

**K. L. E. Society's  
Raja Lakhamagouda Science Institute  
(Autonomous), Belagavi**

**GREEN AUDIT**



**FOR THE ACADEMIC YEAR**

**2020-2021**

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## INTRODUCTION

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience.

It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crisis. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric carbon di-oxide from the environment.

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems.

Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

### **Main Objectives of Green Audit:**

- To examine the existing practices which can impact natural resources
- To review & update the Green practices in campus
- To formulate or update the institution's water & waste management protocols
- To generate a green database of the campus
- To maintain ambient environmental condition

## **General steps involved in Green Audit**

1. Systematic data collection
2. Documentation of activities
3. Regular monitoring
4. Providing standards and methods for improvement by establishing cost effective green action plan.

## **About the College**

K.L.E. Society's Raja Lakhamagouda Science Institute was established in 1935 that signified the renaissance of the mind to the seekers of knowledge, in the pre-independent North Karnataka. Initially, the Science course was introduced in Lingaraj Arts College. It was progressing by leaps and bounds; and subsequently in 1941, it was named as Raja Lakhamagouda Science Institute after the name of the munificent Sardar Raja Lakhamagouda Basavaprabhu Sardesai of Wantamuri, who had generously helped the Institute. Sir C. V. Raman, the Nobel Laureate inaugurated the degree course in science in 1944. Further, in 1958 the science wing was bifurcated from Lingaraj College as a full-fledged science institute.

R.L.S. Institute is a premier science college in a perfect ambience and with sufficient infrastructure for imparting science education. It had the honor of imparting instructions at Post-Graduate level in Mathematics, Chemistry and Physics from 1948 to 1957.

During the academic year 2009-10, our college was re-accredited by the National Assessment and Accreditation Council, Bengaluru, at 'A' grade with CGPA of 3.25. On the recommendation of Karnatak University, Dharwad, the Government of Karnataka granted permission to our college to start Post-Graduation courses in Physics and Mathematics from the academic year 2010-11. Accordingly, this facilitates the students from this part of North Karnataka to carry out Post Graduation in Physics and Mathematics.

Our Institution is conferred with Autonomous status in the academic year 2012-2013 by the UGC. It is approved by the Principal Secretary, Higher Education Government of Karnataka, Bengaluru. It is also approved by Rani Channamma University, Belagavi, our parent University.



During the academic year 2015-16, our college was re-accredited by the National Assessment and Accreditation Council, Bengaluru, for Third cycle after the conferment of Autonomy at 'A' grade with CGPA of 3.10.

From the academic year 2018-19 Post-Graduation course in Chemistry was started. We also have BCA Course. There are **Certificate courses**/value added courses as well as UGC Sponsored NSQF Certificate courses. The institute had the privilege of receiving a number of distinguished personalities including Jnanapeetha Award-winners, Scientists, Educationists, and Vice-Chancellors etc.

To carry out our activities in these transformative and competitive days, we have adopted a slogan, "Adapt and Excel". True to our slogan, we have been adjusting our activities with the changing situation and trying to excel in curricular and extra-curricular activities.

## Geography





## **Role of Management in Green Audit**

The management is very keen in monitoring green activities in its all campuses. The management has a regular evaluation process towards of green activities of the campus. The management encourages all the green initiatives and promotes all the awareness programs based on its green policies. The institute with the consent of management formulates the green policy based on green audit report.

## **Green monitoring cell of the Institute**

<b>Sl. No.</b>	<b>Name of the Faculty</b>	<b>Designation</b>
01	Shri H. N. Bannur	HOD English
02	Shri V. K. Ganiger	HOD Electronics
03	Smt. P. S. Melavanki	Lecturer, Botany
04	Smt. Alfaz Bagwan	Lecturer, Physics
05	Smt. Swapna Inamdar	Lecturer, Biotechnology
06	Smt. P. B. Dubale	Lecturer, Chemistry

## **The Green Audit Process**

1. Constitution of green monitoring cell with specific tasks & time schedule
2. Selection of the area on campus
3. Visiting the selected area to discuss about the audit process
4. Preparing the plan of action
5. Data collection pertaining to identified parameters for green auditing
6. Collection of background information on the identified activities & other parameters
7. Collection of green activities in the campus including flora, fauna, water usage and waste generation, etc.
8. Audit team visit to the campus
9. Data analysis and evaluation
10. Discussion on the findings
11. Report preparation



## **Onsite audit activities**

1. The preliminary visit and meeting with the campus authorities was the first step between the audit team and auditee
2. Site inspection for determining parameters for audit
3. Evaluation of collected information of the audit team
4. Meeting with the audit team for evaluation and clarifications
5. Meeting with the Principal, IQAC Coordinator & faculty members

## **Audit Process**

### **Inspection**

The visit in connection with the audit process to the campus had identified criteria for audit, parameters to be evaluated and time schedule of green audit. It included meeting with the Principal, IQAC Coordinator & the members of green monitoring cell. This enabled the auditing to gather all necessary preliminary information that is useful in preparing auditing questionnaire. The on-site audit team collected information based on the same.

### **Questionnaire**

The detailed questionnaire (Annexure I, II III & IV) was handled by audit teams and information was gathered. Information pertaining to green activities, water management & energy management was analyzed. This was based on the parameters identified. The questionnaire was comprehensive covering qualitative and quantitative dimensions.

### **Evaluation of documents and reports**

The audit visit to the campus evaluated documents and reports that are necessary for the audit process. This further strengthened the claims made by the campus authority on green operations in the campus. To generate future action plan, the audit team had a detailed discussion with different in house members in the institute and a concluding discussion session with Principal, IQAC coordinator and was done to finalize the plans.

## Findings and Analysis

### CAMPUS FLORA

Sl. No.	NAME OF THE PLANT	FAMILY	COMMON NAME	VERNACULAR NAME
1.	<i>Adhatoda vasica</i> Nees.	Acanthaceae	Malabar Nut	ಅಡಸಾಲ
2.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Amaranthus	ಅರಿವೆ ಸೊಪ್ಪು
3.	<i>Pancratium triflorum</i> Roxb.	Amaryllidaceae	Spider lily	ಪ್ಯಾಂಕ್ರಸಿಯಮ
4.	<i>Polyanthus tuberosa</i> L.	Amaryllidaceae	Tuberose	ಸುಗಂಧರಾಜ,
5.	<i>Mangifera indica</i> L.	Anacardiaceae	Mango	ಮಾವು.
6.	<i>Polyalthia longifolia</i> (Senn) Thw.	Annonaceae	False Ashoka.	ಕಂಬದ ಮರ
7.	<i>Centella asiatica</i> L.	Apiaceae	Brahmi	ಬ್ರಾಹ್ಮಿ
8.	<i>Adenium Obesum</i> Roem & Schult	Apocynaceae	Adenium	ಅಡೆನಿಯಮ
9.	<i>Allamanda cathartica</i> L.	Apocynaceae	Dogbane plant	ಹಳದಿ ಹೂ ಗಿಡ
10.	<i>Allamanda neriifolia</i> Hook. Var.	Apocynaceae	Bush Allamanda	-----
11.	<i>Alstonia scholaris</i> L	Apocynaceae	Devil's Tree	ಸಪ್ತಪರ್ಣಿ, ಮದ್ದಾಲೆ ಮರ
12.	<i>Alstonia venenata</i> R.Br	Apocynaceae	Devil's Tree	ಅಡ್ಡಸರ್ಪ
13.	<i>Carissa carandas</i> L.	Apocynaceae	Black Cherry	ಕವಳೆ ಗಿಡ
14.	<i>Catharanthus roseus</i> L.	Apocynaceae	Periwinkle flower	ನಿತ್ಯ ಪುಷ್ಪ
15.	<i>Ervatamia coronaria</i>	Apocynaceae	Moon beam	ನಂದಿ ಬಟ್ಟಲು
16.	<i>Holerrhena antidysenterica</i> Wall.	Apocynaceae	Easter tree	ಕೊಡಸಿಗೆ ಮರ, ಮಹಾಗಂಧ
17.	<i>Nerium indicum</i> Mill.	Apocynaceae	Indian Oleander	ಕಣಗಿಲೆ
18.	<i>Plumeria obtuse</i> L.	Apocynaceae	Pagoda tree	ದೇವಕಣಗಿಲು, ದೀಪ ಕಣಗಿಲು
19.	<i>Rauwolfia canescens</i> L.	Apocynaceae	Rauwolfia	ಸರ್ಪಗಂಧ
20.	<i>Alocasia indica</i> (Roxb)	Araceae	Giant Taro	ನೀರುಗೇಣಸು
21.	<i>Dieffenbachia picta</i> Schott	Araceae	Dumb cane	ಡೈಫೆನ್‌ಬೇಕಿಯಾ



22.	<i>Monster adeliciosa</i> Liebm. (Cerimon)	Araceae	Giant Monstera	ಮಾನ್ಸಸ್ಪೆರಾ
23.	<i>Anthurium</i> Sp.	Araceae	Anthurium	ಅಂತೂರಿಯಮ
24.	<i>Pistia stratiotes</i> L.	Araceae	Water lettuce	ಅಂತರಗಂಗೆ, ಜಲಕುಂಚಿಕಾ
25.	<i>Singonium</i> Sps.	Araceae	Singonium	ಸಿಂಗೋನಿಯಂ
26.	<i>Trevesia palmata</i> Vis	Araliaceae	Trevesia	ಹುಲಿಪಟಕಿ ಮರ
27.	<i>Araucaria cumminghamii</i> Sweet	Araucariaceae	Christmas tree	ಸೂಜಿಪರ್ಣಿ
28.	<i>Caryota urens</i> L.	Arecaceae	Fish tail palm, Indian sagopalm	ಬೈನೆ ಮರ
29.	<i>Cocos nucifera</i> Linn.	Arecaceae	Coconut palm	ತೆಂಗು
30.	<i>Livistonaro tundifolia</i> Mart	Arecaceae	Fan palm	ಬೀಸಣಿಕೆ ಮರ
31.	<i>Roystonea regia</i> Cook	Arecaceae	Royal palm, bottle palm	ರಾಯಲ್ ಪಾಮ್
32.	<i>Asclepias curassavica</i> L.	Asclepiadaceae	Blood flower	ಕಾಕತುಂಡಿ
33.	<i>Calotropis gigantean</i> R. Br .	Asclepiadaceae	Giant milk weed	ಎಕ್ಕೆ ಗಿಡ
34.	<i>Gymnema purgularioides</i> Wight and Gard	Asclepiadaceae	Gymnema	ಮಧುನಾಶಿನಿ
35.	<i>Artemisia vulgaris</i> Linn.	Asteraceae	Indian worm weed or worm seed	ಕಾಡುಮಂಜಿಪತ್ತೆ, ನಾಗಮಟ್ಟ, ಕಾಡುದವನ
36.	<i>Wedelia calendulacea</i>	Asteraceae	Wedelia	ಗರಗರಿ
37.	<i>Impatiens balsamina</i> L.	Balsaminaceae	Balsam plant, Garden balsam	ಗೌರಿಗಿಡ
38.	<i>Bignonia unguis-cati</i> Linn.	Bignoniaceae	Cat's claw Bignonia	ಹಳದಿ ಬಿಗ್ನೋನಿಯ
39.	<i>Spathodea companulata</i> . Beauv.	Bignoniaceae	Fountain tree or scarlet-bell	ನೀರು ಕಾಯಿ
40.	<i>Tabebuia spectabilis</i> Nichols	Bignoniaceae	Tabebuia	ಟಬಿಬಿಯ
41.	<i>Bombax malabaricum</i>	Bombacaceae	Red silk cotton tree	ಕೆಂಪು ಬೂರುಗ
42.	<i>Bombax insigne</i> Wall	Bombacaceae	Silk Cotton tree	ಬಿಳಿ ಬೂರುಗ, ಬೂರಲ.



43.	<i>Cordia sebestena</i> Linn.	Boraginaceae	Cordia	ಚಳ್ಳೆಮರ
44.	<i>Cereus / Cephalocereuspalmeri</i> L.	Cactaceae	Cactus	ಮುಳ್ಳು ಕಳ್ಳಿ
45.	<i>Opuntia elatior</i> (willd)Miller, Gard	Cactaceae	Cactus	ಡಬ್ಬುಗಳ್ಳಿ, ಪಾಪಾಸುಕಳ್ಳಿ, ರಟ್ಟಗೊಳಕಿ
46.	<i>Caesalpinia crista</i> L.	Leguminosae	Fever-nut	ಗಜ್ಜುಗ
47.	<i>Cassia biflorus</i>	Leguminosae	Cassia	ಹಳದಿ ಕ್ಯಾಸಿಯ
48.	<i>Delonix regia</i> Rafi.	Leguminosae	Royal gulmohur, flame tree	ಸಂಕೇಶ್ವರ, ಕೆಂಪು ಕೇಸರಿ
49.	<i>Peltophorum pterocarpum</i>	Leguminosae	Copper tree, Rusty shield bearer	ಕೆಂಪು ಗುರಾಣಿ ಮರ
50.	<i>Tamarindus indica</i> L.	Leguminosae	Tamarind tree	ಹುಣಸೆ ಮರ
51.	<i>Carica papaya</i> L.	Caricaceae	Papaya tree	ಪಪಾಯಿ
52.	<i>Mesua nagassarium</i> (N.Burman) Kostermans	Clusiaceae	Champa	ನಾಗಕೇಸರ, ನಾಗಚಂಪ
53.	<i>Terminalia catappa</i> L.	Combretaceae	Country almond	ನಾಡು ಬಾದಾಮಿ, ಜಂಗ್ಲಿ ಬಾದಾಮಿ.
54.	<i>Rheo discolor</i> Hance.	Commelinaceae	Rheo	ರಿಯೋ
55.	<i>Cuscuta hyaline</i> Roth	Convolvulaceae	Cuscuta	ಮಂಗನ ಬಳ್ಳಿ, ವೃಕ್ಷನಿರ್ಮೂಲಿ, ಬಂದನಿಕೆ
56.	<i>Ipomoea quamoclit</i> L.	Convolvulaceae	Cypress vine	ಕಾಮನಬಳ್ಳಿ, ಕೆಂಪು ಮೊಲ್ಲೆ.
57.	<i>Ipomoea leari</i> Paxt.	Convolvulaceae	Morning glory	ಮಂಜಾನೆ ಮಂದಾರ
58.	<i>Kalanchoe pinnata</i> L.	Crassulaceae	Life plant	ಕಾಡು ಬಸಳೆ, ನಾಯಿ ಪತ್ರ.
59.	<i>Momordica charantia</i> L.	Cucurbitaceae	Bitter gourd	ಹಾಗಲ ಕಾಯಿ
60.	<i>Cycas circinalis</i> Roxb.	Cycadaceae	Cycas	ಗೊಡ್ಡು ಈಚಲಮರ'
61.	<i>Zamia</i> Sp.	Cycadaceae	Zamia	ಜೆಮಿಯ
62.	<i>Cyperus alternifolius</i> L.	Cyperaceae	Umbrella plant	ಜೊಂಡುಗಿಡ
63.	<i>Dillenia indica</i> L.	Dilleniaceae	Elephant apple	ಕಲ್ಲೆಗ, ಬೆಟ್ಟದಕಣಗಲು
64.	<i>Acalypha hispida</i> Burm.	Euphorbiaceae	Red hot cat tail	ಅಕ್ಕಾಗೆಡ



65.	<i>Acalypha wilkesiana</i> Muell.	Euphorbiaceae	Acalypha	ಅಕ್ಕಾ
66.	<i>Croton</i> Sp.	Euphorbiaceae	Croton	ಕ್ರೋಟಾನ್
67.	<i>Emblica officinalis</i> Gaertn.	Euphorbiaceae	Goose berry	ಗುಡ್ಡದನೆಲ್ಲಿ
68.	<i>Euphorbia erythroclada</i> Boiss.	Euphorbiaceae	Euphorbia	ಯುಫೋರಬಿಯ
69.	<i>Euphorbia geneculata</i> Ort.	Euphorbiaceae	Euphorbia	ಯುಫೋರಬಿಯ
70.	<i>Euphorbia pulcherrima</i> Wild.	Euphorbiaceae	Lobster flower	ಯುಫೋರಬಿಯ
71.	<i>Euphorbia splendens</i> Boj.	Euphorbiaceae	Crown of thorns	ಮುಳ್ಳುಗಳ್ಳಿ
72.	<i>Euphorbia thymifolia</i> Linn.	Euphorbiaceae	Euphorbia	ಯುಫೋರಬಿಯ
73.	<i>Jatropha curcas</i> Linn.	Euphorbiaceae	Physic nut	ತುರುಕತ್ತಿ, ಕಾಡಬಿಡಲ, ಬೆಟ್ಟಹರಳು
74.	<i>Manihot esculenta</i> Crantz.	Euphorbiaceae	Tapioca plant	ಮರಗೆಣಸು
75.	<i>Miscodan</i> Sp.	Euphorbiaceae	Miscodan	ಮಿಸಕೋಡನಗಿಡ
76.	<i>Putranjivar oxburghii</i> .Wall. tent.	Euphorbiaceae	Putranjiva	ಪುತ್ರಂಜೀವಿ, ಕಾಲದಮನೆ
77.	<i>Ricinus communis</i> Linn.	Euphorbiaceae	Castor	ಬಿಡಲ
78.	<i>Sauropus androgyrans</i> Blume.	Euphorbiaceae	Multivitamin plant	ಜಿವಸತ್ವದಗಿಡ
79.	<i>Ocimum gratissimum</i> Linn.	Lamiaceae	Basil	ರಾಮ ತುಳಸಿ
80.	<i>Cinnamomum zeylanicum</i>	Lauraceae	True cinnamon	ದಾಲಚಿನ್ನಿ
81.	<i>Aloevera</i> Linn.	Liliaceae	Aloe	ಲೋಳಸರ
82.	<i>Asparagus gonoclados</i> Baker.	Liliaceae	Asparagus	ತಾವರಿ
83.	<i>Asparagus plumosus</i> Baker.	Liliaceae	Asparagus	ತಾವರಿ
84.	<i>Dracaena sanderiana</i> Hort.	Liliaceae	Dracaena	ಡ್ರಸಿನ
85.	<i>Ruscus aculeatus</i> L.	Liliaceae	Butcher's broom	ರಸ್ಕಸಗಿಡ
86.	<i>Yucca gloriosa</i> L.	Liliaceae	Adam's needle	ಅಡಮನಕುಟಿ
87.	<i>Lagerstroemia flosreginae</i> Retz.	Lythraceae	Pride of India	ನಂದಿ



88.	<i>Lagerstroemia indica</i> L.	Lythraceae	Crape myrtle	ನಂದಿ
89.	<i>Magnolia grandiflora</i> L.	Magnoliaceae	Magnolia	ಸಂಪಿಗೆ
90.	<i>Michelia champaka</i> L.	Magnoliaceae	White champaka	ಸಂಪಿಗೆ
91.	<i>Abelmoschu sesculentus</i> Moench.	Malvaceae	Lady's finger	ಭೆಂಡಿ
92.	<i>Abelmoschus manihot</i> Medik.	Malvaceae	Wild bhendi	ಕಾಡು ಭೆಂಡಿ
93.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	China rose	ದಾಸವಾಳ
94.	<i>Marsilea</i> Sp.	Marsileaceae (pteridophyte)	Marsilea	ನೀರು ಪುಳುಕುಪುರುಚಿ, ಗಣಪತಿ ಸೊಪ್ಪು
95.	<i>Azadirachta indica</i> Juss.	Meliaceae	Neem	ಬೇವು
96.	<i>Melia azedarach</i> L.	Meliaceae	Persian lilac, bastard cedar	ಹೆಬ್ಬೇವು, ಕಾಡುಬೇವು
97.	<i>Tinospora cordifolia</i> (Wild) J. Hooker and Thoms	Menispermaceae	Tinospora	ಅಮೃತ ಬಳ್ಳಿ
98.	<i>Albizziabek</i> Benth.	Mimosae	Siris tree	ದೊಡ್ಡ ಶಿರೀಷ
99.	<i>Leucaena leucocephala</i> (Lam.) de wit.	Mimosae	Subabul	ಸೂಬಾಬುಲ್
100.	<i>Samane asaman</i> (Jacq.) Merr.	Mimosae	Rain tree	ಮಳೆಮರ
101.	<i>Artocarpus communis</i> G. Forster.	Moraceae	Bread fruit tree	ಸೀಮೆ ಹಲಸು, ರೊಟ್ಟಿ ಹಲಸು
102.	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Jack fruit tree	ಹಲಸು
103.	<i>Ficus elastica</i> Roxb. Ex Hornem.	Moraceae	Indian Rubber tree	ಇಂಡಿಯಾರಬ್ಬರ ಮರ
104.	<i>Ficus carica</i> L.	Moraceae	Anjur	ಅಂಜೂರಾ
105.	<i>Ficus racemosa</i> L.	Moraceae	Cluster Fig	ಅತ್ತಿ ಹಣ್ಣು
106.	<i>Ficus krishnae</i> DC.	Moraceae	Krishna's Butter cup	ಕೃಷ್ಣನ ಬೆಣ್ಣೆ
107.	<i>Ficus pumila</i> L	Moraceae	Perching fig	ಪರಚಿಂಗ ಫಿಗ್
108.	<i>Ficus religiosa</i> L.	Moraceae	Peepal tree	ಅಶ್ವತ್ಥ ಮರ, ಅರಳಿ ಮರ
109.	<i>Morus alba</i> L.	Moraceae	White mulberry	ಹಿಪ್ಪೋನರಳೆ, ರೇಶ್ಮಿ ಗಿಡ



110.	<i>Moringa oleifera</i> Lamk.	Moringaceae	Drum stick	ನುಗ್ಗೆ ಮರ.
111.	<i>Heliconia bihai</i> Linn.	Musaceae	Heliconia	ಹೆಲಿಕೊನಿಯಾ
112.	<i>Musa paradisiacal</i> L.	Musaceae	Banana	ಬಾಳೆಹಣ್ಣು
113.	<i>Ravenala madagascariensis</i> Sonn.	Musaceae	Traveler's tree	ಪ್ರಯಾನಿಕರ ಮರ
114.	<i>Myristica fragrans</i> Houtt.	Myristicaceae	Nutmeg	ಜಾಯಿಕಾಯಿ
115.	<i>Callistemon</i> sps.	Myrtaceae	Bottle brush	ಚೀಲ
116.	<i>Couroupita guinensis</i> Aubl.	Myrtaceae	Cannon ball tree	ನಾಗಲಿಂಗ ಪುಷ್ಪಾ
117.	<i>Eucalyptus globules</i> La bill.	Myrtaceae	<i>Eucalyptus</i>	ನೀಲಗಿರಿ ಮರ
118.	<i>Syzygium aromaticum</i> Merill & Perry	Myrtaceae	Clove	ಲವಂಗ
119.	<i>Syzygium cumini</i> Skeels.	Myrtaceae	Black plum	ಜಂಬು ನೇರಳೆ
120.	<i>Psidium guajava</i> L.	Myrtaceae	Guava	ಪೆರಲಾ, ಬಿಕ್ಕೆ, ಸಿಬೇ ಹಣ್ಣು
121.	<i>Boerhaavia repanda</i> Willd.	Nyctaginaceae	Punarnava	ರಕ್ತ ಪುನರನವ
122.	<i>Mirabilis jalapa</i> Linn.	Nyctaginaceae	4 'O'Clock plant	ಮದ್ಯಾನ್ಹ ಮಲ್ಲಿಗೆ
123.	<i>Nymphaea lotus</i> Var Pubescence Willd.	Nymphaeaceae	White lotus	ನೈದಲೆ, ಕುಮುದಿನಿ.
124.	<i>Nymphaea lotus</i> Var. rubra. Roxb.	Nymphaeaceae	Pink/purple Indian water lily	ಕೆಂದವರೆ
125.	<i>Ochnaserrulata</i> (Hochst) Walpers	Ochnaceae	Ochna	ಕನಕ ಚಂಪಾ
126.	<i>Nyctanthes arbortristis</i> Linn.	Oleaceae	Night Jasmine	ಪಾರಿಜಾತಾ
127.	<i>Vanda Parviflora</i> Lindl.	Orchidaceae	Orchid	ಆರ್ಕಿಡ ಹೂ
128.	<i>Oxalis corniculata</i> Linn.	Oxalidaceae	Indian sorrel	ಪುಳ್ಳಂಪುರುಚಿ, ಹುಳಿಸೊಪ್ಪು
129.	<i>Oxalis acetosella</i> L.	Oxalidaceae	Indian sorrel	ಸೀಮೆ ಬೆಳ್ಳೊಳ್ಳಿ
130.	<i>Butea monosperma</i> (Lamk.) Taub.	Leguminosae	Flame of the forest	ಮುತ್ತಲ, ಮುತ್ತುಗ
131.	<i>Clitoria turnatea</i> Linn.	Leguminosae	Clitoria	ಗೊಕರ್ಣಾ, ವಿಷ್ಣುಕಂಠಿ
132.	<i>Dalbergia latifolia</i> Roxb.	Leguminosae	Rose wood	ಬೀಟೆಮರ



133.	<i>Erythrina criasta-galli</i> L.	Leguminosae	Cockspur coral tree	ಕಾರಲ ಮರ
134.	<i>Pongamia pinnata</i> Pierre.	Leguminosae	Indian beach tree	ಹುಲಗಲಾ,ಹೋಂಗೆ ಮರ
135.	<i>Piper nigrum</i> L.	Piperaceae	Black pepper	ಕರಿಮಣಿಸು,
136.	<i>Pinus roxburghii</i> Sorg.	Pinaceae(Gymno sperms)	Pine tree	ಸೋಚೀಪರ್ಣಿ
137.	<i>Nephrolepis</i> sps.	Polypodiaceae (Pteriophyte family)	Sword fern	ಜರಿಗಿಡಾ
138.	<i>Muehlenbeckia platyclodus</i> Meissn.	Polygonaceae	Centipede plant	ಸೆಂಟಿಪಿಡೆಗಿಡಾ
139.	<i>Bombusa vulgaris</i> Schrad.	Poaceae	Green bamboo	ಹಸಿರು ಬಿದಿರು
140.	<i>Sorghum vulgare</i> Pers.	Poaceae	Jowar	ಬಿಳಿ ಜೋಳಾ
141.	<i>Saccharum officinarum</i> L.	Poaceae	Sugar cane	ಕಬ್ಬು
142.	<i>Zea mays</i> L.	Poaceae	Indian corn, maize	ಗೊವಿನ ಜೋಳ.ಮಸುಕಿನ ಜೋಳಾ
143.	<i>Eichhornia crassipes</i> (Mort.) Solms.	Pontederiaceae	Water Hyacinth	ಅಂತರ ಗಂಗೆ
144.	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	white lead wort	ಬಿಳಿಚಿತ್ರಮುಲ
145.	<i>Grevillea robusta</i> R. Br.	Proteaceae	Silver oak	ದೇಶಿಟಕಮರ
146.	<i>Punica granatum</i> L.	Punicaceae	Pomegranate	ಡಾಳಿಂಬೆ
147.	<i>Clematis gouriana</i> Roxb, Hort, Beng.	Ranunculaceae	Virgin's bower	ತಲೆಜಾದರಿ
148.	<i>Zizyphus jujube</i> Lamk.	Rhamnaceae	Indian plum	ಬೇರ್
149.	<i>Rosa</i> sps.	Rosaceae	Rose	ಗುಲಾಬಿ
150.	<i>Coffea Arabica</i> L.	Rubiaceae	Coffee plant	ಕಾಫಿಗಿಡಾ
151.	<i>Ixora coccinea</i> L.	Rubiaceae	Ixora	ಕೆಂಪೊ ಕಪಲ
152.	<i>Ixora polyantha</i> Wight.	Rubiaceae	Ixora	ಮಾಲೆಹುವು
153.	<i>Mussaendafrondosa</i> L.	Rubiaceae	Mussaenda	ಮುಸ್ಸೆಂಡಾ
154.	<i>Citrus medica</i> L.var. acida.	Rutaceae	Sour lime, lemon, acid lime	ಲಿಂಬು



155.	<i>Feronia elephantum</i> Corr.	Rutaceae	Wood apple	ಬಲ್ಲಪತ್ರ
156.	<i>Murrayakoenigii</i> Spreng.	Rutaceae	Curry-leaf plant	ಕರಿ ಬೇವು
157.	<i>Ruta graveolens</i> Linn.	Rutaceae	Satap plant	ನಾಗದಾಳಿ, ಸದಾಪು ಗಿಡ
158.	<i>Azolla pinnata</i> L.	Pteridophyte	Azolla	ಅಜೋಲಾ
159.	<i>Santalum album</i> L.	Santalaceae	Sandal wood	ಚಂದನ
160.	<i>Sapindus laurifolius</i> Vahl.	Sapindaceae	Soap nut	ರೀಟಾ
161.	<i>Achrussapota</i> Linn.	Sapotaceae	Sapota	ಚಿಕ್ಕು
162.	<i>Hydrangea</i> sps.	Saxifragaceae	Hydrangea	-----
163.	<i>Datura suaveolans</i> L.	Solanaceae	Tree datura, Angel's triumph	ಧತುರಾ
164.	<i>Solanum macranthum</i> Dun.	Solanaceae	Brinjal tree	ಮರಬದನೆ
165.	<i>Dombeya acutangula</i> L.	Sterculiaceae	Wedding flower	ಧೋಂಬೆ ಹೂವು
166.	<i>Grewia tiliaefolia</i> Vahl.	Tiliaceae	Grewia	ತಡಸಲು
167.	<i>Trema orientalis</i> L. Blum.	Ulmaceae	Charcoal tree	ಗೋಕುಳ
168.	<i>Pileama crophylla</i> Liebm.	Ulmaceae	Gunpowder plant	ಬುಡಿಕೇರಿ ಮರ
169.	<i>Clerodendrum thomsome</i>	Verbenaceae	Clerodendrum	ಇಬ್ಬನಿ
170.	<i>Clerodendrum fragrans</i> R. Br.	Verbenaceae	Clerodendrum	ಮ್ಯಸುರ ಮಲ್ಲಿಗೆ

171.	<i>Clerodendrum inermae</i> (L) Gaertn.	Verbenaceae	Clerodendrum	ವಿಷಮದಾರಿ
172.	<i>Duranta plumier</i> Jacq.	Verbenaceae	Golden dewdrop, forgot-me-not	ದುರಂಟಾ
173.	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Gmelina	ಶ್ರೀಪರ್ಣಿ
174.	<i>Lantana camera</i> Var, <i>aculeata</i> , Moldenke.	Verbenaceae	Lantana	ಚದುರಂಗಾ
175.	<i>Lantana indica</i> Roxb. Var.	Verbenaceae	Lantana	ಚದುರಂಗ
176.	<i>Stachytarpheta mutabilis</i> Vahl.	Verbenaceae	Stachytarpheta	ಕಾಡುಉತ್ತರಾನಿ
177.	<i>Tectona grandis</i> L.	Verbenaceae	Teak wood	ಸಾಗವಾನಿ ಮರ
178.	<i>Vitex negundo</i> Linn.	Verbenaceae	Chaste tree	ಕರಿಲಕ್ಕಿ
179.	<i>Vitis quadrangularis</i> Wall.	Vitaceae	<i>Vitis</i>	ಮಂಗುಟಿ ಬಳ್ಳಿ
180.	<i>Alpinia galangal</i> Swartz.	Zingiberaceae	Shell flower	ಗಂದಮುಲ
181.	<i>Elettaria cardamomum</i> Maton.	Zingiberaceae	Cardamom	ಏಲಕ್ಕಿ
182.	<i>Allamanda cathartica</i> L.	Apocynaceae	golden trumpet	ಅರಸಿನ್ನೂ
183.	<i>Strelitzia reginae</i>	<u>Strelitziaceae</u>	Bird-of-paradise/ Crane Flower	-----
184.	<i>Hamelia patens</i>	<u>Rubiaceae</u>	Fire bush	ತಾಮ್ರ ಪುಷ್ಪ
185.	<i>Ixora coccinea</i> L.	Rubiaceae	Dwarf Ixora /Ixora/ Jungle geranium	ಇಕ್ಸೋರ
186.	<i>Musa velutina</i>	<u>Musaceae</u>	Pink banana	ಗುಲಾಬಿ ಬಾಳೆಹಣ್ಣು
187.	<i>Pseudocalymma alliaceum</i>	Bignoniaceae	Garlic creeper	ಬೆಳ್ಳುಳ್ಳಿ
188.	<i>Cupressus macrocapra</i> L.	Cupressaceae	Goldcrest Wilma	-----



189.	<i>Ficus arica</i> L.	Moraceae	Fig	ಅಂಜುರ
190.	<i>Areca catechu</i> L.	Arecaceae	Areca nut/Betel nut	ಅಡಿಕೆ
191.	<i>Phyllanthu semblica</i> L.	Euphorbiaceae /Phyllanthaceae	Amla /Indian gooseberry	ನೆಲ್ಲಕಾಯಿ
192.	<i>Malus domestica</i> Borkh.	Rosaceae	Apple	ಸೇಬು
193.	<i>Myristica fragrans</i> Houtt.	Myristicaceae	Nutmeg	ಜಾಯಿಕಾಯಿ
194.	<i>Thuja occidentalis</i> L.	Cupressaceae	Eastern white cedar	-----
195.	<i>Stevia rebaudiana</i>	Asteraceae	Sugar leaf	-----

## Campus Fauna

Species present around each of the building locations were assessed. Places such as in and around the college vicinity, in the soil and on the vegetation around the college were checked and noted.

### List of Avian fauna

Sl. No.	Scientific name	Common name
01	<i>Haliastur indus</i>	Brahminy kite
02	<i>Psittacula krameri</i>	Rose ringed Parrot
03	<i>Turdus migratorius</i>	Robin birds
04	<i>Motacilla maderaspatensis</i>	Wagtail
05	<i>Hirundo rustica</i>	Barn Swallow
06	<i>Halcyon smyrnensis</i>	Kingfisher
07	<i>Pycnonotus cafer</i>	Red- vented Bulbul
08	<i>Pycnonotusjocosus</i>	Red whiskered Bulbul
09	<i>Athena brama</i>	Owl
10	<i>Cuculus canorus</i>	Cuckoo
11	<i>Columba livia</i>	Pigeon
12	<i>Milvus migrans</i>	Black kite
13	<i>Dicrurum acrocercus</i>	Drongo
14	<i>Ocyce rosbirostris</i>	Grey hornbill
15	<i>Phylloscopus fuscatus</i>	Warblers
16	<i>Plegadis falcinellus</i>	Ibis
17	<i>Psilopogonhaema cephalus</i>	Coppersmith Barbet
18	<i>Centropus sinensis</i>	Crow Pheasant
19	<i>Corvus splendens</i>	House Crow
20	<i>Passer domesticus</i>	House Sparrow
21	<i>Parus scinereus</i>	Great Tit
22	<i>Leptocoma zeylonica</i>	Purple Rumped sunbird
23	<i>Orthotomus sutorius</i>	Tailor bird
24	<i>Oriolus kundoo</i>	Oriole
25	<i>Pericrocotus speciosus</i>	Scarlet minivet
26	<i>Egretta garzetta</i>	Common Egret
27	<i>Ardeola grayii</i>	Heron
28	<i>Acridothera tristis</i>	Common Myna
29	<i>Spilopelia achinensis</i>	Dove
30	<i>Merops orientalis</i>	Little Green bee-eaters
31	<i>Lanius schach</i>	Long tailed Shriek



32	<i>Saxicola caprata</i>	Bush Chat bird
33	<i>Coracias benghalensis</i>	Indian Roller
34	<i>Ploceus philippinus</i>	Baya Weaver Bird
35	<i>Upu paepops</i>	Hoopoe
36	<i>Lonchura punctulata</i>	Scaly-breasted munia
37	<i>Ceryl erudis</i>	Pied Kingfisher
38	<i>Hiero coccyxvarius</i>	Common Hawk Cuckoo

### List of Insects

Sl. No.	Scientific name	Common name
01	<i>Scaraba eusviettei</i>	Beetles
02	<i>Danaus plexippus</i>	Monarch Butterfly
03	<i>Apis florae</i>	Honey bees
04	<i>Drosophila malanogaster</i>	Drosophila
05	<i>Melanoplus femurrunbrum</i>	Red legged Grass hopper
06	<i>Acheta domesticus</i>	Cricket
07	<i>Coccinella septempunctata</i>	Ladybug
08	<i>Cercyonis pegala</i>	Common wood-nymph butterfly
09	<i>Danaus genutia</i>	Common Tiger butterfly

### List of Mammals

Sl. No.	Scientific name	Common name
01	<i>Tamias traitus</i>	Squirrel
02	<i>Pteropus giganteus</i>	Bat
03	<i>Herpestes edwardsii</i>	Indian grey mongoose

### List of Reptiles

Sl. No.	Scientific name	Common name
01	<i>Calotes versicolor</i>	Garden lizard
02	<i>Calotes zeylanicus</i>	Chameleon
03	<i>Ptyas mucosa</i>	Indian Rat Snake
04	<i>Naja naja</i>	Indian Cobra

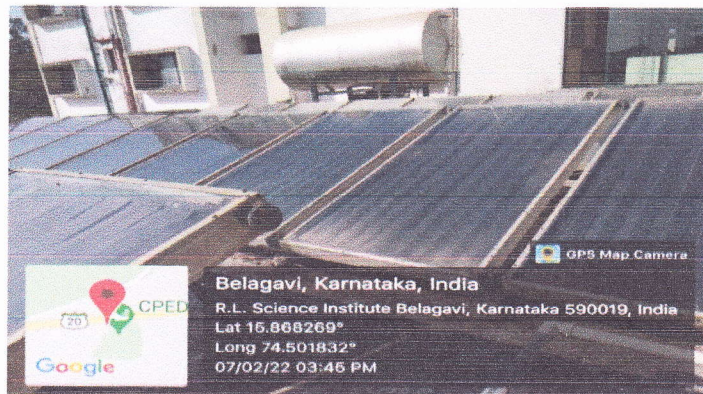
## ENERGY MANAGEMENT

It is the process of tracking and optimizing energy consumption to conserve usage. There are few steps for the process of energy management: Collecting and analyzing continuous data. Set points and flow rates to improve energy efficiency. The power management system mainly consists of the maximum power point tracking (MPPT), the battery management and the power conversion stages. The MPPT stage attempts to obtain the maximum power available from the solar cell panels.

LEDs use 75% less energy than Incandescent bulbs because diode light is much more efficient, power-wise, than filament light. At low power levels, the difference is even larger.

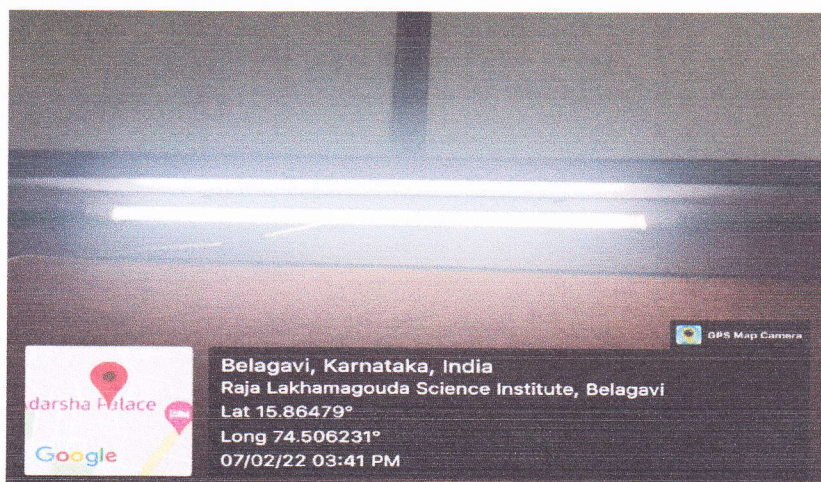
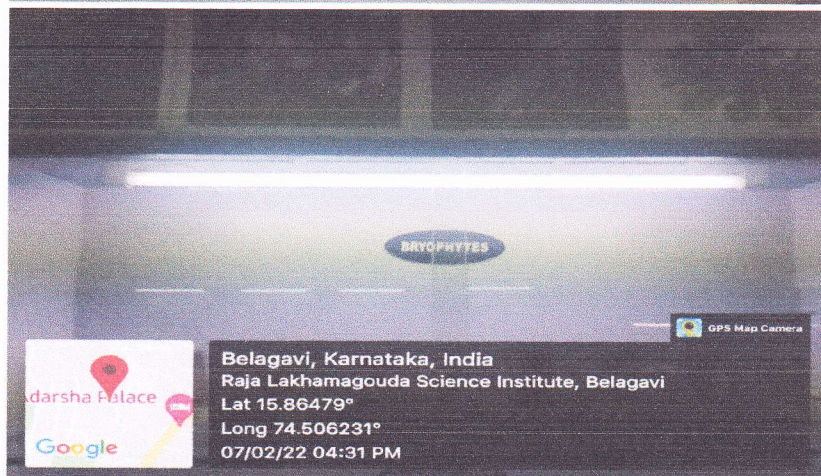
- **USE OF RENEWABLE ENERGY RESOURCES**

- **Solar Panels**





○ LED Lamps





Our Institution has initiated environmental consciousness and sustainability/alternate energy initiatives.

Percentage of power requirement of the College met by the renewable energy sources:

### Solar water heaters

Sl. No	Hostel	No. of Solar heaters	Capacity in litres	Total litres
1	Boy's	01	3000	3,000
2	Ladies	03	4000+3000+3500	10,500
	<b>Total</b>	<b>04</b>		<b>13,500</b>

Sl. No.	Renewable energy sources	Energy generated in units
1	<b>Solar water heaters</b>	
	The energy generated from Solar panel in Kilo Joule	$13,500 \times 4.2J \times (60^{\circ}C - 25^{\circ}C) = 19,84,500 \text{ kJ}$
	The energy generated from Solar panel in Kilo Watts	$19,84,500 \text{ kJ} / 0.8 = 24,80,625 \text{ kJ} = 689.06 \text{ KW h}^{-1}$ (Efficiency is 80%)
	Per day unit of electrical energy saved	$689.06 \text{ KW h}^{-1}$
	Power requirement met by Solar water heater	2,51,506.9 KW
	<b>Total Power required</b>	$2,51,506 \text{ KW} + 7,79,916 \text{ KW} + 60,804 \text{ KW} = 10,92,226 \text{ KW}$
	Percentage of Power to meet a renewable energy	<b>23.02%</b>
2	<b>Solar lamps</b>	
	No. of Solar light units	10 (600W)
	Power requirement met by Solar lamps	7.2 KW
	Total Power required	60,810 KW
	Percentage of Power met by solar lamp	0.0011 %
	Total renewable energy	$23.02 + 0.0011 = 23.0211 \%$
3	<b>Use of LED bulbs and tubes</b>	
	No. of LED bulbs and tubes	802
	Lightning Power requirement through LED bulb	224.16KW
	Total Lightning Power requirement	8,59,068KW
	Percentage of power requirements met through LED bulbs	<b>0.026 %</b>



## SOLID WASTE MANAGEMENT

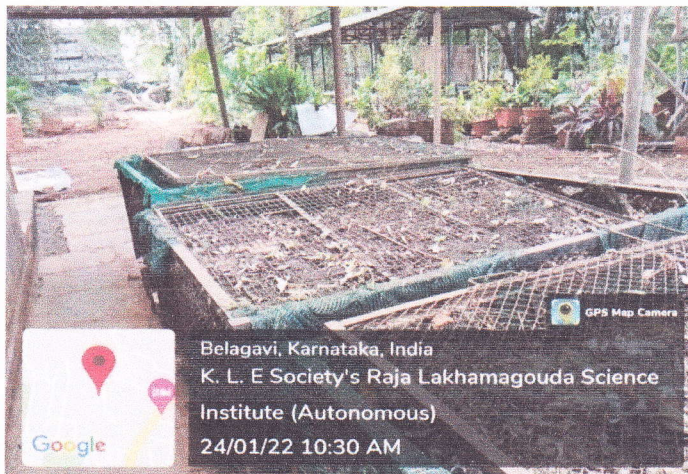
The college has a sprawling green campus and gives top priority to keep the campus clean and eco- friendly. Separate bins are kept at different places in the college campus. The solid waste is regularly collected by the garbage town council. Organic waste is converted into bio-fertilizer by the vermi-composting unit. After the vermi-compost is ready in due course it is harvested and used for plants on the campus. Dry waste mainly leaf litter is allowed to decompose systematically over a period.

### ○ Collection





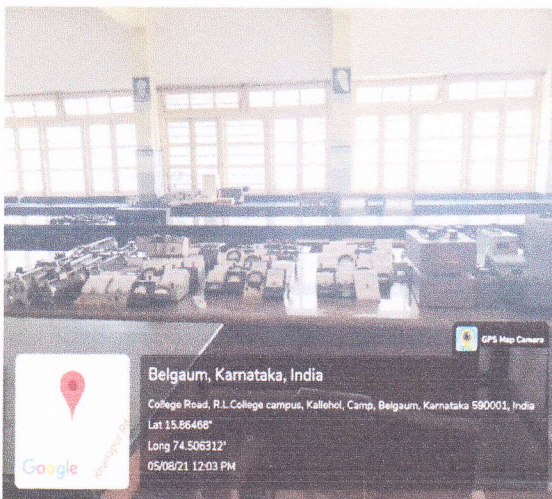
○ Vermicomposting unit





## E-WASTE MANAGEMENT

Every year various Departments of the Institution list outs non-working laboratory equipments, computers, monitors, printers, batteries etc, as a scrap materials. These equipments as e-waste will be kept in a common room & are sold on systematic basis following the rules of purchase committee. All the sold materials are then ruled out from the dead stock register for future records & for safe recycling. The college is planning to create an e-museum, where the damaged parts of computers and other devices shall be displayed, which will help the students to realize and understand the internal structure of the devices. The e-waste is scientifically carried out by licensed vendor.





## WATER MANAGEMENT

Wells and other water resources in the college are well maintained. The college has rain water harvesting unit where in rain water is collected, stored & distributed at times. This will help to generate awareness about the importance of water conservation.

### PHOTOS OF WELL(WATER RESERVOIR) ON THE CAMPUS






**Water bottle refilling stations** - One of the most important and best green initiatives of our college campus is the installation water bottle refilling station. Plastic water bottles are one of the most hazardous items for the environment, so we promote students to use stainless steel water bottles & this would drastically reduce the use of disposable or single use plastic bottles.






### BILLS OF WATER REFILLING STATION


**K. L. E. SOCIETY'S  
RAJA LAKHAMAGOUNDA SCIENCE INSTITUTE,  
BELAGAVI-590 001.**

Cheque No: 908365                      Voucher No: 1159  
 Date: 12/07/2021                      Date: 12/07/2021  
 Name: Subash Kojale

RECEIVED from the Principal, Raja Lakhamagouda Science Institute, Belagavi a sum  
 of Rs. 400/- (in words) Four hundred only  
 on account of water cooler maintenance charge month  
of Mar-April-2021

Assistant                      Superintendent                      Principal                      Signature of Recipient  
                                                                  Subash Kojale



K. L. E. SOCIETY'S  
RAJA LAKHAMAGOURA SCIENCE INSTITUTE,  
BELAGAVI-590 001.

Cheque No. 908 365

Voucher No. 159

Date 12/01/2021

Date 12/01/2021

Name Subekha Kojulog

RECEIVED from the Principal, Raja Lakhmagouda Science Institute, Belagavi a sum  
of Rs. 400/- (in words) Four hundred only

on account of Water cooler maintenance charge  
month of May June - 2021

Accountant

Superintendent

Principal

Signature of Recipient



K. L. E. SOCIETY'S  
RAJA LAKHAMAGOURA SCIENCE INSTITUTE,  
BELAGAVI-590 001.

Cheque No. 908 386

Voucher No. 195

Date 19/01/2021

Date 19/01/2021

Name Shri. Sanjay Patil

RECEIVED from the Principal, Raja Lakhmagouda Science Institute, Belagavi a sum  
of Rs. 600/- (in words) Six hundred only

on account of Tanks cleaning charges of our  
College campus.

Accountant

Superintendent

Principal

Signature of Recipient

7620556001





K. L. E. SOCIETY'S  
**RAJA LAKHAMAGOURA SCIENCE INSTITUTE,**  
 BELAGAVI-590 001.

410  
 411  
 412

Cheque No. 910205

Voucher No. \_\_\_\_\_

Date 08/10/2021

Date 08/10/2021

Name Subash Koushagi

RECEIVED from the Principal, Raja Lakhamagouda Science Institute, Belagavi a sum  
 of Rs. 600/- (in words) Six Hundred only

on account of Water cooler Maintenance charges  
for the month of July, August and September  
2021. [Rs 200/- per month]

*[Signature]*

*[Signature]*  
 Principal

*[Signature]*  
 Principal

*[Signature]*  
 Secretary of Institute

## Plastic free zone

Plastic pollution is an environmental emergency. The impact that plastic usage has on ecosystems and the climate is disastrous. The environment is getting polluted at the never before pace sparing no mediums due to plastics. So it is becoming a key responsibility of every citizen of our country not just to “Say No to Plastics” but also to create awareness among the community as and make pollution free place for our future generations. This is why our involvement in the no plastic campaign significantly contributes towards creating a no plastic campus.



## AWARENESS PROGRAMS

Major programs conducted in the campus during the last three years are:

1. Nature camps
2. Observation of Environment Day, Ozone day etc.
3. Organizing Webinars/ Seminars and workshops on awareness and conservation of environment
4. Seed ball activity
5. Sapling, Planting etc.



## PHOTO GALLERY



## Nature Camps

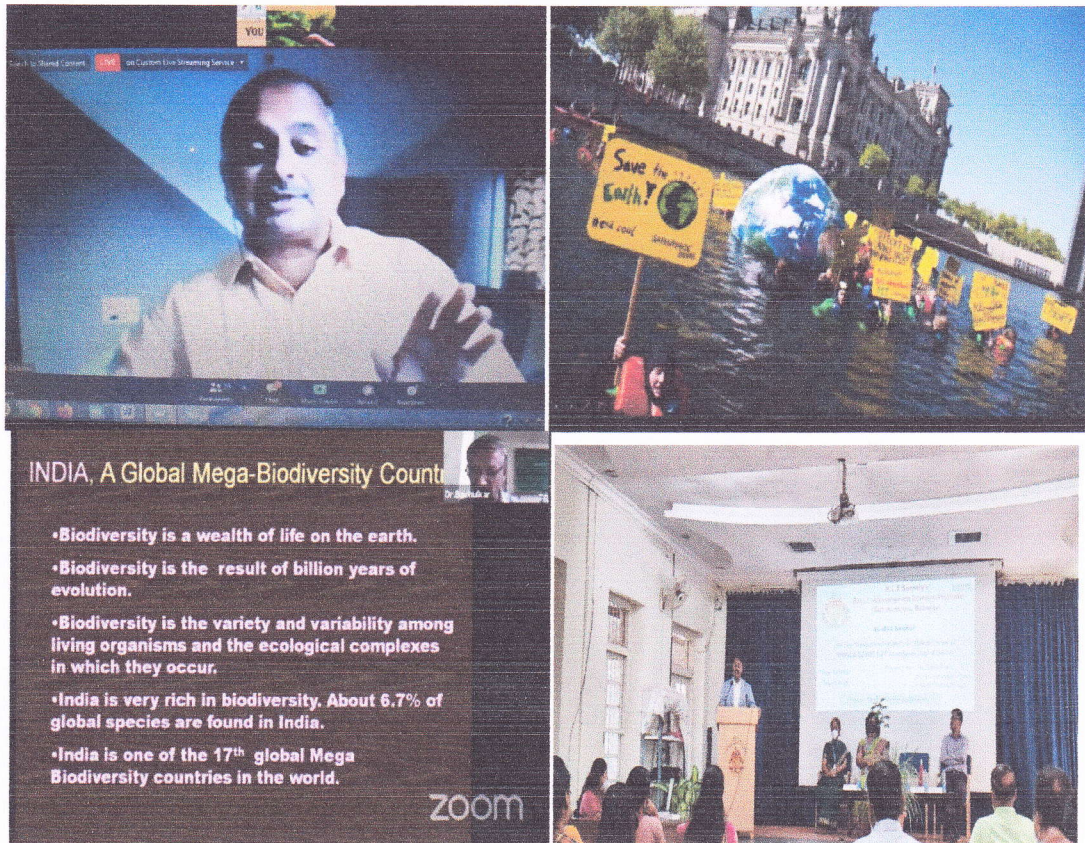


## Plantation





## Observation of World Environment Day



**Webinars/Seminars organized in creating the awareness about conservation of Environment**



**Seed ball activity**



## **SUMMARY**

Green audit at times makes the campus authority to understand the effect of implications towards greenery and conservation of natural resources. The management and other authorities are keen to make the campus a green one. We are making learning process by practical approach as faculty members of Green monitoring cell are aware about the commitment towards the Institution.

The campus thus functions as an eco-friendly approach that enables the student community to develop a genuine approach towards conservation of nature & the natural resources (Water, Energy etc,)

RLSI has conducted a “Green Audit” every year to monitor the green practices followed by the Institute and to understand whether the Institute is on the track of sustainable development. Hope the audit finding would help to implement better plan to execute & achieve a complete green campus.

## **CONCLUSION**

Our Institution puts into practice the optimization of energy consumption to conserve & improve the energy efficiency. Maximum power point tracking stage attempts to obtain the power available from the solar cell panels. LEDs are used in place of Incandescent bulbs as these consume less energy and are more efficient. The solid waste management is done on regular basis. Vermicomposting unit has been well maintained for the production of Bio-fertilizers which is harvested and later used as organic manure for the plants on Campus. E-waste management is carried out by enlisting the non-functional electronic equipments and storing at a E-waste room and scientifically disposed in collaboration with licensed vendor. Water resource management is a part of planning, developing, distributing and managing the optimum use of water resources. Rain water harvesting units are well maintained & distribution of water is on need basis.



## RECOMMENDATIONS

1. Paperless documentation
2. Integrate Digitalization to improve efficiency & facilitate better informational exchange.
3. Set up waste water recycling unit where the recycled water can be used for gardening on the campus.
4. Install Chemical liquid wastewater treatment plant.
5. Organize Outreach Programmes for Public on awareness of environmental management system and sustainable practices.
6. Ensure participation of students and teachers in local environmental issues.
7. Frame an eco-friendly and energy saving Purchase policy.
8. Introduce eco-friendly add-on courses which are income generating to all interested students.





ಕರ್ನಾಟಕ ಅರಣ್ಯ ಇಲಾಖೆ

ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿಗಳ ಕಛೇರಿ, ಪ್ರಾದೇಶಿಕ ವಲಯ, ಬೆಳಗಾವಿ-590016  
OFFICE OF THE RANGE FOREST OFFICER, BELAGAVI RANGE,  
BELAGAVI.

E.Mail: [rfobelagavi@gmail.com](mailto:rfobelagavi@gmail.com)

R.No:RFO/Belagavi/Green Audit/2021-22/1582

Date: 18/01/2022


**-:CERTIFICATE:-**

\* \* \* \*

This is Certify that The Range Forest Officer along with Deputy Range Forest Officer and staff of Belagavi Range Belagavi has inspected and Conducted Green Audit on 18 January 2022, at RAJA LAKHAMAGOUDA SCIENCE INSTITUTE, BELAGAVI as per list of trees enclosed.

Place: Belagavi

Date: 18-01-2022

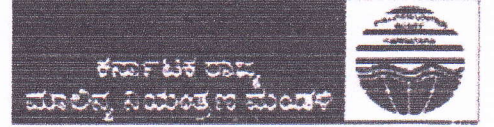
  
**Range Forest Officer**  
Belagavi Range, Belagavi.



An ISO 9001:2015 and BS OHSAS 18001:2007 Certified Laboratory

Regional Office : Belagavi-1  
Karnataka State Pollution Control Board  
#1, Main Road, Auto Nagar,  
Kanbargi Industrial Area, Belagavi-590 015  
Telefax : 0831-2469121

ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ : ಬೆಲಗಾವಿ-೧  
೧ ನೇ ಮುಖ್ಯ ರಸ್ತೆ, ಆಟೋ ನಗರ,  
ಕಾನ್ಬರ್ಗಿ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶ,  
ಬೆಲಗಾವಿ-೫೯೦೦೧೫  
ತೆಲೆಫಾಕ್ಸ್:೦೮೩೧-೨೪೬೯೧೨೧



towards a cleaner Karnataka

**ANALYSIS REPORT : WATER**  
**Regional Laboratory, Belagavi.**

NO: PCB/BGV-1/LAB/AR/2021-22/ 884 Date: 23/2/22  
NAME OF THE STATION : R L Science Institute, Belagavi.  
SAMPLE COLLECTED BY : College Authority.  
DATE OF COLLECTION : 17-01-2022.  
RECEIVED DATE : 17-01-2022.  
PARTICULARS OF SAMPLE : 01-Open well water sample. 02-Tap Water 03-Filter Water

Sl No.	PARAMETERS	UNITS	Std Limit IS 10500		1	2	3
			*DL	**PL			
1	pH	-	6.5-8.5	NR	6.66	5.94	6.13
2	Dissolved Solids	mg/l	500	2000	160	160	160
3	Conductivity	uMhos/cm	-	-	258	250	260
4	Chlorid as Cl	mg/l	250	1000	36	60	56
5	Sulphate as SO <sub>4</sub>	mg/l	200	400	6	2	1
6	Hardness	mg/l	200	600	96	92	100
7	Calcium as Ca	mg/l	75	200	21	19	21
8	Magnesium as Mg	mg/l	30	100	11	11	12
9	Nitrate as NO <sub>3</sub>	mg/l	45	NR	1.7	3.5	3.78
10	Iron as Fe	mg/l	0.3	NR	0.008	0.071	0.012
11	Fluoride as F	mg/l	1	1.5	0.136	0.142	0.132
12	Chromium as Cr <sup>+6</sup>	mg/l	0.05	NR	BDL	BDL	BDL
13	Alkalinity	mg/l	200	600	88	80	68
14	Turbidity	ntu	1	5	0.4	2.8	0.3

**Inference:**

Note 1. Below Desirable Limit- Good Quality-Green 2. Between Desirable Limit to Permissible Limit- Moderate Quality-Orange 3. Above Permissible Limit- Poor Quality-Red. 4. Standards are compared with IS 10500 Drinking Water Standards 5. The above results pertains only to the sample tested. 6. The method of analysis is as per the Standard Method for the examination of Water and Waste water, APHA, AWWA, WPCF, USA and Indian Standards Publication. 7. ND= Not Detected, BDL= Below Detection Limit, 8. DL= Desirable Limits, \*PL= \*\*Permissible Limits ( in the absence of alternate source). NR= Not Relaxable.

Analysed By

Laboratory Head  
Scientific Officer  
Regional Laboratory  
Karnataka State Pollution Control Board  
Belgaum.





**Visit of Range Forest officer and officials during the conduct of Green Audit**

## **FUTURE PLANS**

- 1) Planting more number of medicinal plants and to introduce certificate course on medicinal plants
- 2) To establish a nursery to generate income
- 3) Plantation of exotic species in and around Belagavi
- 4) To Set up Chemical liquid wastewater treatment plant
- 5) Organizing programmes on awareness of waste & water management

*Caup.*

IQAC- Coordinator

*Spaw*  
Principal