



Bioraj Laboratories

Environmental Services & Testing Lab

BRL/2223/CN-47

Date: Jan 16,2023

Certificate

This is to certify that **Nabira Mahavidyalaya, Katol, Nagpur** has conducted detailed **Environmental Green Audit** of their campus and has submitted necessary data and credential for scrutiny. The activities and measures carried out by the college have been verified based on the report submitted and was found satisfactory. The efforts taken by the faculty towards environment and sustainability is highly appreciated and commendable.

For Bioraj Laboratories



(Dr. Raju R. Yadav)



Shikshan Prasarak Mandal's
NABIRA MAHAVIDYALAYA

Katol (MS) - 441 302

**GREEN AUDIT
REPORT**

S e s s i o n

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PREFACE

Humanity currently grapples with pressing environmental concerns, including climate change, the greenhouse effect, energy shortages, natural resource depletion, biodiversity loss, and widespread air, water, and soil pollution. The exacerbation of these issues is exacerbated by a burgeoning population and evolving lifestyles. It is imperative to proactively address these challenges and prioritize environmental preservation. The role of higher education in fostering sustainable development is pivotal for national progress. Unfortunately, our nation is yet to fully recognize the significance of sustainable development across social, economic, and environmental dimensions. There is a growing consensus that educational institutions should not merely impart knowledge about environmental issues but also exemplify sustainable practices. Such education molds and expands young minds, instilling a commitment to seeking solutions for environmental problems and thereby making a substantial contribution to sustainable development. As students transition from higher education to embark on their chosen careers post-graduation, they carry forward the eco-friendly methods and strategies they imbibed at their universities. These individuals evolve into the leaders of tomorrow, integrating green practices into their professional endeavors and further advancing the cause of sustainable development.

During the academic year 2022–2023, our campus underwent a comprehensive Green Audit to assess its environmental management practices, identifying both strengths and areas for improvement. The institution has demonstrated commendable efforts in conserving resources such as paper, power, and water, thanks to the effective implementation of sound policies. The recently released Green Audit Report for 2022–2023 acknowledges these achievements while also highlighting a notable opportunity for enhancement in electricity generation through the integration of solar panels.

One of the campus's standout assets is its vibrant and diverse plant life. The lush landscaping, expansive central garden, and other green spaces not only enhance the aesthetics of the area but also naturally counteract the carbon footprint. Recognizing the need for ongoing improvement, the Green Audit Report has provided valuable suggestions, including the incorporation of trash segregation, tree planting initiatives, and water recycling into the campus green policies. Responding proactively to these recommendations, the College has now established a comprehensive Green policy. This reflects a commitment to operating year-round in a manner that minimizes the institution's adverse environmental impact. It is evident that sustainability is a priority, and this policy serves as a framework for responsible and eco-friendly practices.

To further amplify the impact of these initiatives, raising awareness within the campus community is crucial. Sharing the findings of the Green Audit and the subsequent implementation of the Green policy will not only inform individuals about the current environmental efforts but also inspire a collective sense of responsibility towards sustainable practices. As we spread the word about this study, we contribute to fostering a culture of environmental consciousness within our campus community.

Shikshan Prasarak Mandal's

Nabira Mahavidyalaya, Katol, Nagpur

Executive Summary

Environmental and ecological problems are the outcome of rapid urbanization and careless economic development at the local, regional, and worldwide levels. This motivates us to put the Green Campus system in place at the institutional level. Our college is very concerned about the need to address these basic concerns in order to reverse the present destructive tendencies. The goal of this audit is to ensure that campus practices correspond to institutionally established green policies as well as NAAC and UGC criteria.

The methodology included: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit were based on the identified risks.

Introduction

Green Audit is the systematic identification, quantification, recording, reporting, and analysis of environmental diversity components. The 'Green Audit' seeks to examine environmental behaviors both on and off campus that have an influence on the eco-friendly atmosphere. It was established with the goal of inspecting the work done within organizations whose activities might endanger the health of residents and the environment. Green Audit provides guidance on how to improve the state of the environment, and several causes have contributed to the expansion of Green Audit.

Nabira Mahavidyalaya was established in 1961 by the Danshur Late Shri. Bhikulalji Nabira and the generous people of Katol. It is permanently affiliated (1986) to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. With the aim to make students reliant it has been working tirelessly and uninterruptedly for the well-being of students and ultimately for the society is proven by the group of alumni who have been placed in all over India, in Indian army as well as in various posts.

Nabira College has a suitable academic and physical infrastructure to meet the needs of undergraduate and postgraduate students from the surrounding Katol area. With the affiliation of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, we provide graduate courses in Arts, Commerce, and Science, as well

as postgraduate studies in Botany, Zoology, Mathematics, Microbiology, Chemistry, Commerce, English, History, and Marathi. Our Institution is ISO Accredited (ISO 9001), which stipulates an uncompromising infrastructure standard. Our institution offers a large campus with modern amenities for students and faculty. We offer large, well-aerated classrooms with audio-visual teaching aids, one of the largest libraries in the region, and a large playground for a variety of sports. We offer a well-maintained canteen, a well-equipped gym, and a plentiful yoga bhavan for the students' overall growth. We have a lovely garden with rich green plants and trees, which offers a welcoming academic environment for teaching and learning. Our college also provides a well-equipped dormitory for female students.

Vision and Mission Statement:

VISION: Nabira Mahavidyalaya, Katol commits to ensure all round development of students' personality, awakens in them the light of knowledge by dispelling the darkness of ignorance, helps them become self-reliant and molds them into better persons physically, socially and ethically.

MISSION

- ❖ To stimulate the academic atmosphere to enhance quality of teaching-learning and research by using modern modes of education.
- ❖ To introduce new programmed keeping the current needs of students and society.
- ❖ To help students become self-reliant
- ❖ To offer opportunities to grow educationally and ethically.
- ❖ To uplift economically weaker and oppressed class in rural areas.

The vision and mission are displayed in the college campus on boards.

One of the concepts or principles adopted to make the educational institute ecologically sustainable is green audit. Green auditing is a technique for assessing general practises undertaken by organisations in terms of their environmental effect. Green auditing also sheds light on harmful behaviours that contribute to environmental damage. It demonstrates the organization's strengths and weaknesses in terms of environmental protection. It is beneficial to realise the necessity to operate throughout the year in order to limit the negative environmental impact. Green Audit is the baseline assessment used to determine green policies.

Objectives of the Study

Nowadays, Green Audit of an educational campus is considered very important since it is important part a developed society; and also, a major source for inculcating good practices among the students despite their studies. Plantation drive has always been with our institution right from the beginning but unrecorded.

Thus, the objective of this present Green Audit is to recognize, quantify, depict and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are as under:

- ✓ To map the Geographical Location of the College Campus
- ✓ To map the Floral and Faunal diversity of the college
- ✓ To estimate the energy requirements of the college
- ✓ To analyze the waste disposal system
- ✓ To analyze environmental condition of air, water and noise
- ✓ To introduce and create awareness among the students to feel a concern for environment and to maintain it educationally conducive.

Methodology:

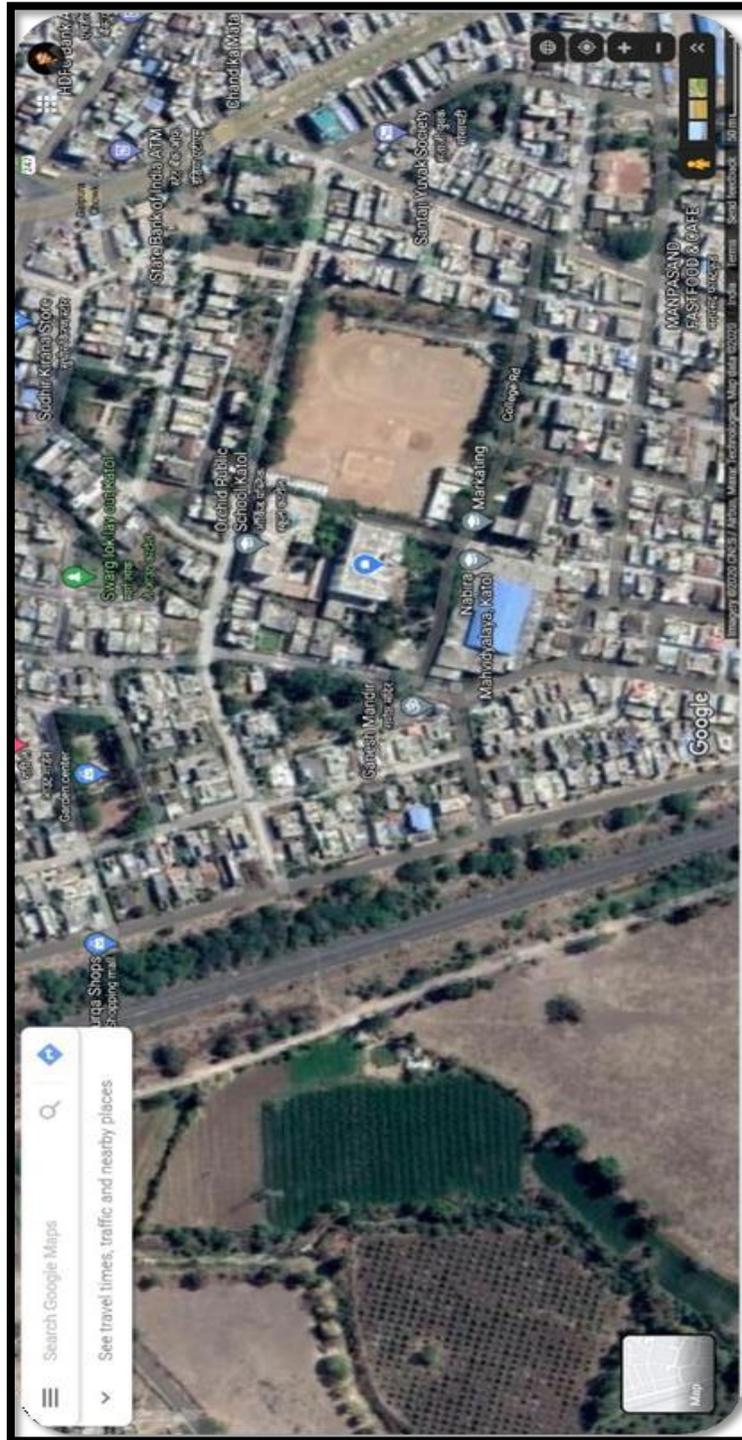
The purpose of the green audit of Nabira Mahavidyalaya is to satisfy and verify the norms of the green audit from ecological point of view.

The methodology includes:

- Physical inspection of the campus.
- Observation and review of documents.
- Interviewing key persons and data analysis.
- Organizational level efforts.
- Creating awareness.
- Analysis of access to light and air.
- Light and ventilation.
- Operation of electronic equipment's.
- Water management.
- Water quality.
- Renewable energy.
- Transportation.
- Waste management.
- Plantation details.

OBSERVATIONS

GEOGRAPHICAL LOCATION OF CAMPUS



Land use:

Sustainable land management is “an adoption of land use systems that, through appropriate management practices, enables land users to maximize the economic and social benefits from the land, while maintaining or enhancing the ecological support functions of the land resources.”

Classification scheme for land use analysis of built-up area:

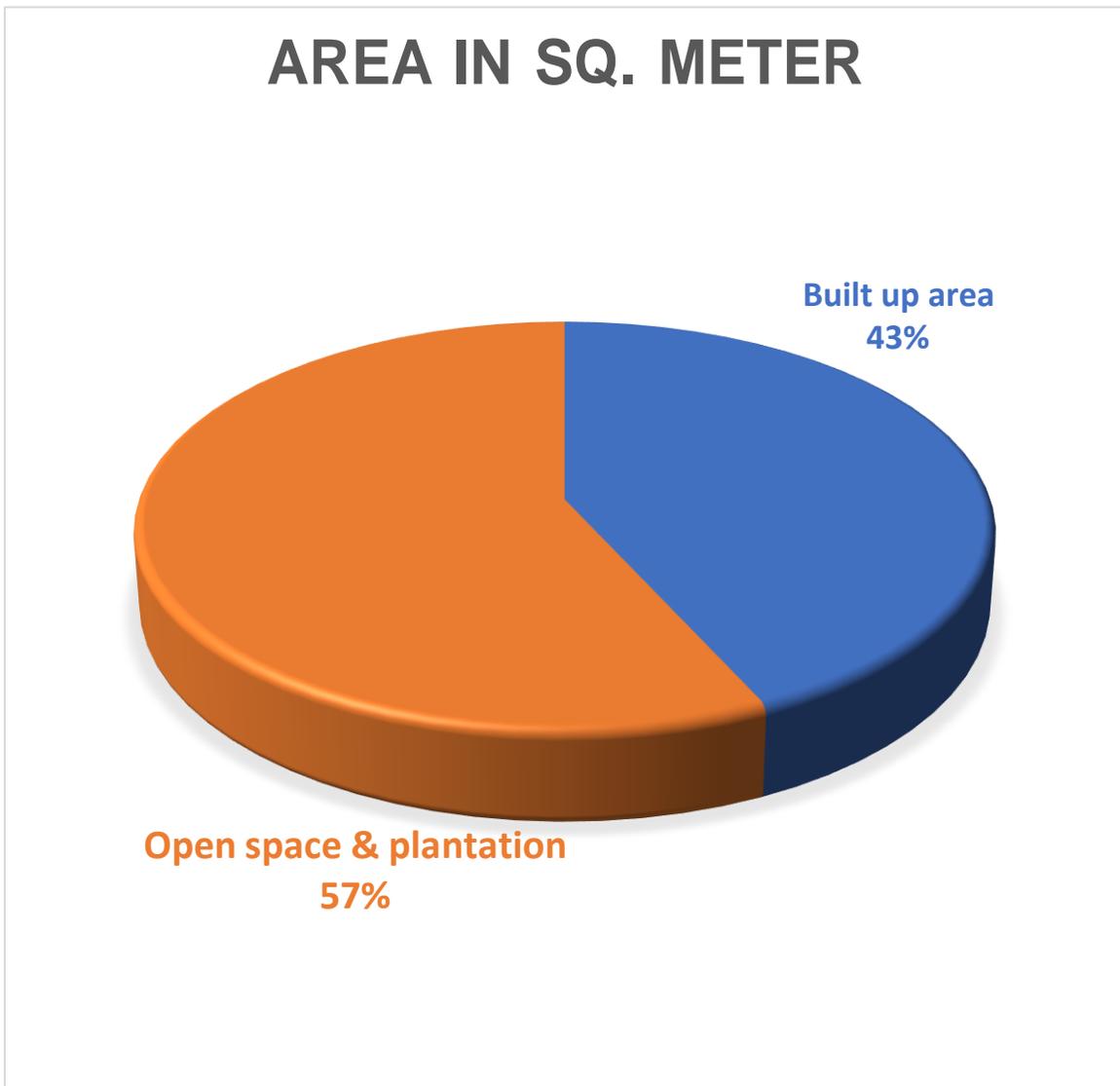
Level-I	Level-II
Built-up land area	1.1 Dense 1.2 Moderate 1.3 Sparse

Thus, attempt has been made in this study to give land use plan i.e., land used for construction and open land in the college campus.

Land use data of Nabira Mahavidyalaya, Katol:

Land use Categories	Area in Sq. meters
Built up area	11549.597
Open space and plantation	15341.764
Total area	26891.361 sq. meters

Graphical representation of land use data of Nabira Mahavidyalaya, Katol.



Land use (built up area) analysis:

S. No.	Categories of land use	Area in sq. meters
1.	Administration Block	2876.10
2.	Classrooms	602.49
3.	SPM office	117.81
4.	Store	226.18
5.	MBA	916.44
6.	Pharmacy (Dept. in MBA building)	916.44
7.	Laboratories (Retained structure)	872.32
8.	CR/ADMN. (B.Ed.)	603.50
9.	Gymnasium	297.00
10.	Staff Quarters	587.88
11.	Library	363.37
12.	Toilet	74.14
13.	Yoga center (G+1)	142.79

Floral and faunal diversity of the Nabira Mahavidyalaya

Floral diversity:

Nabira Mahavidyalaya is within the geo-position between latitude 21.274740°N and Longitude 78.581110°E at Katol in the District of Nagpur, Maharashtra, India. It comprises an area of about 6.645 acres. The campus of Nabira Mahavidyalaya is enriched with diversity of plants which serves multiple functions for college and for adjoining locality. Most of the species of trees are pretty old. The diversity of tree of the premises plays very important role in increasing and maintaining quality life. They maintain the high oxygen level, improves air quality index, keep pleasant climate, conserves water, improves soil quality, supports variety of birds and animals. Large shady trees in the premises protect us from noise pollution and air pollution also. A recent survey of plant diversity reveals that we have different families of large trees which sequester lots of organic carbon. Thus, the college campus plays very important role in maintaining and conserving plants of various species and creating an aesthetic ambience for all of us.

We have around 173 varieties of plant species belonging to various herbs, shrubs and trees families. Department of Botany have well maintained medicinal garden with 40 species of medicinal plants. Following table represents the list of plant and total number of plants species present in campus.

College Campus Plant Diversity Index Table

Sr. No.	Name of the plant	Total Numbers
1	Teak (<i>Tectona grandis</i>)	71
2	Christmas tree (<i>Araucariasp.</i>)	23
3	Mehndi / Hina (<i>Lawsoniainermis</i>)	Multiple
4	Jungle geranium (<i>Ixora coccinea</i>)	17
5	Palm sp.	11
6	<i>Bougainvillea</i> sp.	9
7	Shatavari (<i>Asparagus racemosus</i>)	5
8	Weeping Fig (<i>Ficus benjamina</i>)	38

9	Century Plant / American Aloe (<i>Agave americana</i>) (with yellow stripe)	13
10	Century Plant / American Aloe (<i>Agave americana</i>) (green leaf)	2
11	Caribbean agave (<i>Agave angustifolia</i>)	12
12	<i>Agave heterantha</i>	07
13	Queen Sago (<i>Cycas circinalis</i>) (Endangered species)	4
14	Sago palm (<i>Cycas revoluta</i>)	27
15	<i>Acacia</i> sp.	3
16	Bamboo sp.	32
17	Indian bael (<i>Aegle marmelos</i>)	3
18	She-Oak (<i>Casuarina cristata</i>)	3
19	Red Bottle brush (<i>Callistemon citrinus</i>)	5
20	Traveller's Palm (<i>Ravenala madagascariensis</i>)	1
21	Poinsettia (<i>Euphorbia pulcherrima</i>)	21
22	Christmas flower / snow bush (<i>Euphorbia leucocephala</i>) (white petals)	28
23	Crown of Thorns / Christ plant (<i>Euphorbia milii</i>)	10
24	Copperleaf / Jacob's Coat (<i>Acalypha wilkesiana</i>)	Multiple
25	Casava (<i>Manihot esculenta</i>)	1
26	Guava (<i>Psidium guajava</i>)	13
27	Schott (<i>Araceae</i> sp.)	2
28	Rose (<i>Rosa</i> sp.)	42
29	Little Ruby (<i>Alternanthera dentata</i>)	Multiple
30	<i>Lantana camara</i>	Multiple

31	Groundsel (<i>Senecio vulgaris</i>)	Multiple
32	Coat-buttons or Tridax daisy (<i>Tridax procumbens</i>)	Multiple
33	Ironweed and Poovamkurunnila (<i>Cyanthillium cinereum</i>)	Multiple
34	Money plant / Devil's ivy (<i>Epipremnum aureum</i>)	Multiple
35	The Creeping Wood Sorrel /Sleeping Beauty (<i>Oxalis corniculata</i>)	Multiple
36	Sitafal (<i>Annona squamosa</i>)	5
37	Mogra / Jasmin (<i>Jasminum sambac</i>)	9
38	Egyptian Star Cluster (<i>Pentas lanceolate</i>) (Purplish Pink)	1
39	Dahliasp.	17
40	Heart of Jesus (<i>Caladium bicolor</i>)	1
41	<i>Dracaena fragrans</i>	1
42	Mango (<i>Mangifera indica</i>)	40
43	Ashoka (<i>Saracaasoca</i>)	61
44	Kate Koranti (<i>Barleria prionitis</i>)	2
45	Barberry (<i>Berberis vulgaris</i>)	1
46	Fairy Lily / Magic Lily (<i>Zephyranthes citrina</i>)	Multiple
47	St Bernard's Lilli (<i>Anthericum lilliange</i>)	4
48	Hawkweed (yellow flower) (<i>Hieracium caespitosum</i>)	Multiple
49	Neem (<i>Azadirachta indica</i>)	22
50	Gulmohar (<i>Delonix regia</i>)	28
51	Pipal (<i>Ficus bengalensis</i>)	3
52	Cassia Tree (<i>Senna siamea</i>)	1

53	Royal Palm (<i>Roystonea oleracea</i>)	39
54	Karanji Tree / Pongame Oil Tree (<i>Pongamia pinnata</i> / <i>Millettia pinnata</i>)	9
55	Saptaparni / Devil's Tree (<i>Alstonia scholaris</i>)	59
56	Mauritius hemp (<i>Furcraea foetida</i>)	28
57	Badam Tree (<i>Prunus dulcis</i>)	10
58	Palash Tree (<i>Butea monosperma</i>)	5
59	Sisam / Indian rosewood (<i>Dalbergia sissoo</i>)	1
60	Neelgiri (<i>Eucalyptus tereticornis</i>)	8
61	(Acacia Coral) <i>Adenanther apavonina</i>	2
62	Chicory (<i>Cichorium intybus</i>)	1
63	Macarthur palm (<i>Ptychosperma macarthurii</i>)	31
64	Areca palm (<i>Dyopsis lutescens</i>)	96
65	Ran-wange creeper (<i>Diplocyclos palmatus</i>)	1
66	Lemon (<i>Citrus limon</i>)	5
67	Golden Shower (<i>Cassia fistula</i>)	7
78	Sonpatta / Aapta Tree (<i>Bauhinia racemose</i>)	4
79	Madhumalati / Rangoon creeper (<i>Combretum indicum</i>)	5
70	Garden Croton (<i>Codiaeum variegatum</i>)	8
71	Indian Shot / Edible Canna (<i>Canna indica</i>)	Multiple
72	Pygmy date palm (<i>Phoenix roebelenii</i>)	3
73	Sathon Tree (<i>Millettia leucantha</i>)	4
74	<i>Ecbolium viride</i> (Purple)	4

75	Water-Willow (<i>Justicia viridis</i>)	1
76	Yellow Bells (<i>Tecoma stans</i>)	3
77	Jambhul / Jamun /Java Plum (<i>Syzygiumcumini</i>)	3
78	Malabar Spinach / Vine Spinach (<i>Basella alba</i>)	1
79	Kassod tree (<i>Senna siamea</i>)	2
80	River tamarind (<i>Leucaena leucocephala</i>)	7
81	Indian Abutilon / Indian Mallow (<i>Abutilon indicum</i>)	2
82	Amla / Indian gooseberry (<i>Phyllanthus emblica</i>)	2
83	Jungle Jalebi / Chichbilai / Manila tamarind (<i>Pithecellobium dulce</i>)	2
84	Ber / Indian Plum (<i>Ziziphus mauritiana</i>)	1
85	Persian Silk Tree (<i>Albizia julibrissin</i>)	6
86	Yellow Oleander / Lucky Nut (<i>Cascabela thevetia</i>)	4
87	Ceylon date (<i>Phoenix pusilla</i>)	1
88	<i>Ceratozamia mexicana</i>	26
89	Asparagus Fern / Foxtail Fern (<i>Asparagus densiflorus</i>)	1
90	Rhais excels (Broodleaf leady)	7
91	<i>Dracaena</i> sp.	2
92	Coconut tree (<i>Cocos nucifera</i>)	3
93	Thuja (Vidya) (<i>Thuja occidentalis</i>)	5
94	<i>Terminalia catappa</i> (Indian almond)	2
95	<i>Dyopsis</i> sp.	2
96	Thatch Screwpine (<i>Pandanus tectorius</i>)	2

97	Kadunimb / Godnimb	1
98	Dalimb / Pomegranate (<i>Punica granatum</i>)	4
99	<i>Jatropha integerrima</i>	2
100	Firebush (<i>Hamelia patens</i>)	3
101	Snake Plant / Mother-in-law's Tongue (<i>Dracaena trifasciata</i>)	142
102	Pedilanthus (<i>Euphorbia tithymaloides</i>)	2
103	Vinca rosea / Madagascar Periwinkle (<i>Catharanthus roseus</i>)	6
104	Broadleaf Lady Palm / Bamboo Palm (<i>Rhapis excelsa</i>)	2
105	Windmill Palm (<i>Trachycarpus fortunei</i>)	2
106	<i>Roulphiglla tetraphylla</i>	1
107	Ashwagandha (<i>Asparagus racemosus</i>)	1
108	Sweet flag (<i>Acorus calamus</i>)	1
109	Hibiscus sp.	8
110	Lajjalu / Shame-Plant (<i>Mimosa pudica</i>)	15
111	Dumb-cane (<i>Dieffenbachia seguine</i>)	1
112	Nirgudi (<i>Vitex negundo</i>)	1
113	Behada (<i>Terminalia bellirica</i>)	1
124	Bael / Bengal Quince / Golden Apple / Stone Apple / Stone Apple / Japanese Bitter Orange (<i>Aegel marmelose</i>)	1
125	Khas (<i>Chrysopogon zizanioides</i>)	3
126	Godlimb / Curry Tree (<i>Murraya koenigii</i>)	3
127	Karwand / Carandas Plum / Karanda (<i>Carissa carandas</i>)	1

128	Adulsa / Adhatoda / Vasa / Vasaka / Malabar nut (<i>Justicia adhatoda</i>)	1
129	Turmeric (<i>Curcuma Longa</i>)	5
130	Arjun (<i>Terminalia arjuna</i>)	1
131	Guggul / Indian Bdellium Tree (<i>Commiphora mukul / Commiphora wightii</i>)	1
132	Ghrita - Kumari (<i>Aloe vera</i>)	10
133	Kalmi / Tezpat / Tezapatta / Indian Bay Leaf / Malabar Leaf / Indian Bark / Indian Cassia / Malabathrum (<i>Cinnamomum tamala</i>)	1
134	TaunTree (<i>Pometia pinnata</i>)	1
135	Devil's Backbone (<i>Cissus quadrangularis</i>)	1
136	Mulethi / Jesthmadh (<i>Glycyrrhiza glabra</i>)	1
137	Manoranjitham (<i>Artabotrys hexapetalus</i>)	1
138	Elephant ears / Taro (<i>Colocasia sp.</i>)	2
139	Eastern redbud (<i>Cercis canadensis</i>)	1
140	Devil's Pepper (<i>Rauwolfiatetraphylla</i>)	2
141	Lime Berry (<i>Triphasiatrifolia</i>)	1
142	Lajjalu / Shame-Plant (<i>Mimosa pudica</i>)	10
143	Lambogo Criculata	1
144	Sadafuli / Milkwood (<i>Tabernaemontana sp.</i>)	1
145	Common Reed (<i>Phragmites australis</i>)	Many
146	Asparagus (<i>Asparagus officinalis</i>)	Many
147	Godlimb / Curry Tree (<i>Murraya koenigii</i>)	1
148	Krishna Kamal / Yellow passionflower (<i>Passiflora lutea</i>)	1

149	Nerium (<i>Nerium oleander</i>)	2
150	Kunda / Star Jasmine (<i>Jasminum pubescens</i>)	2
151	Kate Korati / Vajradanti / Porcupine Flower (<i>Barleriapronitis</i>)	1
152	DudhMogra (<i>Jasminum sambac</i>)	1
153	Barbary Fig Cactus (<i>Opuntia ficus-indica</i>)	2
154	Globe Cactus (<i>Mammillaria sp.</i>)	1
155	Cactus (<i>Cereus jamacaru</i>)	2
156	Ti Plant / Palm Lily (<i>Cordyline fruticose</i>)	3
157	Umber / Cluster Fig Tree / Indian Fig Tree (<i>Ficus racemosa</i>)	4
158	Khas / Vetiver (<i>Chrysopogon zizanioides</i>)	1
159	Yellow Alder (<i>Turnera ulmifolia</i>)	1
160	PatharKuchi / Air plant / Life plant / Miracle Leaf (<i>Bryophyllum pinnatum</i>)	5
161	Purple Heart (<i>Tradescantia pallida</i>)	2
162	Lady Fern (<i>Athyrium filix-femina</i>)	20
163	Ponytail palm / Elephant's Foot (<i>Beaucarnea recurvata</i>)	1
164	Caricature Plant (<i>Graptophyllum pictum</i>)	2
165	Garden croton (<i>Codiaeum variegatum</i>)	2
166	Jambhul / Jamun /Java Plum (<i>Syzygium cumini</i>)	1
167	Dalimb / Pomegranate (<i>Punica granatum</i>)	1
168	Yellow Margin Orchid / Golden Leaf-edge Orchid / Golden-edged Orchid (<i>Cymbidium floribundum</i>)	3
169	Pudina / Apple Mint (<i>Mentha suaveolens</i>)	2

170	Boat Lily / Moses-in-the-cradle (<i>Tradescantia spathacea</i>)	3
171	White Spider Lily (<i>Lycoris radiata</i>)	2

Faunal Diversity of Nabira Mahavidyalaya, Katol:

Nabira College, situated in Katol, benefits from the region's soil composition, particularly conducive to the growth of citrus fruits, guava, papaya, various berries, leafy vegetables, and a variety of flowers. This diverse flora not only contributes to the visual appeal of the campus but also serves as a primary attraction for birds, bees, and various other animals. The climatic conditions of Nagpur district further support the flourishing biodiversity, creating a favorable environment for a wide range of plant and animal species.

The faunal diversity at our college is noteworthy, reflecting the richness of the local ecosystem. The campus provides a habitat for diverse wildlife, fostering an environment where different species coexist. This harmonious interaction contributes to the overall biodiversity of the area. As a result, Nabira College not only stands as an educational institution but also as a steward of the environment, actively participating in the preservation and promotion of local biodiversity. The thriving plant and animal life on campus not only enhance the natural beauty of the surroundings but also offer valuable opportunities for ecological education and conservation efforts within the academic community.

Green Waste Management:

Our campus boasts a verdant landscape, featuring a large central garden, a medicinal garden affiliated with the botany department, and an abundance of towering green trees throughout the premises. With such lush surroundings, the generation of green leaf waste is a daily occurrence. In a sustainable and eco-friendly approach, our campus has established a vermicompost unit to manage this organic waste.

The green waste, comprised of leaves and other organic material, is systematically deposited into the composting pit within the vermicompost unit. Through the intricate workings of vermiculture, the waste is transformed into high-quality compost. This organic manure, enriched with nutrients, is then utilized within our campus to nurture and support the flourishing vegetation.

By implementing this waste management system, our campus not only addresses the challenge of green waste disposal but also promotes a closed-loop approach to sustainability. The organic compost derived from the vermicompost unit not only serves as an eco-friendly alternative to synthetic fertilizers but also contributes to the overall health and vitality of the campus's greenery. This initiative underscores our commitment to environmentally conscious practices and showcases the potential for creating a harmonious relationship between waste management and the nourishment of our natural surroundings.

Clean Drive:

Each year, our institution actively engages in numerous cleanliness drives, fostering a collaborative effort that involves the entire student body, as well as participants from the NCC and NSS programs. These initiatives extend beyond our campus, reaching into the surrounding local areas, reflecting our commitment to community well-being.

The primary objective of these cleanliness drives is not only to enhance the immediate environment but also to educate and raise awareness about the critical importance of maintaining cleanliness and neatness. By involving students, NCC, and NSS participants, we create a collective force dedicated to the betterment of our surroundings.

Participating in these programs serves as a hands-on learning experience for students, instilling in them a sense of responsibility and civic duty. Through outreach efforts in local communities, we strive to impart valuable knowledge about the far-reaching benefits of a clean environment.

In organizing these drives, our institution not only contributes to the immediate improvement of the areas involved but also strives to leave a lasting impact by nurturing a culture of cleanliness and community responsibility. These initiatives underscore our dedication to holistic education, emphasizing not only academic excellence but also the development of responsible and environmentally conscious citizens.

Clean Energy and Energy Conservation:

As a significant step in our clean energy drive, our institution has made substantial investments in sustainable energy solutions. Notably, we have installed solar panels with a total capacity of 30 KW, showcasing our commitment to harnessing solar power as an alternative energy source. This initiative aligns with our goal of reducing dependence on conventional electricity and embracing cleaner, renewable energy options. In addition to the solar panels, we have implemented small solar lights equipped with automated sensor-based on/off mechanisms. This innovative approach not only enhances energy efficiency but also contributes to a more sustainable and eco-friendly campus environment. The incorporation of sensor-based technology ensures that energy is utilized judiciously, responding to the natural lighting conditions.

Furthermore, our commitment to energy efficiency is evident in our ongoing efforts to replace traditional CFL lights with LED lights. This switch not only reduces energy consumption but also aligns with the broader goal of minimizing our carbon footprint. This sustainable practice, once implemented, has been consistently maintained, reflecting our dedication to long-term environmental responsibility. By combining solar energy adoption with the transition to energy-efficient LED lighting, our institution strives to be a model for sustainable practices in the community. This multifaceted approach not only reduces our

environmental impact but also sets a positive example for others to follow in the pursuit of a cleaner and greener future.

Conclusion:

Considering the fact that the institution is predominantly an education temple, there is significant environmental research both by faculty and students. The environmental awareness initiatives are substantial. The installation of solar panels and system are noteworthy. Besides, environmental awareness programs initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development.

Recommendations

Reduce the absolute amount of waste that is produced from college staff offices. Make full use of all recycling facilities provided by government authority and private suppliers, including glass, cans, white, colored and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture. Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated.

- Important and confidential paper documents after their validity to be sent for pulping. Vermicomposting should be adopted on at least 200-400 sq. ft. of land.
- Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records.
- Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
- Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy.

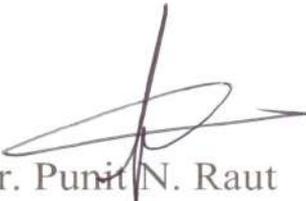

External Agency

(Dr. Raju Yadav)
Bioraj Laboratories




Principal
Principal
Nabira Mahavidyalaya,
Katol, Dist. Nagpur.

(Dr. S. K. Navin)
Nabira Mahavidyalaya Katol


Dr. Punit N. Raut
IQAC, Coordinator


Dr. Trupti Khedkar
Coordinator
Green Audit Committee


Dr. Bipinchandra Kalbande
Internal Auditor


Dr. Reena Meshram
Internal Audit



Some of the species of bird found in Nabira Mahavidyalaya Campus



Red vented bulbul
(*Pycnonotus cafer*)



Greater Conical
(*Centropus sinensis*)



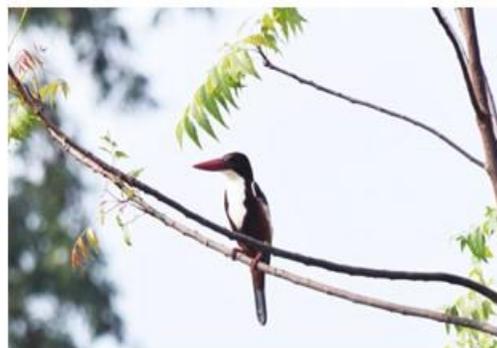
Indian pied myna
(*Gracupica contra*)



House crow
(*Corvus splendens*)



House sparrow
(*Passer domesticus*)



White throated kingfisher
(*Halcyon smyrnensis*)

Some of the species of bird found in Nabira Mahavidyalaya Campus



Asian green bee eater
(*Merops orientalis*)



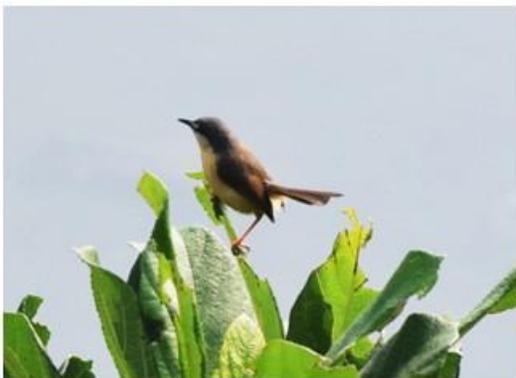
Indian robin
(*Copsychus fulicatus*)



Black drongo
(*Dicrurus macrocercus*)



Long tailed shrike
(*Lanius schach*)



Ashy prinia
(*Prinia socialis*)



Oriental magpie robin
(*Copsychus saularis*)