

# **Khwaja Moinuddin Chishti Language University**

**Lucknow, U.P.**

## **Green Audit Report**

**2019 - 2020**

*Date: 14 JULY, 2020*

**AUDITED BY**

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मण्डल अभियन्ता  
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LANGUAGE UNIVERSITY,  
LUCKNOW

# Green Audit

## 1. Green Audit

The Green Audit process involves systematically identifying, quantifying, recording, reporting, and analyzing various aspects of environmental diversity within different establishments. Its objective is to assess environmental practices both within and outside the concerned sites, aiming to foster eco-friendly environments.

For Higher Educational Institutions (HEIs), Green Audit serves as a valuable tool to identify areas of high energy, water, or resource usage, facilitating potential changes and cost savings. Additionally, it helps in determining waste types and volumes, aiding in recycling projects and waste minimization plans. Furthermore, it cultivates health consciousness, environmental awareness, and ethical values among staff and students, enhancing their understanding of the campus's environmental impact.

Given that self-enquiry is intrinsic to quality education, institutional self-enquiry emerges as a natural and necessary aspect of a quality educational institution. Hence, HEIs must evaluate their contributions to a sustainable future, particularly considering the increasing importance of environmental sustainability nationally and globally.

The imperative for adopting Green Campus initiatives arises from rapid urbanization and economic development, which have led to environmental crises. Implementing Green Campus practices not only promotes sustainable development but also helps in reducing atmospheric carbon dioxide levels.

In recent times, Green Audit has gained paramount importance for institutional self-assessment, reflecting an institution's role in addressing environmental challenges. While many institutions undertake commendable measures to address these issues, lack of awareness about green documentation often leads to undocumented efforts. Consequently, non-scholastic endeavors by administrations significantly contribute to maintaining the campus's green quotient.

Thus, the present Green Audit aims to identify, quantify, describe, and prioritize the framework of Environmental Sustainability, ensuring compliance with applicable regulations, policies, and standards.

### 1.1 Objective of Green Audit

- Geographic Positioning.
- Biodiversity of Flora and Fauna.
- Meteorological Conditions.
- Consumption of Energy.
- System for Waste Management.
- Surrounding Environmental Conditions.
- Education and Training on Sustainability for Students.

### 1.2 Biodiversity Audit

The Biodiversity Audit Approach represents an innovative, landscape-wide strategy grounded in evidence for biodiversity conservation. It exemplifies an integrated approach to preserving biodiversity within a region, focusing on understanding and meeting the needs of priority species. By collating and synthesizing data on the ecological requirements of these species, the approach provides guidance for their conservation, encompassing multiple species within management frameworks.

Key components of this approach include:

- Compilation and analysis of available evidence to identify present species.
- Objective determination of priority species for conservation efforts.
- Assessment of the current status of priority species.

The primary goal of this approach is to equip land managers and conservationists with actionable guidance for enhancing and sustaining biodiversity effectively. This is achieved by formulating management prescriptions rooted in robust evidence. A unique aspect of the approach is the identification of multi-species assemblages, including flagship invertebrate and plant species, sharing similar ecological needs and processes (referred to as 'guilds'). By integrating prescriptions for multiple species within habitat-based strategies, the approach ensures comprehensive conservation efforts guided by a thorough understanding of individual species' requirements.

Moreover, this approach extends to campus sustainability efforts, encompassing the maintenance of green spaces and adherence to environmental standards within campus buildings. It serves as a mechanism for implementing, enforcing, and reviewing Environmental Policies through various educational initiatives aimed at raising environmental awareness.

### 1.3 Biodiversity

To preserve the lush greenery on campus, the university diligently tends to its gardens, overseen by dedicated staff under the guidance of university leadership. Here's an overview of the activities organized to promote and conserve greenery at the university:

- Diverse Plantation and Medicinal Use: The university actively engages in planting various species, including medicinal plants, and focuses on identifying different plant species.
- Carbon Footprint Awareness: Initiatives are undertaken to raise awareness about carbon consumption and reduce the university's carbon footprint.

An annual plantation program involving active participation from the university community and visitors is conducted to enhance the green cover, foster an eco-friendly atmosphere, and promote oxygen purity. The Campus Horticulture Committee is responsible for overseeing all aspects of maintaining greenery within the university campus. Under their guidance, the Horticulture Section ensures regular upkeep of all gardens.

Key departmental activities include:

- Plantation and Landscaping: Continuous efforts are made to plant and maintain greenery across the campus.
- Garden Maintenance: Emphasis is placed on the regular upkeep of gardens and landscapes.
- Plantation Management: A dedicated team, led by a Director, oversees horticultural activities aimed at enhancing the university's landscape.

While necessary infrastructure developments occasionally necessitate transformation of natural vegetation patches, efforts are made to ensure harmony between academic, administrative, and recreational areas, fostering an eco-friendly campus environment.

The university's horticulture and gardening unit, comprising a team of dedicated staff, is solely devoted to executing plantation, maintenance, and landscape protection tasks. This ensures the

preservation of vast green areas on campus, while also maintaining natural vegetation patches. Block plantations, roadside plantations, departmental garden spaces, and residential compounds all contribute to the campus's verdant ambiance. Careful selection of trees and plants not only enhances aesthetics but also provides shelter for birds and creates shaded walkways.



#### 1.4 Diversity of Plant and Animal Life Within the University Campus

Biodiversity serves as a vital indicator of biological system health, showcasing Earth's millions of distinct species. It varies globally, thriving in tropical regions but diminishing in Polar Regions due to limited biomass. Different diversity levels are interconnected, and rapid environmental changes often lead to extinctions. Human activities, notably habitat destruction, drive the ongoing decline in biodiversity since the emergence of humans, known as the Holocene extinction.

##### Fauna Details in the campus

Fauna Details				
S.No	Scientific name	Common name	Family	Phylum
1	Alexandrine Parakeet <i>Psittacula eupatria</i>	Tota/Parrot	Psittaculidae	Chordata
2	Ashy Prinia <i>Prinia socialis</i>	Kali Phutk	Cisticolidae	Chordata
3	Asian Koel <i>Eudynamys scolopaceus</i>	Koel	Cuculidae	Chordata
4	Asian Pied Starling <i>Sturnus contra</i>	Ablak	Sturnidae	Chordata
5	Bank Myna <i>Acridotheres ginginianus</i>	Mynah	Sturnidae	Chordata
6	Barn Owl <i>Tyto alba</i>	Owl/Ullu	Tytonidae	Chordata

Fauna Details				
S.No	Scientific name	Common name	Family	Phylum
7	Black Drongo <i>DICRURUSMACROCERCUS</i>	Bhujanga	Dicruridae	Chordata
8	Black Kite <i>MILVUS MIGRANS</i>	Cheel	Accipitridae	Chordata
9	Black rumped flameback <i>DINOPIUMBENG HALENSE</i>	Katodwa	Picidae	Chordata
10	Brahminy Starling <i>STURNUS PAGODARUM</i>	Brahminy Myna	Sturnidae	Chordata
11	Brain fever Bird <i>HIEROCOCCYX VARIOUS</i>	Papiha	Cuculidae	Chordata
12	Brown rock Chat <i>CERCOMELAFUSCA</i>	Dauma	Muscicapidae	Chordata
13	Cattel Egret <i>BUBULCUS IBIS</i>	Badami bagla	Ardeidae	Chordata
14	Chestnut-tailed starling <i>STURNUSMALABARICUS</i>	Grey Headed Mynah	Sturnidae	Chordata
15	Citrine Wagtail <i>MOTACILLA</i>	Pied Wagtail	Motacillidae	Chordata
16	Common/Eurasian Hoopoe <i>UPUPA EPOPS</i>	Hudhud	Upupidae	Chordata
17	Common Iora <i>AEGITHINIA TIPHIA</i>	Shaubeegi	Aegithinidae	Chordata
18	Common Myna <i>ACRIDOTHERES TRISTIS</i>	Desi Myna	Sturnidae	Chordata
19	Coppersmith Barbet <i>MEGALAIMAHAEMACEPHALA</i>	Tuktukia	Megalaimidae	Chordata
20	Eurasian Collared Dove <i>STREPTOPELIADECAOCTO</i>	Panduk	Columbidae	Chordata
21	Eurasian Golden Oriole <i>ORIOLUS ORIOLUS</i>	Shaubeegi	Oriolidae	Chordata
22	Greater Coucal <i>CENTROPS SINENSIS</i>	Mahoka	Cuculidae	Chordata
23	House crow <i>CORVUS SPLENDENS</i>	Crow or Kawwa	Corvidae	Chordata
24	House Swift <i>APUS AFFINISNIPALENSIS</i>	House Swift	Apodidae	Chordata
25	House-sparrow <i>PASSER DOMESTICUS</i>	Gauriya	Passeridae	Chordata
26	Indian Grey Hornbill <i>OCCYEROSBIROSTRIS</i>	Dhanesh	Bucerotidae	Chordata
27	Indian Peafowl <i>PAVOCRISTATUS</i>	Mor	Phasianidae	Chordata
28	Indian Robin <i>SAXICOLAIDESFULICATA</i>	Kalchuri	Muscicapidae	Chordata
29	Indian Roller <i>CORACIAS BENGHALENSIS</i>	Neelkanth	Coraciidae	Chordata
30	Indian Silverbill <i>LONGURAMALABARICA</i>	White throat minia	Estrildidae	Chordata
31	Jungle Owlet <i>GLAUCIDIUMREDIATUM</i>	Barsa Chugad	Strigidae	Chordata
32	Large Grey-Babbler <i>ARGYAMALCOLMI</i>	Gaugai	Leiothrichidae	Chordata
33	Little brown dove/Laughing dove <i>STREPTOPELIA SENEGALENSIS</i>	Chotafakta	Columbidae	Chordata
34	Red-breasted Flycatcher <i>FICEDULA PARVA</i>	Flycatcher	Muscicapidae	Chordata
35	Red-vented Bulbul <i>PYCNONOTUSCAFER</i>	Bulbul	Pycnonotidae	Chordata

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Fauna Details				
S.No	Scientific name	Common name	Family	Phylum
36	Red-Whiskered Bulbul <i>Pycnonotusjocosus</i>	pahari bulbul	Pycnonotidae	Chordata
37	Rock Pigeon <i>Cloumbalivia</i>	Kabootar	Columbidae	Chordata
38	Spotted Owlet <i>Athene brama</i>	Chugad	Strigidae	Chordata
39	Graphiumnomius Esper	Spot Swordtail	Papilionidae	Arthropoda
40	Graphiumdoson C & R Felder	Common/Blue Jay	Papilionidae	Arthropoda
41	Papiliopolytes Cramer	Common Mormon	Papilionidae	Arthropoda
42	Astrophaneurearistolochiae Fabricius	Common Rose	Papilionidae	Arthropoda
43	PapilioPolytes Cramer	Lime Butterfly	Papilionidae	Arthropoda
44	Pachlioptahactor Linnaeus	Crimson Rose	Papilionidae	Arthropoda
45	Danaus chrysippus Linnaeus	Plain Tiger	Nymphalidae	Arthropoda
46	Danaus genutia Cramer	Striped Tiger	Nymphalidae	Arthropoda
47	Junoniaatlites Linnaeus	Grey Pansy	Nymphalidae	Arthropoda
48	Junoniaalmana Linnaeus	Peacock Pansy	Nymphalidae	Arthropoda
49	Junoniaiphita Cramer	Chocolate Pansy	Nymphalidae	Arthropoda
50	Hypolimnasmisippus Linnaeus	Danaid Egg fly	Nymphalidae	Arthropoda
51	Hypolimnasbolina Linnaeus	Great Egg fly	Nymphalidae	Arthropoda
52	Phalantaphalantha Drury	Common Leopard	Nymphalidae	Arthropoda
53	Junoniaorithya Linnaeus	Blue Pansy	Nymphalidae	Arthropoda
54	Ariadne merione Cramer	Common Castor	Nymphalidae	Arthropoda
55	Euremahecabe Linnaeus	Common Grass Yellow	Pieridae	Arthropoda
56	Euremabrigitta Cramer	Small Grass Yellow	Pieridae	Arthropoda
57	Lxias pyrene Linnaeus	Yellow Orange Tip	Pieridae	Arthropoda
58	Ceporanerissa Fabricius	Common Gull	Pieridae	Arthropoda
59	Delias eucharis Drury	Common Jezabel	Pieridae	Arthropoda
60	Gandacaharina Horsfield	Tree Yellow	Pieridae	Arthropoda
61	Talicadanyseus Guerin	Red Pierrot	Lycenidae	Arthropoda

A total of Sixty-One animal species were recorded within the university campus during the study. The fauna observed represented a diverse range of animal groups, including insects, other invertebrates, reptiles, amphibians, birds, and mammals. Common fauna species across the study areas included termites, ants, earthworms, lizards, spiders, and springtails, with a notable presence near the campus's water body, which serves as a significant attraction for birds and animals seeking water. The university's exceptional efforts, coupled with the adoption of scientific methods, are commendable.

## Flora Details in the campus

Flora Details					
S. No	Species Name	Common Name	Family	Habit	No. of Plants
1	Murraya Paniculata	Orange Jessamine	Rutaceae	South Asia	35
2	Jacaranda Arborea	Jacaranda	Bigroniaceae	Cuba	8
3	Calotropis Gigantea	Crown Flower	Dogbanes	India, China	1
4	Black Tupela	Blackgum	Dog woods	Eastern Noth America	1
5	Mettia Milletia Pinnata	Indian beech, Karanja	Fabaceae	Eastern and Tropical Asia, Australia	3
6	Eucalyptus	Tailapatra	Myrtaceae	Substrates	8
7	Plumeria Obtusa	Singapore Graveyard	Apocynaceae	Neotropics	12
8	Tabernaemontana	Pinwheel flower	Apocynaceae	Terrestrial	11
9	Hamelia patens	Firebush	Rubiaceae	Moist Soil	5
10	Sublanceolata	Banyan	Moraceae	Subtropical Rainforest	25
11	Nerium	Oleander	Apocynaceae	River valley	8
12	Quercus Petraea	Sessile oak	Fagaceae	Semi-Natural Woodland	1
13	Caryota Mitis	Fishtail Palm	Arecaceae	India, South East Asia	5
14	Ficus Religiosa	Sacred Fig	Moraceae	SouthEast Asia	7
15	Anadenanthera Colubrina	Vilca	Fabaceae	South America	1
16	Dalbergia Sissoo	Indian Rosewood	Fabaceae	SouthEast Asia	3
17	Ficus Benjamina	Weeping Fig	Moraceae	Tropical Rainforest	5
18	Psidium Guajava	Guava, Amrood	Myrtaceae	Central & South America	6
19	Mangifera Indica	Mango	Anacardiaceae	Low Land Tropical	2
20	Syzygium Cumini	Java Plum, Jamun	Myrtaceae	Tropical & Subtropical Forest	3
21	Saraca Asoca	Ashok	Fabaceae	Central & Eastern Himalayas	9
22	Murraya Kolnigii	Curry Patta	Rutaceae	Tropical & Subtropical Region	1
23	Carica papaya	Papaya	Caricaceae	Tropical & Subtropical Region	1

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Flora Details					
S. No	Species Name	Common Name	Family	Habit	No. of Plants
24	<i>Araucaria heterophylla</i>	Norfolk Island Pine	Araucariaceae	Australia	1
25	<i>Calotropis gigantea</i>	Giant Calotrope	Apocynaceae	Dry coastal areas	1
26	<i>Aganonerion polymorphum</i>	Aganonerion	Apocynaceae	India, Bangladesh	2
27	<i>Furcraea foetida</i>	Mauritius hemp	Asparagaceae	Brazil	2
28	<i>Encephalartos ferox</i>	Zuzuland Cycad	Zamiaceae	Africa	1
29	<i>Roystonea regia</i>	Florida Royal Palm	Arecaceae	Central America, Cuba	9
30	<i>Azadirachta indica</i>	Neem	Meliaceae	India	4
31	<i>Persea borbonia</i>	Red Bay	Lauraceae	Moist Soil	3
32	<i>Moringa oleifera</i>	Moringo	Moringaceae	South Asia	2
33	<i>Catharanthus roseus</i>	Madagascar Periwinkle	Apocynaceae	Coastal	5
34	<i>Rosa x alba</i>	White Rose	Rosaceae	Sub Arctic climate	1
35	<i>Terminalia catappa</i>	Indian Almond	Combretaceae	Asia, Australia	1
36	<i>Wrightia religiosa</i>	Water Jasmine	Apocynaceae	China, Indochina and Malaysia	6
37	<i>Cascabela Thevetia</i>	Kaner	Dogbanes	tropical America	2
38	<i>Acer negundo</i>	Boxelder Maple	Sapindaceae	North America	5
39	<i>Opuntia</i>	Nopal, Prickly pear	Cactaceae	Semi arid region	1
40	<i>Citrus limon</i>	Lemon	Rutaceae	Asia, North East India	2
41	<i>Petunia x atkinsiana</i> Surfinia Group	Surfinia	Solanacee	Central America	2
42	<i>Mecardonia procumbens</i>	Marcardonia	Plantaginaceae	Tropical & Subtropical region of America	1
43	<i>Petunia</i>	Petunia	Solanaceae	South America	2
44	<i>Encelia californica</i>	California brittlebush	Asteraceae	Southern California	1
45	<i>Dianthus</i>	Carnation	Caryophyllaceae	Oak forest clearing	3
46	<i>Sporos dianthus</i>	Carnation	Caryophyllaceae	Oak forest clearing	1
47	<i>Pink dianthus</i>	Carnation	Caryophyllaceae	Oak forest clearing	2
48	<i>viola odorata</i>	Sweet Violet	Violaceae	Europe & Asia	1
49	<i>Dianthus chinensis</i>	China pink	Caryophyllaceae	China Korea Mongolia	1

### Flora Details

S. No	Species Name	Common Name	Family	Habit	No. of Plants
50	<i>Torenia fournieri</i>	Wishbone flower	Linderniaceae	Shade and hot humid weather	1
51	<i>Tagetes minuta</i>	Cone Marigold	Asteraceae	South America	3
52	<i>Tinospora cordifolia</i>	Giloy herbal plant	Menispermaceae	India	1
53	<i>tamarindus indica</i>	tamarind	Fabaceae	India	1
54	<i>Calea</i>	Bitter grass	Asteraceae	Mexico	1
55	<i>Leucaena leucocephala</i>	River tamarind	Fabaceae	Mexico	1
56	<i>Indigofera tinctoria</i>	Indigo	Fabaceae	Asia Africa	1
57	<i>Ocimum tenuiflorum</i>	Holy Basil, tulsi	Lamiaceae	Southern Asia	1
58	<i>Murraya koenigii</i>	curry tree	Rutaceae	Asia	1
59	<i>Kalanchoe pinnata</i>	Cathedral bells	Crassulaceae	Madagaskar	1
60	<i>Pimenta racemosa</i>	Bay rum tree	Myrtaceae	Carrabian	1
61	<i>Tagetes</i>	Marigold	Asteraceae	North America	5
62	<i>ficus virens</i>	White fig	Moraceae	India, Pakistan	1
63	<i>Fraxinus</i>	Ash	Oleaceae	Subtropical	1
64	<i>Streblus asper</i>	Siamese rough bush	Moraceae	India, Indonesia	1
65	<i>Rhinacanthus nasutus</i>	snake jasmine	Acanthaceae	Tropical Asia	1
66	<i>Lagerstroemia indica</i>	Common Crape Myrtle	Lythraceae	South east asia, china	1
67	<i>Aloe vera</i>	Aloe vera	Asphodelaceae	arid climate	1
68	<i>Minesotta</i>	Red pine	Pinaceae	North America	1
69	<i>bauhinia forficata</i>	Brazilian orchid tree	Fabaceae	Argentina, Brazil, Peru	1
70	<i>Euphorbia lathyris</i>	capur spurge	Euphorbiaceae	Europe, Africa, Asia	1
71	<i>baouganvillia</i>	paperflower	Nyctaginaceae	South America, Brazil, Peru	1
72	<i>Swietenia mahagoni</i>	Mahogany	Meliaceae	America	1
73	<i>Hibiscus rosa-sinensis</i>	Shoeblack plant	Malvaceae	Tropical & Subtropical region	1
74	<i>Calophyllum inophyllum</i>	Punna tree	Calophyllaceae	Tropical Asia	1
<b>Total Number of Plants</b>					<b>254</b>

The highest diversity of plants was observed on the university campus with 74 plant species. Apocynaceae, Moraceae, Rutaceae, Fabaceae, Arecaceae, Myrtaceae, etc. are commonly found plants.

## 1.5 LANDSCAPING AND GARDENING ACTIVITIES

Furthermore, the Horticulture Section at KMC Language University has undertaken various efforts beyond plantation programs to enhance the aesthetics of different campus areas. This includes the creation of flower gardens and the implementation of landscaping activities like developing lawns, hedges, and ornamental and avenue plantations. Numerous green spaces have been meticulously cultivated throughout the university grounds.

Additionally, the university has focused on the plantation of diverse medicinal plants across various locations within the campus. This initiative not only adds to the beauty of the landscape but also contributes to the overall enrichment of the campus environment.





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تاریخ: 10/07/2018

कार्यालय ज्ञाप

विश्वविद्यालय द्वारा माननीय कुलपति जी के आदेशानुसार विश्वविद्यालय में हरित लेखा परीक्षा सिमित (Green Audit Committee) का गठन तीन वर्षों अथवा अग्रिम आदेशों तक किया जाता है जिसका विवरण निम्नवत् है—

1. प्रौ. सच्यद हैदर अली (व्यवसाय प्रबंधन विभाग)
2. डॉ सौबान सईद (उदू विभाग)
3. डॉ नलिनी मिश्रा (शिक्षाशास्त्र विभाग)
4. श्री शबीह हैदर (लेखाकार, वित्त कार्यालय)
5. श्री आशुतोष श्रीवास्तव (मंडल अभियंता, पूर्वोत्तर रेलवे बरेली)

  
(अशोक कुमार अरविन्द)  
कुलसचिव