

L.S. RAHEJA COLLEGE OF ARTS & COMMERCE.

Green Audit Report 2019-20



L.S. RAHEJA COLLEGE OF ARTS & COMMERCE.

GREEN AUDIT REPORT 2019-20

Submitted to:

L.S. Raheja College of Arts & Commerce.

**Corporation Bank, STY Relief Rd,
Santacruz, Mumbai, Shastri Nagar,
Maharashtra 400054**

Submitted

by:



**Sanjeevani S3
Malad, Mumbai-95.**

Date

February 2021



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*Received
Anurag
IPAC*

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Acknowledgement

We are writing this to express our sincere thanks to the respected Principal Dr. Debajit Sarkar for all inputs and suggestions.

For their assistance with this audit, thanks and appreciation is extended to:

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Dr. Samya Shinde

We would also like to thank those people who directly or indirectly helped us in collection of data, including the administrative department.

Our sincere gratitude to the gardeners and the non-teaching staff.

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1. 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. Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. 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. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. 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. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

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2. OBJECTIVES:

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. The college has been putting efforts to keep our environment clean since its inception. But the auditing of this non-scholastic effort of the college has not been documented. 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. The main objectives of carrying out Green Audit are:

1. To map the Geographical Location of the college
2. To document the floral and faunal diversity of the college.
3. To record the meteorological parameter of Mumbai where college is situated.
4. To introduce and aware students to real concerns of environment and its sustainability.

2.1 Methodology:

The purpose of the green audit of L.S. Raheja College of Arts & Commerce. Is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology include: 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. Some data have also been taken from the students' initiative works.

2.2 About the College:

Sadhana Education Society's L. S. Raheja College of Arts & Commerce is a premier educational institute situated in the heart of Mumbai's suburbs, Santacruz (West). It is a Gujarati-speaking linguistic minority institution offering quality-oriented education from higher secondary to doctoral program.

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Its parent body Sadhana Education Society was established in 1961. Since its inception, the Society is dedicated to the cause of education. With the mission to spread education in all its aspects and phases, across various sections of the society and to promote research and nurture the Gujarati culture, the Society founded its first institute – Smt. Kapila Khandvala College of Education in 1961. Thereafter, it instituted Malti Jayant Dalal Primary School and Malti Jayant Dalal High School in 1968. In 1975, the Society also instituted Malati Jayant Dalal Nursery School and S.B. Kindergarten. Subsequently, to promote the all-round development of students and to facilitate education from K.G. to Ph.D. under one banner, the Society instituted L. S. Raheja College of Arts & Commerce in 1980.

The College is devoted to the holistic development of its students, inspires them to participate and be actively involved in various co-curricular and extra-curricular activities. Students are encouraged to register with several statutory and voluntary associations like NCC unit, NSS unit, DLLE department, Marathi VangmayMandal, etc. Students of L. S. Raheja College have showcased their talents in various inter-collegiate and intra-collegiate programs and have won several accolades. The students also organize inter-collegiate programs like Unmesh, Udaan, Parallax and Retake.

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3. OBSERVATIONS:

3.1 Geographical location:

L.S. Raheja College of Arts & Commerce is within the geo-position between latitude N 19.0856 and longitude E 72.8327 in Mumbai, Maharashtra, India. It encompasses an area of about approximately 1.9 acres.

3.2 Tree diversity of L.S. Raheja College of Art & Commerce, Mumbai:

The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these tree species are planted in different periods of time through various plantation programs organized by the authority and have become an integral part of the college.

The trees of the college have increased the quality of life, not only the college fraternity but also the people around of the college in terms of contributing to our environment by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife, controlling climate by moderating the effects of the sun, rain and wind. Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Leaf – covered branches keep many animals, such as birds and squirrels, out of reach of predators. Different species display a seemingly endless variety of shapes, forms, texture and vibrant colors. Even individual trees vary their appearance throughout the course of the year as the seasons change. The strength, long lifespan and regal stature of trees give them a monument – like quality. They also remind us the glorious history of our institution. We often make an emotional connection with these trees and sometime become personally attached to the ones that we see every day. A thick belt of large shady trees in the periphery of the college have found to be bringing down noise and cut down dust and storms.

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**Following are the tree
premises:**

species present in the college

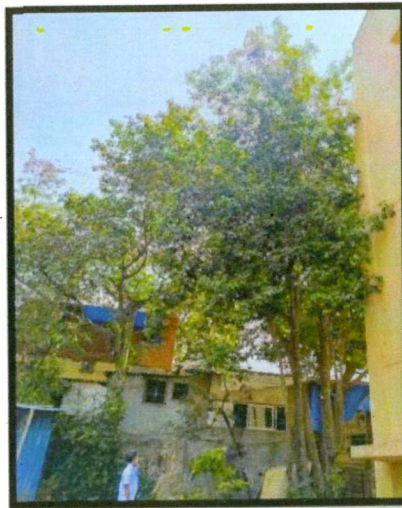
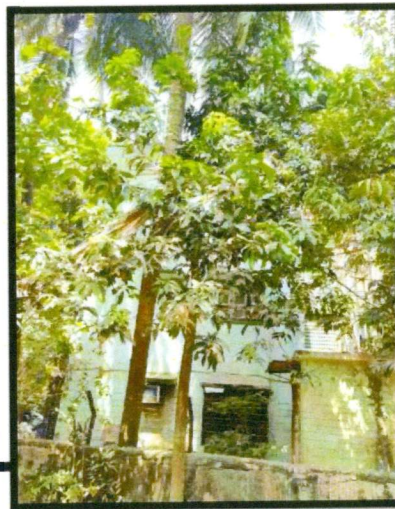


Fig 1: Common Name: Jamun /Java Palm Tree

Binomial Name: *Syzygies Cumin*



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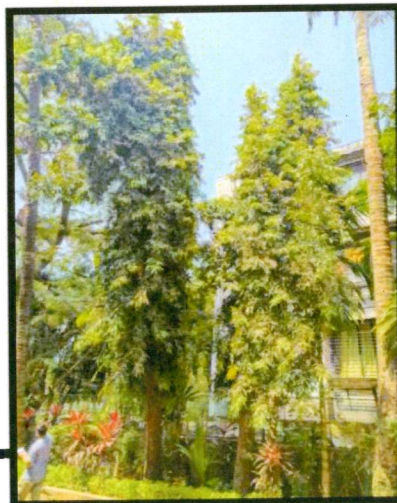
Fig 2: Common Name:Peru /Guava Tree

Binomial Name:*Sodium Guava*



Fig 3: Common Name:River Tamarind

Binomial Name:*Luciana leucocephala*



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Fig 4: Common Name:Ashoka tree

Binomial Name:*Saraca Asoca*

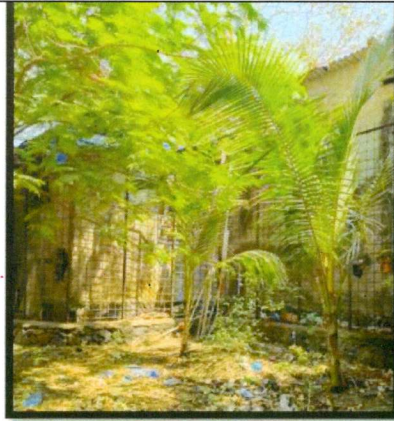


Fig 5: Common Name:Supari /Areca Palm Tree

Binomial Name:*Areca catechu*



Fig 6: Common Name: Eucalyptus / Gum tree

Binomial Name: *Eucalyptus globulus*

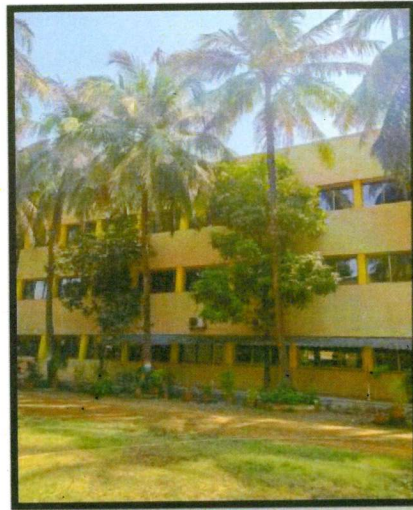


Fig 7: Common Name: Coconut tree

Binomial Name: *Cocos nucifera*



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Fig 8: Common Name:Peepal tree

Binomial Name:*Ficus religiosa*



Fig 9: Common Name:Pisoniatree

Binomial Name:*Pisonia brunoniana*

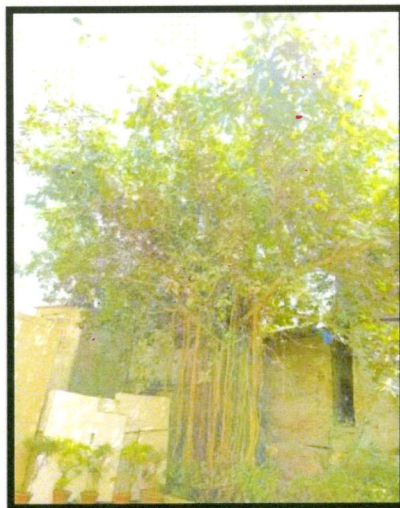


Fig 10: Common Name:Banyan Tree

Binomial Name:*Ficus benghalensis*

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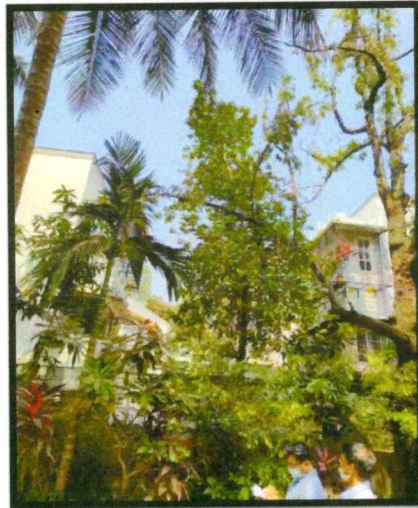


Fig 11: Common Name:Jackfruit tree

Binomial Name:*Artocarpus heterophyllus*

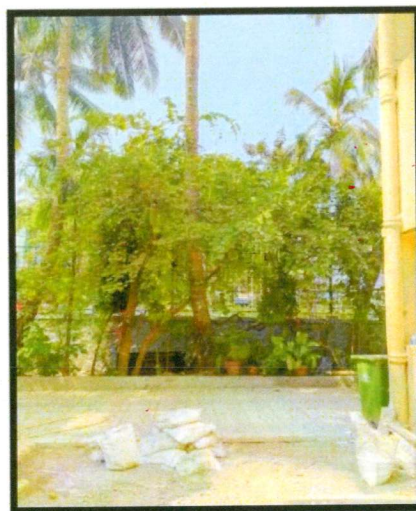


Fig 12: Common Name:Aapta tree

Binomial Name:*Bauhinia racemosa*

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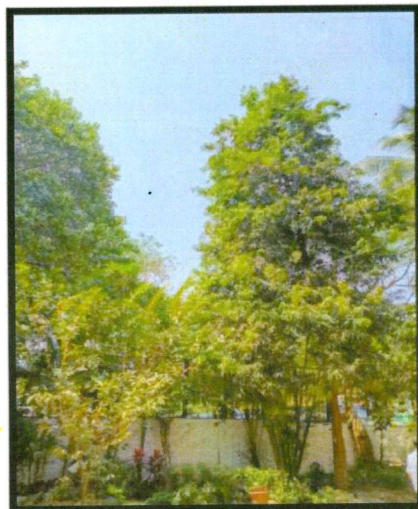


Fig 13: Common Name:Mango tree
Binomial Name:*Mangifera indica*

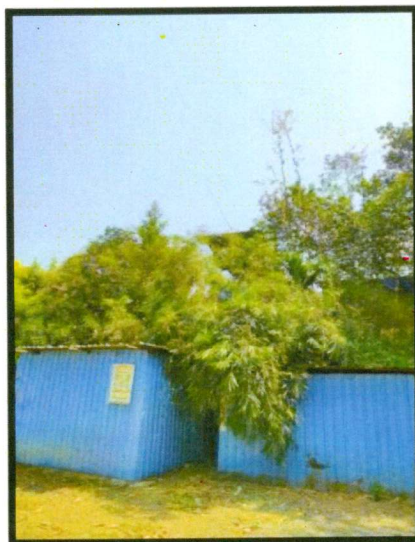


Fig 14: Common Name:Bamboo tree
Binomial Name:*Bambusoideae*

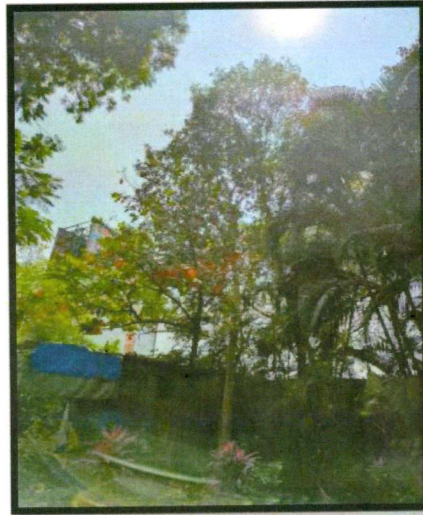


Fig 15: Common Name:Badam /Almond Tree

Binomial Name:*Prunus Dulcis*

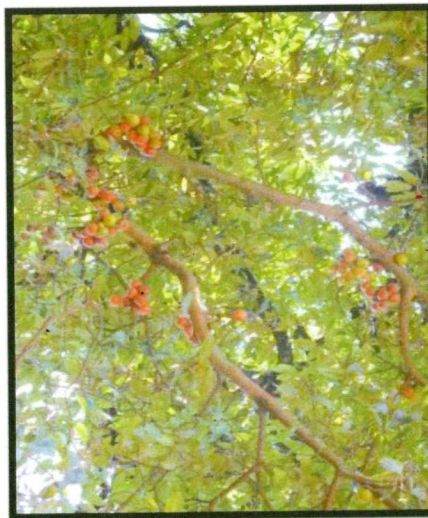


Fig 16: Common Name:Anjeer/ Common fig

Binomial Name:*Ficus carica*

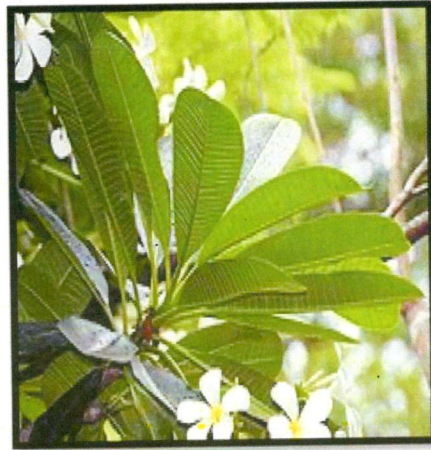


Fig 17: Common Name:Chafa/ templetree

Binomial Name:*Plumeria*



Fig 18: Common Name:Karanja / Panigrahi

Binomial Name:*Milletia pinnata*

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Table 1: List of tree species of L.S.Raheja College of Arts & Commerce, Mumbai.

Sr. No	Common Names	Binomial Name	Quantity
1	Jamun /Java Palm Tree	<i>Syzygium Cumini</i>	12
2.	Peru /Guava Tree	<i>Psidium Guajava</i>	6
3.	River tamarind	<i>Leucaena leucocephala</i>	5
4.	Ashoka tree	<i>Saraca Asoca</i>	15
5.	Supari /Areca Palm Tree	<i>Areca catechu</i>	14
6.	Eucalyptus /gum tree	<i>Eucalyptusglobulus</i>	1
7.	Coconut tree	<i>Cocos nucifera</i>	27
8.	Peepal tree	<i>Ficus religiosa</i>	2
9.	Pisonia	<i>Pisonia brunoniana</i>	1
10.	Banyan/ inomial banian	<i>Ficus benghalensis</i>	3
11.	Jackfruit tree	<i>Artocarpus heterophyllus</i>	7
12.	Aapta tree	<i>Bauhinia racemosa</i>	1
13.	Mango tree	<i>Mangifera indica</i>	23
14.	Bamboo tree	<i>Bambusoideae</i>	15
15.	Badam /Almond Tree	<i>Prunus Dulcis</i>	1
16.	Anjeer/ common fig	<i>Ficus carica</i>	5
17.	Chafa/ templetree	<i>Plumeria</i>	2
18.	Karanja / Panigrahi	<i>Millettia pinnata</i>	1

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The college has been playing a significant role in maintaining the environment of the entire surrounding areas. The following are some plant species in the premises of the college:



Fig 19: Common Name:Ti plant
Binomial Name:*Cordyline fruticosa*



Fig 20: Common Name:Bamboo plant
Binomial Name:*Bambusoideae*

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Fig 21: Common Name: Arrow head plant

Binomial Name: *Syngonium podophyllum*



Fig 22: Common Name: Suji Plant

Binomial Name: *Dracaena Angustifolia*

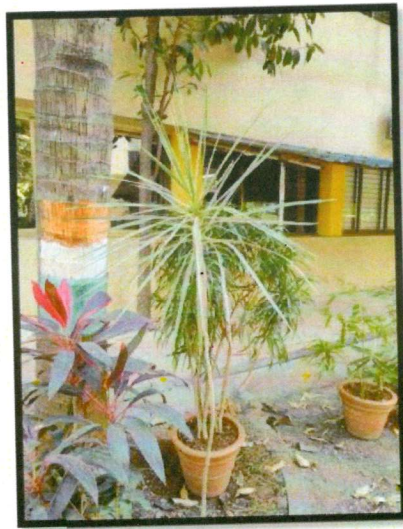


Fig 23: Common Name: Dragon plant

Binomial Name: *Dracaena draco*

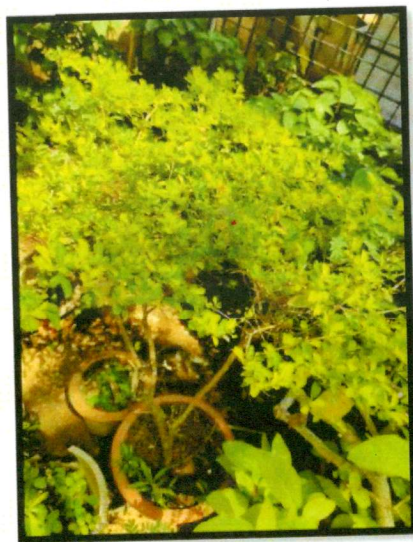


Fig 24: Common Name: Golden dewdrop.

Binomial Name: *Duranta erecta*

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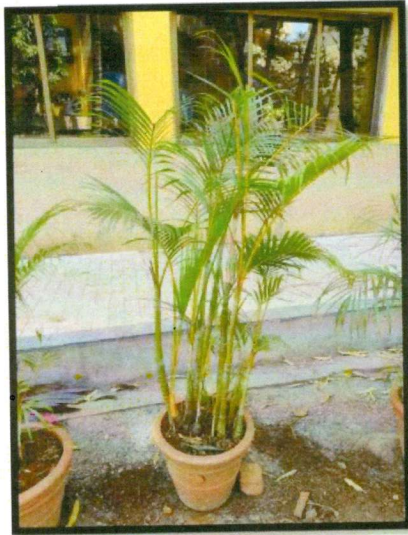


Fig 25: Common Name: Acacia Palm

Binomial Name: *Dypsis lutescens*



Fig 26: Common Name: Bougainvillea / paperflower

Binomial Name: *Bougainvillea glabra*

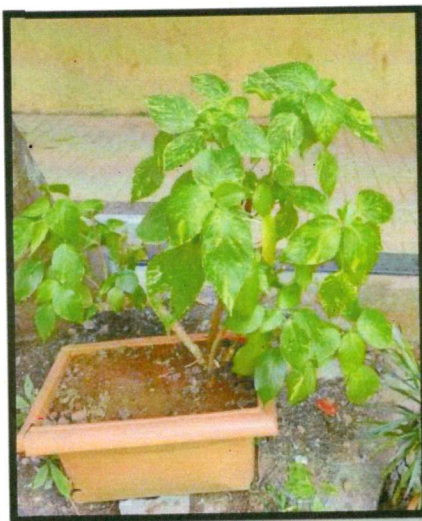


Fig 27: Common Name: Copperleaf.
Binomial Name: *Acalypha Wilkesiana*



Fig 28: Common Name: Hibiscus
Binomial Name: *Hibiscus rosa-sinensis*



Fig 29: Common Name: Indian Aloe.

Binomial Name: *Aloe vera*



Fig 30: Common Name: Nakai yellowwood

Binomial Name: *Podocarpus nakaii*

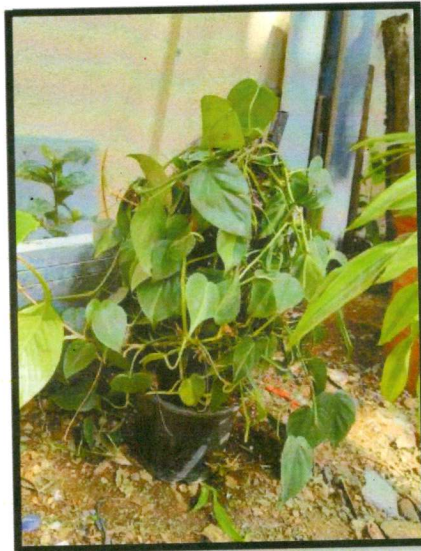


Fig 31: Common Name: Money plant

Binomial Name: *Pachira aquatic / Epipremnum aurum*

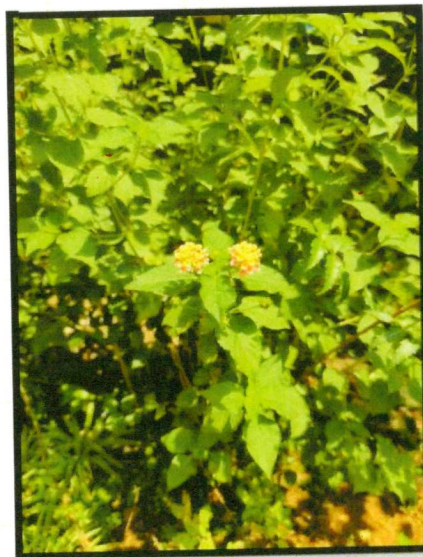


Fig 32: Common Name: Lantana

Binomial Name: *West Indian Lantana*

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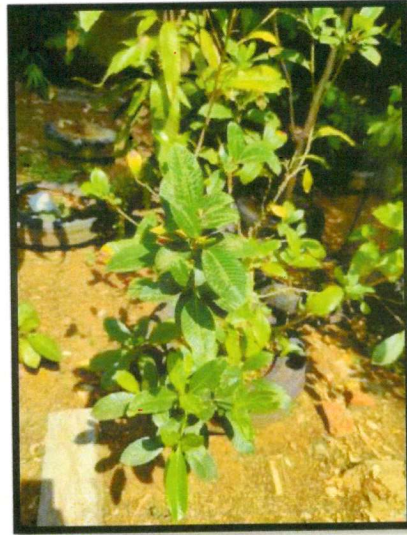


Fig 33: Common Name: Golden Gardenia

Binomial Name: *Gardenia sootepensis*

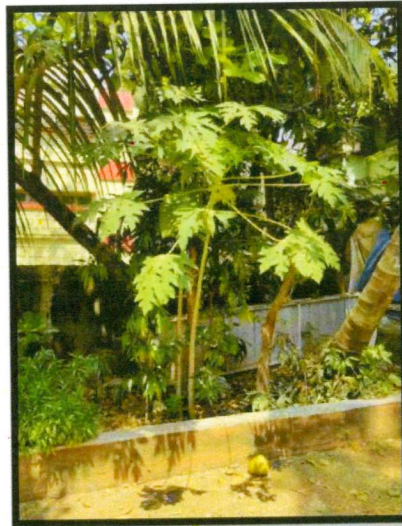


Fig 34: Common Name: Papaya.

Binomial Name: *Carica papaya*

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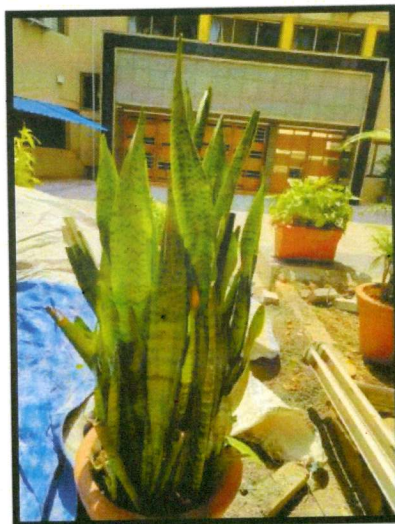


Fig 35: Common Name: Snake plant.
Binomial Name: *Darcaena trifasciata*

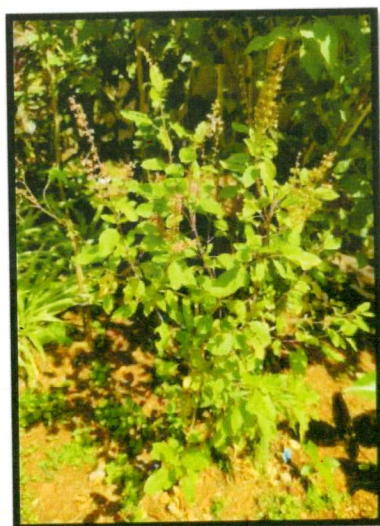


Fig 36: Common Name: Tulsi, holy basil
Binomial Name: *Ocimum tenuiflorum*



Fig 37: Common Name: Willow-leaf
Binomial Name: *Justicia gendarussa*

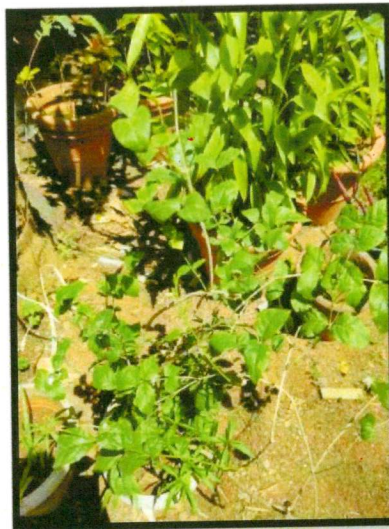


Fig 38: Common Name: Crepe Jasmine
Binomial Name: *Tabernaemontana divaricata*

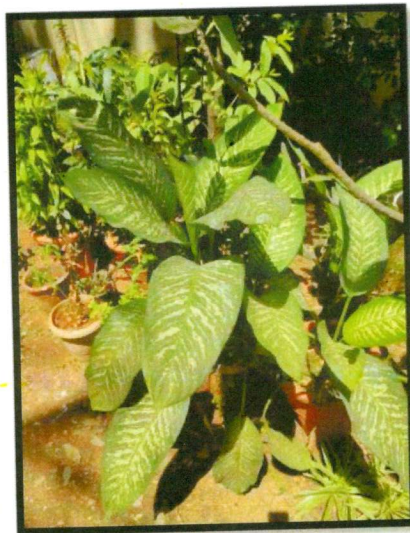


Fig 39: Common Name: Dumb cane
Binomial Name: *Dieffenbachia seguine*

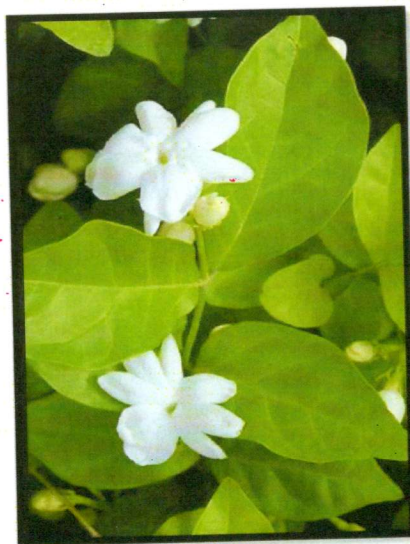


Fig 40: Common Name: Mogra
Binomial Name: *Jasminum sambac*

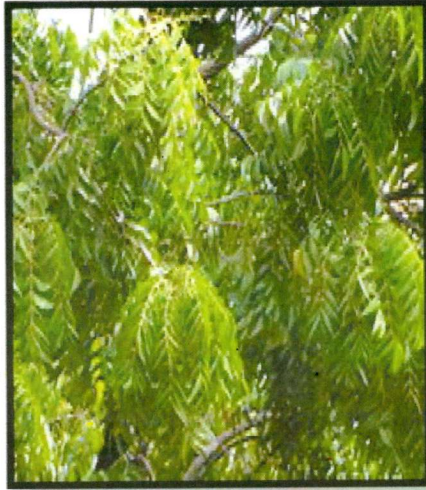


Fig 41: Common Name: Neem

Binomial Name: *Azadirachta indica*



Fig 42: Common Name: Champa

Binomial Name: *Magnolia champaca* / *Michelia*



Fig 43: Common Name: Shameplant
Binomial Name: *Mimosa pudica*



Fig 44: Common Name: Flame-of-the-forest
Binomial Name: *Butea monosperma*

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Table 2: List of plant species of L. S. Raheja College of Arts & Commerce, Mumbai.

Sr. No	Common Name	Botanical Name	Quantity
1.	Ti plant	<i>Cordyline fruticosa</i>	99
2.	Bamboo	<i>Bambusoideae</i>	37
3.	Arrow head plant	<i>Syngonium podophyllum</i>	15
4.	Suji	<i>Dracaena Angustifolia</i>	6
5.	Dragon tree	<i>Dracaena draco</i>	1
6.	Golden dewdrop	<i>Duranta erecta</i>	1
7.	Acacia Palm	<i>Dypsis lutescens</i>	28
8.	Bougainvillea / paperflower	<i>Bougainvillea glabra</i>	1
9.	Copperleaf	<i>Acalypha Wilkesiana</i>	51
10.	Hibiscus	<i>Hibiscus rosa-sinensis</i>	9
11.	Indian Aloe	<i>Aloe vera</i>	2
12.	Nakai yellowwood	<i>Podocarpus nakaii</i>	1
13.	Money plant	<i>Pachira aquatic / Epipremnum aureum</i>	2
14.	Lantana	<i>West Indian Lantana</i>	3
15.	Golden Gardenia,	<i>Gardenia sootepensis</i>	1
16.	Papaya	<i>Carica papaya</i>	5
17.	Snake plant	<i>Darcaena trifasciata</i>	4
18.	Tulsi, holy basil	<i>Ocimum tenuiflorum</i>	5
19.	Willow-leaf	<i>Justicia gendarussa</i>	127
20.	Crepe Jasmine	<i>Tabernaemontana divaricata</i>	4
21.	Mogra	<i>Jasminum sambac</i>	2
22.	Neem	<i>Azadirachta indica</i>	2
23.	Champa	<i>Magnolia champaca, Michelia</i>	1
24.	Shameplant	<i>Mimosa pudica</i>	1
25.	Flame-of-the-forest	<i>Butea monosperma</i>	1
26.	Dumb cane	<i>Dieffenbachia seguine</i>	1

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3.3 Faunal Diversity:

L.S. Raheja College of Arts & Commerce located in Mumbai, Maharashtra. College being in Mumbai district falls in the Sub-Tropical, wet and dry climate region, and enjoys monsoon rains with heavy to very heavy rainfall at isolated places in and around Mumbai, July being the wettest month. The highest temperature is recorded just prior to the onset of monsoon (around May to early June). Mumbai's climate can be best described as moderately hot with high level of humidity. Its coastal nature and tropical location ensure temperatures do not fluctuate much throughout the year. June–September is the wet monsoon season. December–January is dry, with warm days and mild evenings and February–May is hot and high in humidity. The climatic condition of the Mumbai district as a whole and College in particular is very suitable for a wide variety of flora and fauna to support its rich



biodiversity.

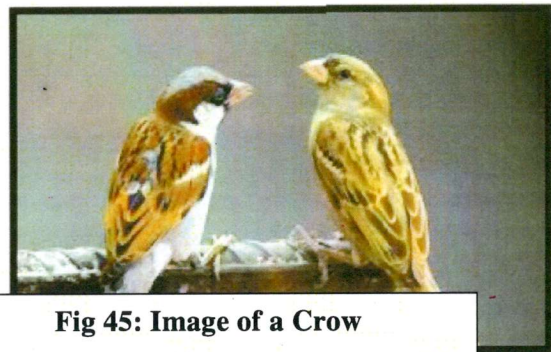


Fig 45: Image of a Crow



Fig 47: Image of a Pigeon



Fig 48: Image of an Asian Koel

Fig 49: Image of a Parrot

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3.4 Carbon Foot Print Analysis:

Carbon footprint of staff transit is contributing around 579.072 kgs of CO₂ annually.

Details for the Academic year 2019-20								
Sr.No	Name	Teaching or Non-teaching staff	Vehicles used (yes/No)	Whether he/she uses a cycle	Whether he/she uses two wheeler (yes/No) (average distance travelled and quantity of fuel and amount used per day)	Whether he/she uses a car (average distance travelled and quantity of fuel and amount used per day)	Whether he/she uses a public transportation, if yes no. of transports used	Whether he/she uses college conveyance
1	Dr. Neelam Yadav	Teaching Staff	YES	NO	NO	NO	YES(3)	NO
2	Rahul Dandekar	Teaching Staff	YES	NO	NO	NO	YES(1)	NO
3	Vaishali Pandya	Teaching Staff	YES	NO	NO	YES 50KMS & 3.5 LTRS DIESEL	NO	NO
4	Shri Ramsagar Yadav	Teaching Staff	YES	NO	NO	NO	YES(1)	NO
5	Ms. Divya Kanchan	Teaching Staff	YES	NO	NO	NO	YES(1)	NO
6	Dr. Parita Desai	Librarian	Yes	No	No	Yes 32 KMS. & 2.24 Diesel	No	No
7	Preeti Vaswani	Teaching staff	Yes	No	No	No	Yes (1)	No
8	Prajakta Joshi	Teaching staff	Yes	No	No	Yes 10 KMS & .75 Ltr Petrol	No	No
9	Jyoti Parimal Sarkar	Teaching Staff	Yes	No	No	Yes 1.5 kms. & 0.25 ltr Petrol	Yes (1)	No
10	Dr. Samiya Shinde	Teaching Staff	NO	NO	NO	NO	Yes- (2)	NO
11	Dr. Gordhan N Devnani	Teaching Staff	YES	NO	YES 20KMS 0.9 Ltrs	NO	YES	NO
12	Neha Dalal	Teaching Staff	No	No	No	No	Yes(3)	No
13	Puja Patwardhan	Teaching Staff	Yes	No	No	No	Yes (1)	No
14	Shivani Chande	Teaching Staff	yes	No	No	No	yes (1)	No
15	Mehul Barai	Teaching Staff	No	No	No	No	Yes(3)	No
16	Chandrakant Vichare	Non-Teaching	NO	NO	NO	NO	YES (3)	NO
17	Ms. Ragini Samant	Non-Teaching	NO	NO	NO	NO	YES (3)	NO
18	Dr. Akshata A. Kulkarni	Teaching	Yes	No	No	Yes 1.5 Kms., 1ltr. Petrol	No	No
19	Raju D. Gole	Teaching	No	No	No	No	Yes (3)	No
20	Suvarna Raikar	Teaching	Yes	No	Yes, 3 kms & .25 ltr Petro	Yes, 10 kms & .75 Petrol	Yes (3)	No
21	Pooja U Yadav	Teaching Staff	NO	NO	NO	NO	Yes (3)	NO
22	Dr. Anupama Nerurkar	Teaching staff	yes	No	No	Yes 15 km & 2 and half ltr petrol	No	No
23	Hrishikesh Wandrekar	Teaching staff	Yes	No	No	Yes 3 kms, 0.25 Ltrs petrol	Yes (2)	No
24	Neha Nikam	Teaching staff	Yes	No	No	Yes, 2.5 Kms, CNG	Yes (3)	No
25	Heta Parekh	Teaching staff	Yes	No	No	Yes, 1200 per week, average	Yes - 2	No
26	Upmanyu Yajnik	Teaching Staff	No	No	No	No	Yes - 3	No
27	Dr. Seema Ukidve	Teaching staff	yes	No	NO	No	yes -1	No
28	Miss. Dipali Mahesh Patil	Teaching staff	yes	yes	yes	no	yes 1	no
29	Laila Patel	Teaching staff	NO	No	No	No	yes- 3	No
30	Mansi Bafna	Teaching staff	yes	No	yes 8 kms 0.5 ltr	No	Yes- (2)	No
31	Samiksha Jadhav	Teaching Staff	Yes	No	No	No	Yes-(1)	No
32	Kavita Makhija	Teaching Staff	Yes	No	No	55 Kms, 4 Ltrs Diesel	Yes - 1	No
33	Swapnali Ankush Ghume	Non-Teaching Staff	No	No	No	No	yes(3)	No
34	Mahesh Laxman Gosavi	Non-Teaching Staff	No	No	Yes	Yes 16 Km	No	No
35	Atul Janardhan Khare	Non-Teaching Staff	No	No	No	No	Yes (2)	No
36	Rupal R. Kore	Non-Teaching Staff	No	No	No	No	Yes (3)	No

Table 3: Carbon foot print data record.

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4. GREEN INITIATIVES:

Listed below are Initiatives by College towards Sustainable Environment:

4.1 ANTI-PLASTIC MOVEMENT STARTED BY BISLERI INTERNATIONAL PVT LTD.

About the initiative: 'Bottles for Change', an initiative by Bisleri International Pvt. Ltd., focuses to create awareness amongst all citizens about waste segregation, recycling of plastic bottles and best practices towards cleaner environment. The plastic collected is crushed, sold to recyclers and then converted into flakes.

According to a September 2017 report by the Central Pollution Control Board (CPCB) which collated data from 60 major cities in India, the country generates around 25,940 tons of plastic waste a day.

The main reasons for this enormous amount of plastic generation in India are rapid urbanization, spread of retail chains, and plastic packaging for a dizzying array of products, from grocery, food, and vegetable products, to cosmetics and consumer items.

According to a Down to Earth report, the plastic processing industry in 2018 had estimated polymer consumption was likely to grow at 10.4 percent between 2017 and 2022, with nearly half of the consumption amounting to single-use plastic.

Action plan: The NSS Unit B-09 of L.S. Raheja College of Arts and Commerce participated in the activity for the Green Initiative i.e., Anti-Plastic Movement started by Bisleri International Pvt Ltd. NSS Volunteers under the guidance of Dr. Mrs. Akshata Kulkarni, the Assistant Professor of EVS and Shri Ramsagar Yadav, the NSS Programme Officer, collected the plastic bottles for recycling and to provide clean environment. 9 NSS Volunteers led this activity (6 Male and 3 Female). The plastic collected is crushed, sold to recyclers and then converted into flakes. These flakes are then used to create non-edible products such as cloth fabric, Hand Bags, Window blinds and other useful products.

Result/ Outcome: Successfully collected 75kgs of plastic bottles.

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Fig 51: 'Bottles for Change', an initiative by Bisleri International Pvt. Ltd

4.2 CLEAN UP DRIVE

- **Big Mumbai Clean-Up Drive**

About the initiative: The NSS Volunteers of L. S. Raheja College of Arts and Commerce, participated in Big Mumbai Clean Up Drive covering around 100 locations to mark the successful completion of 100 weeks of the clean-up initiative.

Action plan: The initiative was taken up by the beach warrior Chinu Kwatra to seven beaches in the city – Dadar, Cuffe Parade, Bandra, Worli, Erangal, Madh, and Juhu. The beach warrior helped in removing more than 2000 tons of waste from all the beaches of Mumbai. Around 86,000 kilograms of garbage was removed together with more than 6400 Mumbaikars. The waste collected by the NSS Volunteers was handed over to the civic body for effective management.

Result/ Outcome: The college was awarded the Certificate of Social Warrior on 21st July, 2019 and the Certificate of Opting Zero Plastic Model by Mr. Chinu Kwatra, the Founder and Secretary of Khushiyaan Foundation.

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Fig 52: Beach Clean- Up



Fig 53: Certificate of Recognition and Excellence

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- **Cleanathon**

About the initiative:The NSS Volunteers of L.S. Raheja College of Arts and Commerce participated in Clean-A-Thon 2019 initiated by Rajani Foundation (India) and United for Greater Cause.

Action plan:Cleanathon was an initiative which brought together the students from different colleges and schools on one platform to work for the cleaning and beautification of beach every year post Ganpati visarjan.

Cleanathon 2019 was an initiative of Rajani Foundation India in collaboration with United for Greater Cause and supported by MCGM.

Given the need to spread awareness about reduce, reuse and recycle of wastes, the theme of Cleanathon 2019 was 'Zero Waste Movement'.

Result/ Outcome: The College was given letter of appreciation for supporting the initiative by Rajani Foundation and united for greater cause.



Fig 54: Clean Up Drive at Juhu Beach

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4.3 TREE PLANTATION

About the initiative:A plantation drive 'Vrukshit' with an aim for a green environment. The committee gathered along with the students of L.S. Raheja College and brought forward this project with the help of Principal Dr. Debajit Sarkar Sir and their beloved teachers.

Action plan:In 2020, Team Parallax initiated a plantation drive 'Vrukshit' with an aim for a green environment. Students of L.S. Raheja College and committee all together brought forward this project with the help of Principal Dr. Debajit Sarkar Sir. They planted samplings on the college premises and distributed more saplings around the neighborhood. Vrukshit has become an integral part of Parallax and the team takes pride and honor in continuing the same over the coming years to make a bigger and better difference in society

Result/ Outcome:More than 30 samplings were planted on the college premises and distributed over 200+ more saplings around the neighborhood.



Fig 55: Tree Plantation at L.S. Raheja College

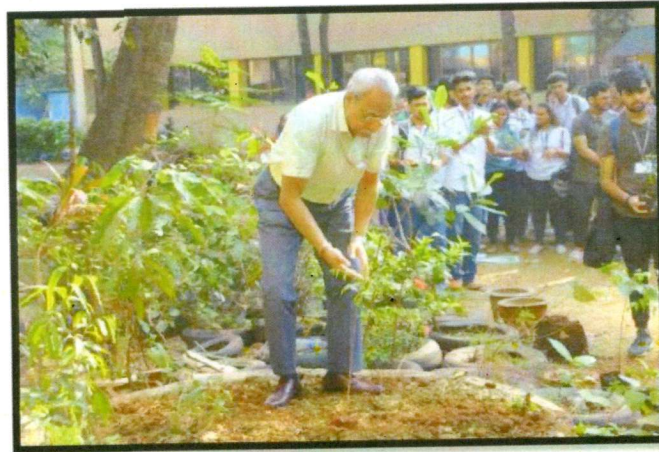


Fig 56: Tree Plantation by Principal Dr. Debajit Sarkar

4.4 Use of Solar PV System for power Generation:

Solar system of 15KVA has been installed on the terrace. Around 15000 units (KWh) is produced with the help of solar panels annually which results in reduction of 13.85 tons of CO₂emission.

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5. RECOMMENDATIONS:

• General Recommendations:

1. Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Assign scientific names to the trees.
2. Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
3. Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
4. Celebrate every year 5th June as 'Environment Day' and plant trees on this day to make the campus Greener.
5. Indoor plantation to inculcate interest in students, Bonsai can be planted in corridor to bond a relation with nature.
6. Grow up vegetable garden and medicinal garden and gradually develop it as a nursery.
7. Develop a butterfly garden that arouse appreciation towards flora and fauna diversity.
8. Name all the trees and plants with its common name and scientific name.
9. Organize "earn while learn" eco-friendly programs.
10. Declare the campus plastic free and implement it thoroughly.
11. Adopt an environment policy for the college.

• Green Initiative recommendations:

1. **Plastic Free Paper Free Campus:** Concept of plastic free and paper free campus can be adopted by the college. Management can take initiative to make a policy for the same. It will help to reduce the use of plastic and papers which will be a good contribution towards sustainable environment. For instance, the college can get a PET Bottle Crusher and place in the college premises and ask students, teaching and non-teaching staff to use it.
2. **Routine Green Practices:** Every year college can celebrate World Environment Day, World Water Day and Ozone Day in the campus. The main focus of these programs is to

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provide awareness to the students about the importance of the environment, its conservation and sustainable use of environmental resources. The programs can be conducted through seminars, poster presentation, quiz competition and debates etc.

- **Energy management:**

The college can avoid use of more energy consuming electrical appliances and replace the current appliances with more environment friendly and energy efficient appliances (for example five stars rated Air conditioner) in the college.

- **Water Management:**

The college club can arrange awareness programs for water conservation. There should be a proper monitoring of water consumption pattern in the campus. College club can also conduct water quality monitoring during specific intervals.

- **Waste Management:**

The college can adopt a self-sustainable waste management system that involved composting of biodegradable waste and sub-segregation of recyclable waste generated in college premises.



Fig 57: Categories of waste generated.

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6. CONCLUSION:

Green Audit is the most efficient way to identify the strength and weakness of environmentally sustainable practices and to find a way to solve problem. Green audits can “add value” to the management approaches being taken by the college and is a way of identifying, evaluating and managing environmental risks (known and unknown).

The installation of solar panels system is noteworthy. Besides, environmental awareness programs initiated by the administration shows how the campus is going green.



Date: October 26th 2021

TO WHOMSOEVER IT MAY CONCERN

Respected sir,

The Green Audit and Energy Audit for L.S.Raheja College was conducted in the academic year 2019-2020. However, due to the Pandemic situation, the report was submitted in February 2021. Therefore the College could not claim it in AQAR 2019-2020. Hence, it will be included in AQAR 2020-2021.

Thanking You,

Yours Faithfully,
For SANJEEVANI S3.,



A handwritten signature in blue ink, appearing to be "A. Raheja", written over the stamp.