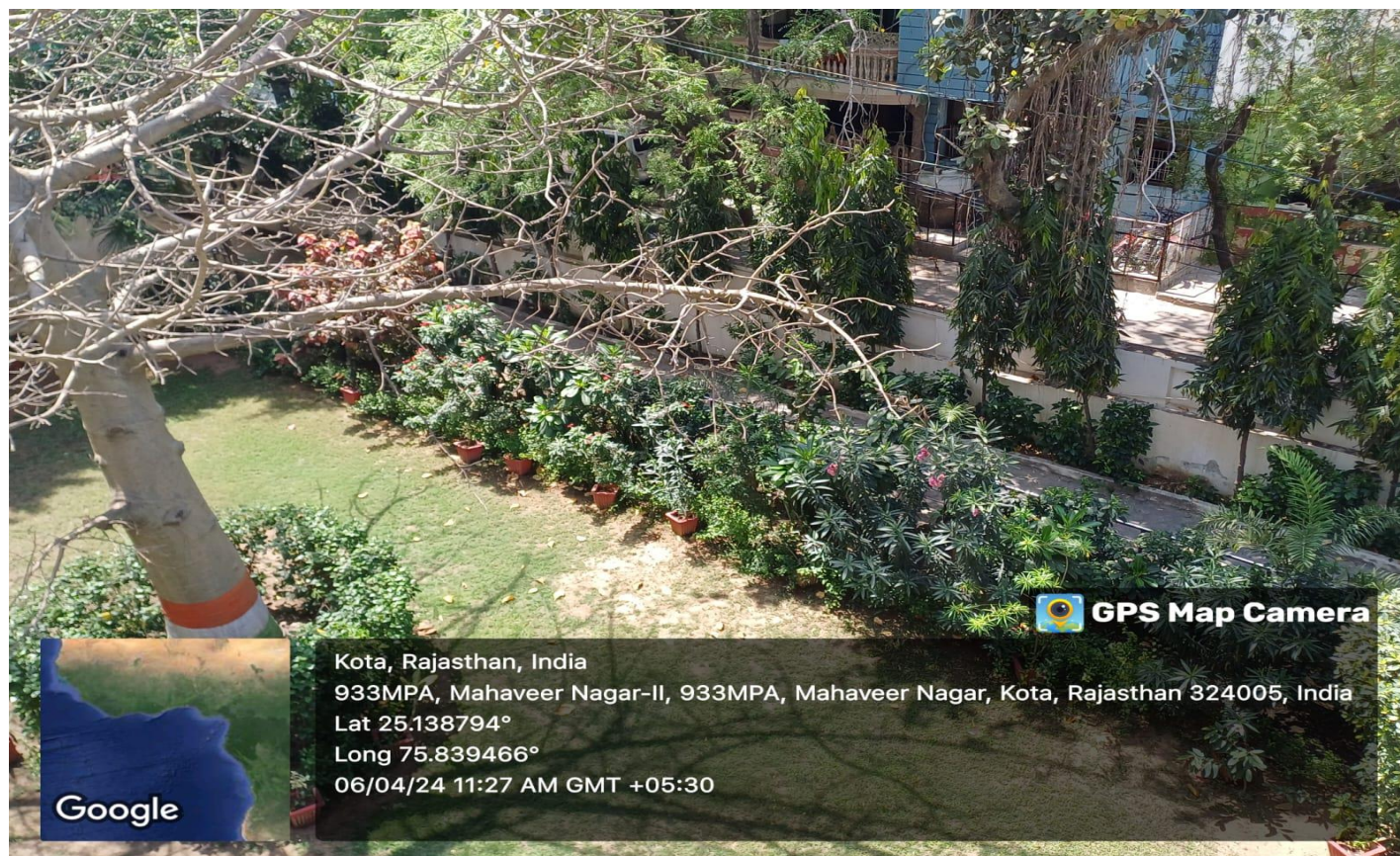
3°

988°

56 AM GMT +05:30

## 8. AUDITING FOR GREEN CAMPUS - BIODIVERSITY, FLORA

The value of biodiversity is supported by the culture of Rajasthan. Normal human beings are aware of the existence of other living things, but as development advances in other areas, so does concern for the preservation of plants and animals. The institute recognizes the significance and works to provide its students with a practical education. Since the beginning of time, trees have given us two necessities of life: food and oxygen. They gave us extra basics like food, clothing, and equipment as we developed. By reducing the impacts of the sun, rain, and wind, trees regulate climate. The radiant energy of the sun is absorbed and filtered by leaves, keeping things cool in the summer. Therefore, all the trees on campus are working to make the air cleaner for us while we are busy studying and striving to earn those good academic grades. Our mental health is impacted by the trees on our campus as well. Research has shown that trees significantly lower stress, which a huge deal is considering that many students are under some kind of stress. Our campus has implemented green campus efforts by continually adding trees. Students are charged for conserving and caring for the plants in the botanical gardens.







## Methodology of Green Auditing

The audit's goal was to confirm that campus practices adhered to the institution's established Green Policy. The identified risks served as the foundation for the audit's criteria, procedures, and recommendations. The process entails a visual assessment of the campus, document review and observation, interviews with those who will be held accountable, data analysis, measurements, and suggestions. The following steps were used for this audit : Data Collection – Extensive data gathering was carried out during the preliminary data collecting phase utilizing a variety of approaches, including observation, survey, communication with relevant parties, and measurements. The following actions were conducted to acquire data: The team went to all of the departments, the administrative building, the library, etc.

- Interviews and observation were used to gather data on general information.
- In certain instances, an average number was used to report the power usage of appliances.

## **Data Analysis-**

Calculating energy usage, examining the campus' most recent power bill, and comprehending the price plan offered by the Rajasthan State power Board are just a few of the detailed analyses of the data gathered. Water use data were also examined using the right methods.

Recommendations Based on the findings of the data analysis and other observations, some actions for cutting down on power and water consumption are suggested. Proper treatment methods for waste are also suggested.