

# RAJKIYA MAHAVIDYALAYA KANVAGHATI KOTDWAR (PAURI GARHWAL)

## GREEN AUDIT REPORT

Green audit is carried out to assess the environmental quality and associated management strategies being implemented in RAJKIYA MAHAVIDYALAYA KANVAGHATI KOTDWAR (PAURI GARHWAL). It includes environment audit, management for waste disposal, water usage etc.

### 1- Environment AUDIT

**Introduction:** Environment audit report is a tool to assess general practices implemented by the organization in terms of the impact on environment. It includes measurement of effect of certain activities on the environment along with process of regular identification, documentation and monitoring of environmental components within campus of college. Environment audit report may introduce an initiative to make the educational institute environmentally sustainable and active in eco-friendly practices with spreading the education about the same. Honourable Prime minister, Government of India, has launched the mission of Swachh Bharat Abhiyan to preserve natural resources. UGC is being released guidelines for all higher educational institutions to make green campus mandatory. Concept of Green Campus leads the opportunities adopting environmental culture and creating sustainable solutions to environmental, social and economical needs of mankind. Thus, it becomes boon to achieve mental and physical health of the students and staff. The details of plants and flora are given as below as per their availability in the campus-

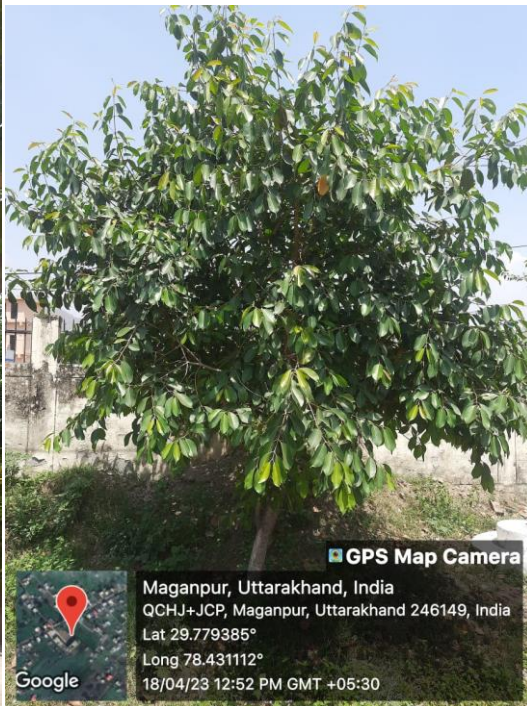
**Table 1. List of Tree/Shrubs/Herbs species found in the campus**

S. No.	Botanical Name	Common Name	Numbers
<b>Trees</b>			
1.	<i>Psidium guajava</i>	Guava	05
2.	<i>Dalbergia sissoo,</i>	Sheesham	01
3.	<i>Syzygium cumini</i>	Jamun	03
4.	<i>Elaeocarpus angustifolius</i>	Rudraksha	01
5.	<i>Cassia fistula</i>	Amaltash	01
6.	<i>Mangifera indica</i>	Mango	01
7.	<i>Ficus bengalensis,</i>	Pepal	04
8.	<i>Emblica officinalis</i>	Awanla	03
9.	<i>Azadirachta indica</i>	Neem	05
10.	<i>Saraca asoca</i>	Ashok	13
11.	<i>Melia azedarach</i>	Bakain	08

12.	<i>Delonix regia</i>	Gulmohar	02
13.	<i>Platyclusus orientalis</i>	Morpankhi	20
14.	<i>Citrus limon</i>	Nimbu/Lemon	01
15.	<i>Punica granatum</i>	Anar/Pomegranate	01
16.	<i>Prosopis Juliflora</i>	Mesquites	01
<b>Shrubs/ Grasses/Herbs</b>			
1.	<i>Ficus benjamina</i>	Ficus	21
2.	<i>Hibiscus</i>	Gudhal	07
3.	<i>Rosa rubiginosa</i>	Rose	15
4.	<i>Cycas revoluta</i>	Cycas palm	20
5.	<i>Dypsis lutescens</i>	Areca palm	02
6.	<i>Aloe barbadensis miller</i>	Aloe vera	01
7.	<i>Duranta erecta</i>	Golden Hedge	NA
8.	<i>Aglaonema commutatum red</i>	Red Hedge	NA
9.	<i>Mentha spicata</i>	Pudina (Mint)	NA
10.	<i>Cynodon dactylon</i>	Durba	NA

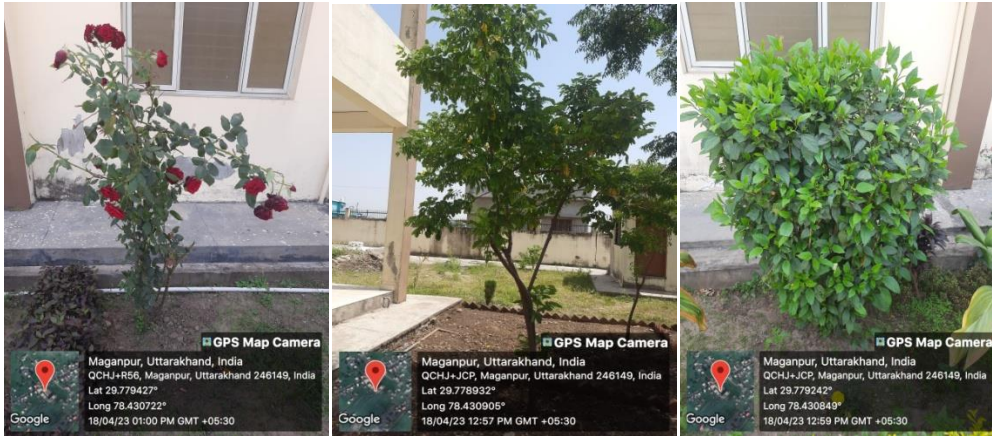


1. *Dalbergia sissoo*



2. *Syzygium cumini*

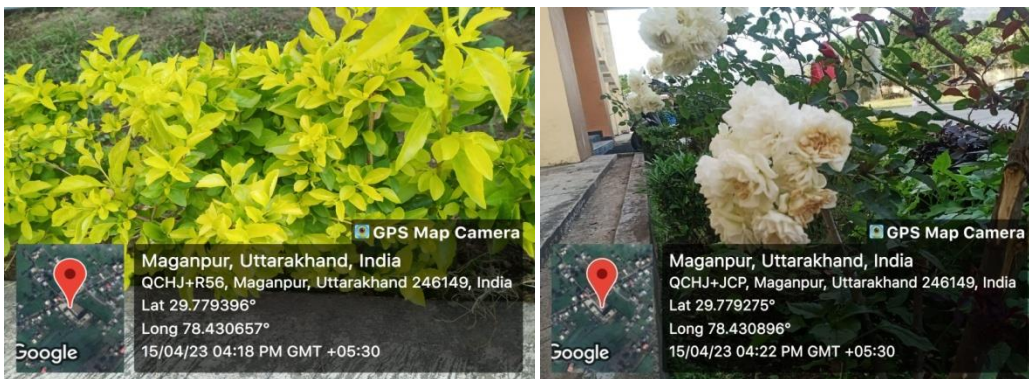




3. *Rosa Rubiginosa*

4. *Cassia fistula*

5. *Hibiscus*



6. *Duranta erecta*

7. *Rosa acicularis*



8. *Livistona chinensis*

9. *Sarcaca asoca*



10. *Melia azedarach*

11. *Ficus benjamina*

**Table 2. List of Birds found in and around the Campus**

S. No.	Zoological Name	Common Name
1	<i>Passer domesticus</i>	House Sparrow
2	<i>Corvus splendens</i>	House Crow
3	<i>Pycnonotus leucogenys.</i>	Himalayan Bulbul
4	<i>Pycnonotus cafer</i>	Red Vented Bulbul
5	<i>Acridotheres tristis</i>	Common Myna
6	<i>Aquila nipalensis</i>	Steppe Eagle
6	<i>Cinnyris asiaticus</i>	Purple Sunbird
7	<i>Copsychus saularis</i>	Oriental Magpie Robin
8	<i>Columba livia</i>	Pigeon
9	<i>Spilopelia chinensis</i>	Spotted Dove

**Table 3. List of Butterflies found in and around the campus**

S. No.	Zoological Name	Common Name
1.	<i>Pachliopta aristolochiae</i>	Common Rose
3.	<i>Papilio polytes</i>	Common Mormon



4.	<i>Graphium doson</i>	Common Jay
5.	<i>Delias cucharis</i>	Common Jezebel
6.	<i>Eurema hecabe</i>	Common Grass Yellow
7.	<i>Danaus chrysippus</i>	Plain Tiger
8.	<i>Danaus genutia</i>	Striped Tiger
9.	<i>Euploea core</i>	Common Crow

**Table 4. List of Reptiles found in and around the campus**

S. No.	Zoological Name	Common Name
1.	<i>Varanus spp.</i>	Monitor Lizard
2.	<i>Calotes spp.</i>	Garden Lizard
3.	<i>Hemidactylis spp.</i>	Common House Gecko

**Observation:** The institute has done plantation in available land within campus. There are limited scope for further plantation and mostly campus. Bio-fertilizers have been used to nourish the soil condition and to maintain the healthy growth of plants. Some plantation is also made by our institute in off campus areas. There were about 130 trees/Shrubs in the campus

**Suggestions:** The institute has limited variety of plants. To improve the diversity of plants, suitable plants are to be identified according soil quality. To increase the fertile condition of soil, efforts should to be producing organic compost using the food waste, dried leaves, and green manure. Cooperation of local peoples and students needs to proper maintaining and monitoring for off-campus plantation.

## 2- WASTE DISPOSAL MANAGEMENT

For Maintaining the Green Campus, Waste Disposal Management (WDM) is required to achieve higher level of environmental performance. In Waste Disposal Management, activities and actions are executed to dispose waste from its inception. It includes the inspection, collection, separation, treatment and disposal of waste.

The waste from all around the campus of college is collected daily and separated into wet and dry waste in different blue and green dustbins. Waste of these dustbins is transferred to Dustcart of Municipal Council of Kotdwar. Some Dry waste (includes paper, cardboard) is also disposed of by burning. Wet waste (organic waste such as pods, left-over food etc.) is composted as a fertilizing material. Disposal of this waste gives organic manure that can be used as soil amendments and source of plant nutrients.







### 3- Management for Water Usage and Conservation

This report includes the evaluation of facilities for raw water intake, storage and water treatment for full fill the need of college. Hence, relevant methods has adopted and implemented to balance the demand and supply of water in the institute. These facilities are properly investigated time to time for maintenance purpose.

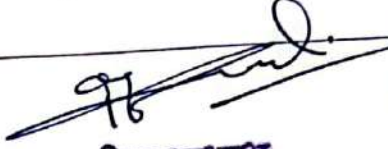
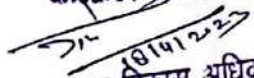
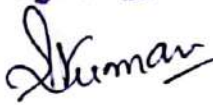


S.No.	Parameter	Response	Remarks
01	Source of water	Bore Well	
02	No of Bore Wells	01	
03	No of Motors used	01	16.38 H.P.
04	Horse Power- Motor	12.01-16.38 H.P.	
05	Depth of Well-Total	170	
06	Water level	120	
07	Number of water tanks	19	
08	Capacity of tanks	500-1000 lts	500 lts- 18 1000 lts -01
09	Quantity of water pumped every day	12000 lts	
10	Any water wastage	No	
11	Water usage for gardening	Yes	
12	Waste water sources	Yes	
13	Use of Waste water	No	
14	No of water coolers	01	
15	No of RO plants	01	

**Observations:** Main source of water for college campus is bore well. There are three RO plants in College and waste water from only one RO plant (Administrative Block) is used for gardening. The water from over head tank is also channelized to plants. Minimum wastage of water is found within campus of college.

**Suggestions:** Construction of rain water harvesting tank is required for recharging water level. Proper care should be taken for the maintenance of RO plants.



Report Prepared and Certified by:

S.N o.	Name of the Member and Designation	Role	Signature
01	Prof. Arvind Singh, Department of Botany Rajkiya Mahavidyalaya Kanvaghati Kotdwar (Pauri Garhwal)	Convenor	
02	Prof. M.D. Kushwaha, Department of Botany, DR P.D.B. Himalayan Govt. P.G College Kotdwar (Pauri Garhwal)	Member	 विभागाध्यक्ष वनस्पति विज्ञान विभाग डॉ. पी. ड. व. हि. राष्ट्रीय स्नातकोत्तर महाविद्यालय कोटद्वार (बदवाँ) उत्तरांचल
03	Block Development Officer Dugadda Block, (Pauri Garhwal)	Member	 खण्ड विकास अधिकारी दुगड़डा, मढ़वाल
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05	Sanitary Inspector, Nagar Nigam Kotdwar (Pauri Garhwal)	Member	 सफाई निरीक्षक नगर निगम, कोटद्वार
06	Kusum Bhandari, Administrative Office Rajkiya Mahavidyalaya Kanvaghati Kotdwar (Pauri Garhwal)	Member	
07	Rohan, Safai Nayak, Rajkiya Mahavidyalaya Kanvaghati Kotdwar (Pauri Garhwal)	Member	