Nagar Yuwak Shikshan Sanstha's
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
Hingna Road, Wanadongri, Nagpur - 441 110
NAAC Accredited with 'A' Grade
Ph.: 07104-242919, 242623, 242588
Website : www.ycce.edu E-mail : principal@ycce.edu

Summary

7.1.6

Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives

- ISO Certified Environmental Audit including Green and Energy Audit Report (2020-21)
- Clean and green campus Awards (2020-21)
- Beyond the campus environmental promotion activities (2020-21)

Y.C. COLLEGE OF ENGINEERING AN AUTONOMOUS INSTITUTION SEAL NAGPUR

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR - 441110

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7.1.6
2020-2021

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2	Clean and Green Campus Award 2020-21	173-174
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ISO Environment Audit (with Energy and Green Audit)Report 2020-21

Environmental Audit Report

2020-21

Yeshwantrao Chavan College of Engineering, Nagpur

YCCE
Institute code : 4167
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliation to Rashtrasant Tukadoji Maharaj Nagpur University)

GLOBAL SCIENTIFIC INC.

Report By

The Global Scientific Inc.

Nagpur

GLOBAL SCIENTIFIC INC.

ISO 9001:2015

Asidham,Opp Gomti Appartment W.H.C Road, Law College Square ,Nagpur

GLOBAL SCIENTIFIC INC.

ENVIRONMENTAL AUDIT CERTIFICATE

This Certificate has been awarded to

Yeshwantrao Chavan College of Engineering

Hingna Rd ,Wanadongri ,Nagpur ,Maharashtra

for 2020-2021

In Recognition of the Organization Efforts for Sustainable Management and compliance of Environmental Audit and maintenance of the Institution.

Global Scientific Inc

Dr. Anagha Patil
Team Lead
Global Scientific Inc.

Dr. Smeeta Bhabra
Director
Global Scientific Inc.

Ms. Aishwarya Deshmukh
Lead Auditor-TUV Nord
Global Scientific Inc.
Cert. No: 35273988 14

TÜV NORD

PR315: ISO 14001:2015 Lead Auditor (Environmental Management Systems) Training course

Certificate of Achievement

Aishwarya Deshmukh

has successfully passed all the course assessment requirements.

06th - 10th July 2020

INDIA

Certificate No. 35273988 14

Unique Learner No. 253664

Katja Beyer
for TÜV NORD CERT GmbH

Essen, 2020-10-30

The course is certified by CQI and IRCA (Certification No. 18125). The learner meets the training requirements for those seeking certification under the IRCA EMS Auditor certification scheme. The certificate is valid for five years, starting from last day of the course, for the purpose of IRCA auditor certification.

TÜV NORD CERT GmbH Langemarckstraße 20 45141 Essen www.tuev-nord-cert.com

CQI | IRCA
CERTIFIED COURSE

Certificate

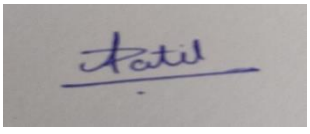
This is to certify that a **"Environmental Audit"** for Yeshwantrao Chavan College of Engineering, Hingna Nagpur has been conducted in 2021 to assess the Environmental Components: Water, Air, Soil, Weather and Climate, Vegetation and Fauna, Sound Level, Energy, Waste- Institutional Municipal Solid Waste and Wastewater and the Eco-friendly initiatives implemented within the college campus.

Place: Nagpur

Date: 20/11/2021

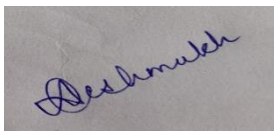
Dr. Smeeta Bhabra

Director
Global Scientific Inc.



Dr. Anagha Patil

Team Lead
Global Scientific Inc.



Ms. Aishwarya Deshmukh

Lead Auditor-TUV Nord
Global Scientific Inc.
Cert. No: 35273988 14

Audit Team

1) Dr. Smeeta Bhabra (Head)
2) Dr. Anagha Patil (Team Lead)
3) Ms. Aishwarya Deshmukh (Certified Auditor)
4) Ms. Samruddhi Metangley (Co-ordinator)
5) Ms. Sukhada Nagpure (GIS Analyst)
6) Ms. Tejashree Padwe (Data Processing Assistant)

Data Collection Team

1) Ms. Shivani Deshmukh
2) Ms. Tanushree Mendhe
3) Mr. Nilesh Jibhkate
4) Ms. Nisha Bihare
5) Ms. Jayashree Kale

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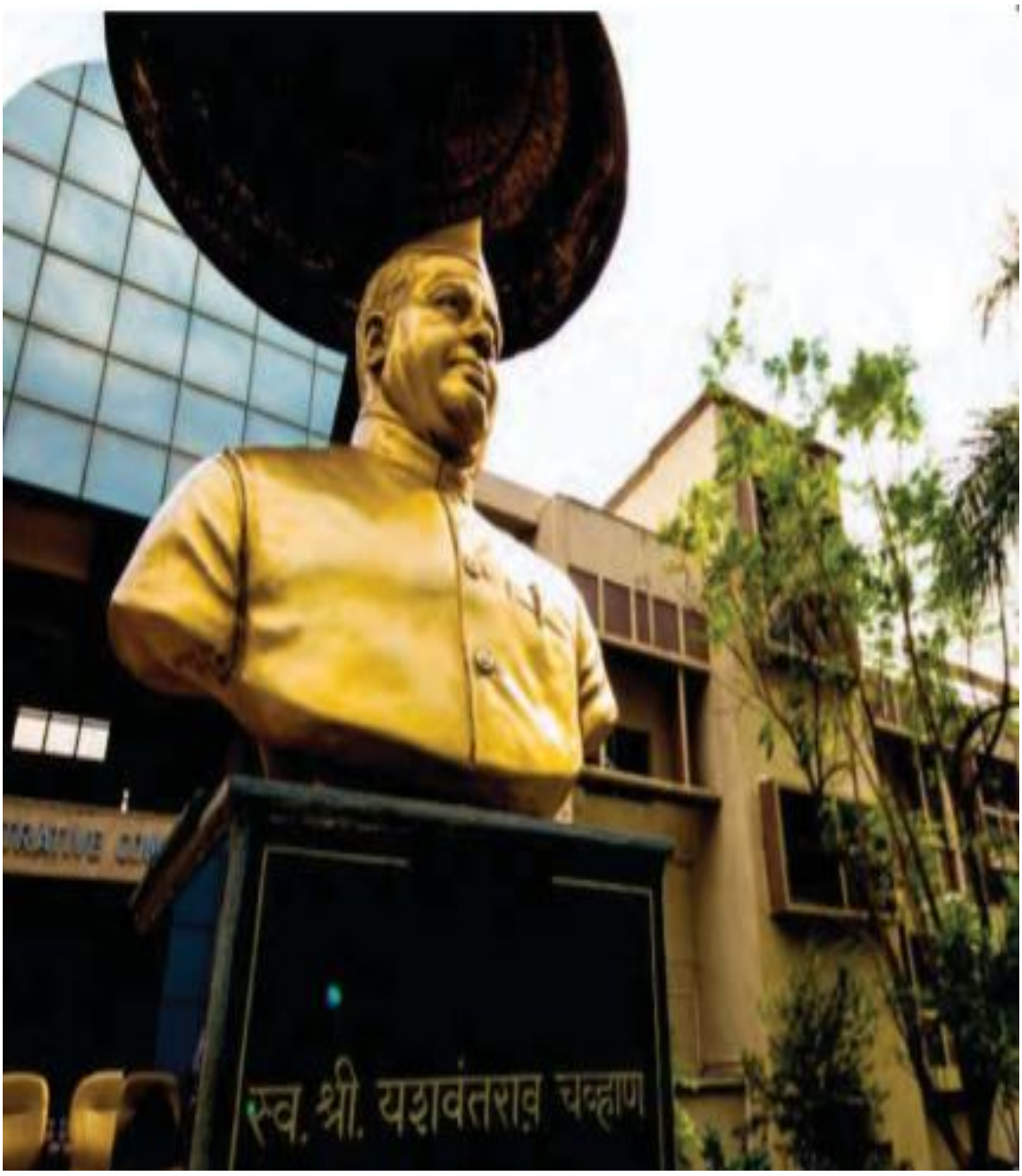
Introduction

Yeshwantrao Chavan College of Engineering, Nagpur is established in the year 1984. It is named in the memory of Late Shri. Yeshwantrao Chavan, the Great Patriot who was first Chief Minister of Maharashtra and the former Deputy Prime Minister of India.

YCCE is one of the premier college of Engineering in the Vidarbha region of Maharashtra. The goal of Institution is to provide excellent educational environment to the students at both undergraduate and postgraduate levels. The institute extends its expertise in engineering and technological requirements to various public and private sector organizations. The institute aims to transform students into responsible and resourceful leaders in their profession.

The college is becoming a most sought after destination by the students who are aspiring to pursue higher technical education and attain placements in the competitive software and core industries. The institution accentuates on instilling significant professional education for crafting ambitious engineers who would ultimately possess noteworthy qualities to become leaders in their opted profession. The highly educated and well-experienced faculty members focus on inculcating excellent education for creating commendable engineers.



The infrastructure and the atmosphere of the institute are completely oriented towards boosting the substantial teaching-learning schema promoting the development of students' attentiveness towards learning. These factors have ultimately made YCCE as the most ideal and preferred **engineering college in Central India**. The institute is awarded with **'A' Grade** of by **National Assessment and Accreditation Council (NAAC)** for a period of five years 2016-2021.

The Yeshwantrao Chavan College of Engineering, Nagpur is geographically located about at 21.096742 latitutde and 78.979402 longitude and is 14.7 Km from Nagpur airport and railway station, on the Nagpur Hingna road. The college campus is located on a lush green hill top area- a barren land 39 years back, and is benefitted with the elevation from adjacent street pollution which leads to reduced air pollution in the college premises.

College Address

Yeshwantrao Chavan College of Engineering Hingna Road, Wanadongri, Nagpur- 441110	
State	Maharashtra
Phone	+91-7104-295083, 295085
Phone (Principal office)	+91-7104-295083, 09764996477
Fax	+91-7104-242376
Hostel	+91-7104-242840
Website	www.ycce.edu
Email	principal@ycce.edu , info@ycce.edu

About College

- The college is guided by the Academic Advisory Board consisting of eminent academicians from the prestigious technical institutes in India and USA. The college is having well qualified blend of experienced senior as well as young faculty members.
- Yeshwantrao Chavan College of Engineering (YCCE) is renowned for Engineering Education and Research. For over 36 years, it has successfully nurtured young engineering professionals, becoming a sought-after destination for students aspiring to higher technical education and placement in the competitive software and core industries. It offers a rare combination of respected scholars, international footprint and interdisciplinary studies
- A premier institute, YCCE became one of the few selected well-performing colleges for Government of India's Technical Education Quality Improvement Program (TEQIP Phase I), funded by the World Bank. With the TEQIP financial aid, the Institution has created state-of-the-art infrastructure, laboratories, computational facilities, library etc
- YCCE has become the First private engineering college to acquire 'Autonomous' status in Central India. Under the new status, the first batch of students commenced their B.E. and M.Tech. Courses from the academic session 2010-2011. In the year 2016-17, UGC peer team visited YCCE & granted 'Extension of Autonomy' for 6 years (2016-2022).
- Quality assurance through Accreditation and Re-Accreditation of UG & PG programs done by National Board of Accreditation (NBA), New Delhi Since 2003
- B.E. Mechanical Engg., B.E. Civil Engg., B.E. Electrical Engg., B.E. Electronics & Telecomm. Engg., B.E. Electronics Engg. and B.E. Information Tech. programs are Accredited by National Board of Accreditation (NBA), New Delhi upto June 2023.
- M.Tech. Structural Engg, M.Tech. Integrated Power System and M.Tech. CAD-CAM are also Accredited by National Board of Accreditation (NBA), New Delhi upto June 2019
- Accreditation with 'A' Grade by UGC National Assessment and Accreditation Council (NAAC), Bangalore
- Received ISTE National Award 2014 for being the "Best Private Engineering College" in the Country.
- All India 32nd Rank, 23rd Rank amongst Self-Financing & 4th Rank in West Zone by Data Quest-CMR Ranking-2020

- All India 134th Rank amongst IIT's, NIT's, Government and Autonomous Engineering Institutions by NIRF, MHRD, Govt. of India, 2019.
- Ranked amongst Top 150 Engineering Institutions all over India including IITs, NITs, Govt. & Autonomous Engineering Institution by NIRF, MHRD, Govt. of India in 2017 and also in 2018. All India 93rd rank amongst IITs, NITs,Govt. & Autonomous Engineering Institution by NIRF, MHRD, Govt. of India, 2016
- Received 2nd prize for YCCE Magazine from RTMNU, Nagpur in 2019-20.
- Awarded 'A' Grade by the Government of Maharashtra in the year 2002-2003
- All technical departments of the Institution are recognized as a center for Higher Learning and Research for pursuing Ph.D. by RTM Nagpur University. At Present about 44 scholars have registered for Ph. D. research programs and about 110 candidates have been awarded Doctoral (Ph.D) degree.
- In last 5 Years, the institute has received financial assistance of Rs. 5.5 Cr. from various funding agencies like AICTE, DST, UGC etc.
- Innovation Gallery for displaying innovative UG/PG project work of students
- MSME technology business incubators under ASPIRE (A scheme for promotion of innovation, rural industries and entrepreneurship) & business incubator under a scheme for development of managerial and entrepreneur skills through incubator.
- Nodal Centre for "Smart India Hackathon", an initiative of MHRD Govt. of India.
- Accreditation by repeated corporates/industries like TCS, Capgemini, Wipro etc. for enhancing student's placement and internship.

Visionary

Hon'ble Shri Dattaji Meghe is the architect of **Nagar Yuwak Shikshan Santha, Nagpur**. He has been the guiding star in spreading the light of education. His can-do-more attitude brought about an intellectual revolution that has transformed the social, educational, economic and cultural life of rural Maharashtra.

One lamp that lit strongly and firmly with a great vision of spreading the light of wisdom is our Hon'ble Shri Dattaji Meghe the Chairman of Nagar Yuwak Shikshan Sanstha & Founder Chancellor of Datta Meghe Institute of Medical Sciences University is in active public life for

more than 35 years. He represented the people of Maharashtra in Lok Sabha for 3 consecutive terms & was the Member of Parliament (Rajya Sabha).

He strongly believed that quality Education & Health can only bring the true transformation of the huge human resources of our nation.

In pursuit of Chairman of Institution social commitment, a modest beginning was made by starting a small educational institute **36** years ago, which has grown up into an educational empire covering almost all faculties of education spread all over Maharashtra state.

This educational society has established **27** institutions right from pre-primary to postgraduate levels covering various faculties like Medical Sciences, Pharmacy, Engineering, Social Science, Commerce, Science, Physical Education and Performing Arts. The Society is like a giant joint family of about **30000** students and about **1500** highly educated and skilled staff. Our founder Chairman Shri. Dattaji Meghe insists on good quality education, discipline and welfare of the students and the staff.

All these institutions are provided with highly qualified and well trained staff, well equipped laboratories, spacious libraries, playgrounds, canteens and buses for transportation of students and staff. The performances of the students in examinations are always excellent. It is profound desire and ardent endeavor of our founder to evolve an educational process involving modern technology and knowledge with preservation of our cultural heritage.

YCCE stands by its motto of becoming a leader in imparting quality education and training in engineering. It also contributes to the ever-expanding knowledge and skills in the professional environment through scientific inquiry, applied research and innovation to play a vital role in socio economic progress. The management and faculty are fully committed to generate excellence in academics and to attain the sacred goal of making the students realize their full potential in all dimensions of their personality.

Leadership

This quote very well goes with our young and dynamic leaders Shri. Sagar Meghe and Shri. Sameer Meghe, who were empowered with knowledge and inspired by a tradition of accomplishment have with their focused expertise, far-reaching vision and strong commitment to humanity have given

the new height to YCCE. This in turn is creating students, scholars and technocrats who in turn are contributing meaningfully to the service of mankind and the profession.

Under their great leadership, YCCE students learn not only to navigate and translate the engineering sciences in the classroom and laboratories but also to apply their developing knowledge and understanding in practical engineering applications in innovative ways.

Vision

To become the most preferred institution providing innovative research and value based, professional education for the society at large.

Mission

YCCE is committed to:

- Attract best talent and create best learning ambience
- Practice-innovative teaching-learning & research
- Integrate Industry-Institute Collaborations
- Nurture students towards holistic development and choicest careers

Objectives of Environmental Audit:

The main aim objectives of this Environmental Audit are to assess the environmental quality and the management strategies being implemented in Yeshwantrao Chavan College of Engineering, Nagpur.

The specific objectives are:

1) To assess the quality of the Water Component and Soil Component in the YCCE college campus.
2) To track the Weather & Climate parameters around the campus and monitor Ambient Air Quality parameters of YCCE.
3) To monitor the Energy Consumption pattern (Electricity & Solar Energy) of the college.
4) To quantify the Solid Waste Generation and Management Plans in the YCCE campus.
5) To assess the Carbon footprint potential drawn Electricity and Solar Energy Consumption of the college.
6) To assess whether extracurricular activities of the Institution support the collection, recovery, reuse and recycling of solid wastes.
7) To identify the gap areas and suggest recommendations to improve the Green Campus status of the Yeshwantrao Chavan College of Engineering, Nagpur.


Energy
Carbon Footprint
Green Cover
Environmental Audit
Water
Soil
Air
Waste


1. YCCE Entrance
2. Admin & Library
3. Mechanical Dept.
4. New CCC + ME Labs
5. Workshop
6. Information Tech. Dept.
7. Science & Humanities
8. Civil Dept.
9. Old CCC + CT Labs
10. Electrical + Computer Dept.
11. Electronics & ETC Dept.
12. Canteen - 1
13. Canteen - 2
14. Boys Hostel
15. Gymnasium
16. Parking
CANTEEN-2
Y C C E
YCCE Campus Map
Nagpur
Wanadongri, Hingna Raod
Hingna

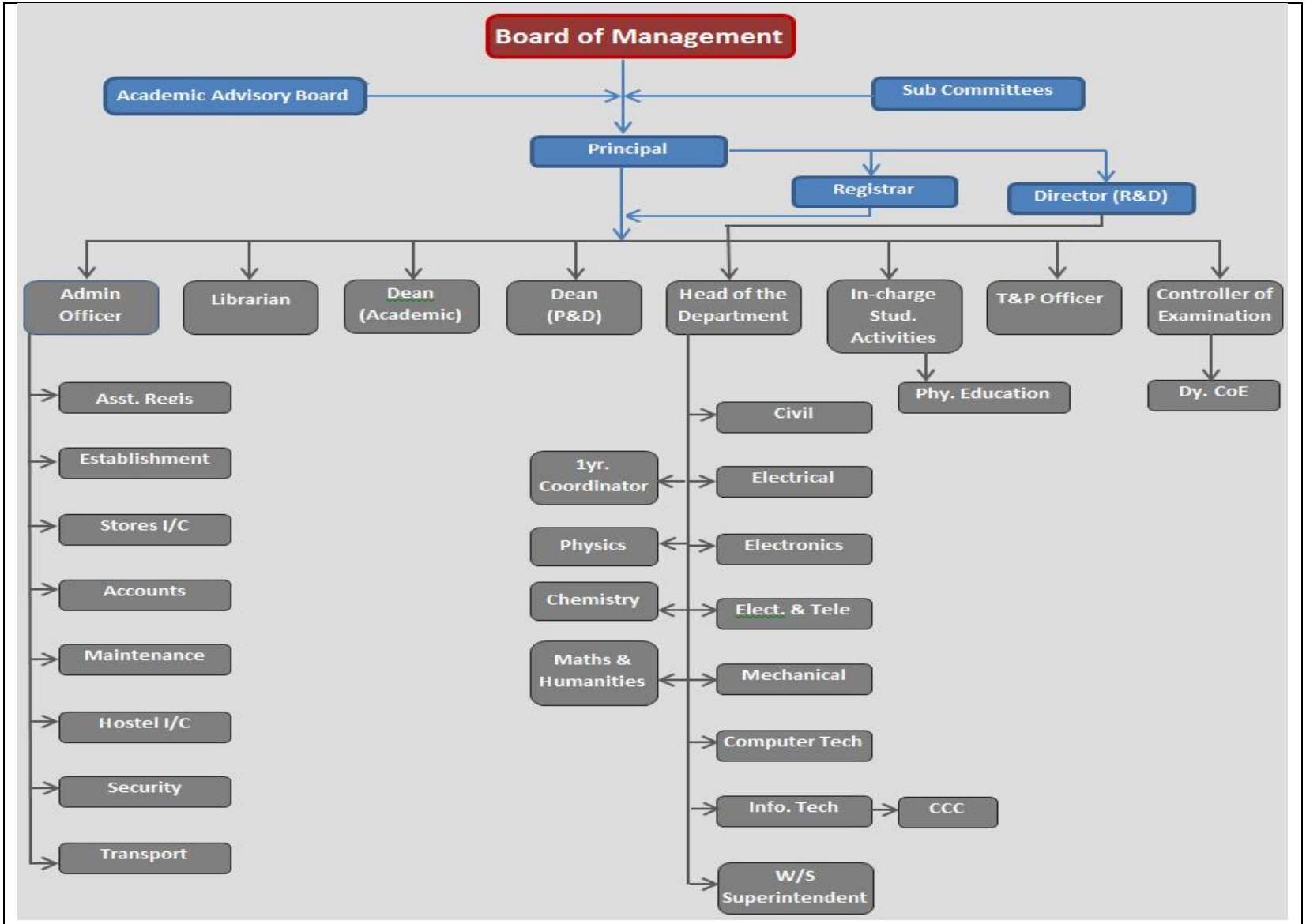
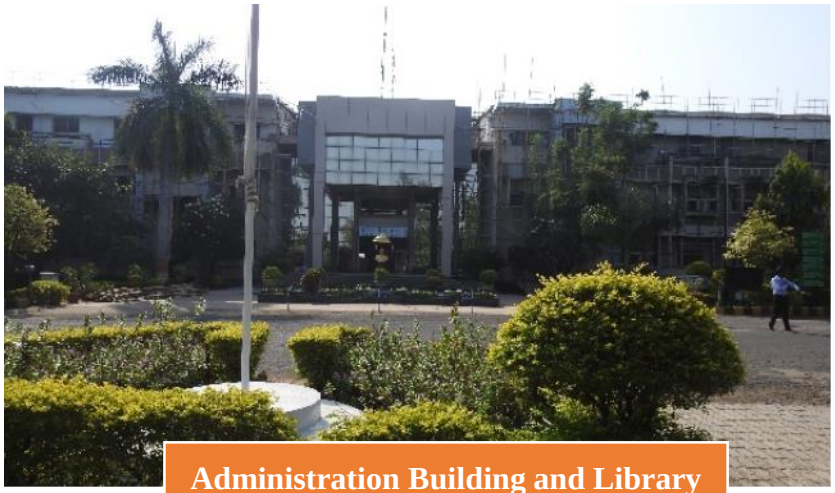


Image No. 1: Organization Structure of YCCE

Main Entrance



Administration Building and Library

Temple

Parking

Civil Engineering

Workshop (Civil)

Mechanical Engineering

Electronics and Telecommunication

Information Technology

Old CCC+Computer Technology Labs

New CCC+Mechanical Engineering Labs

Workshop

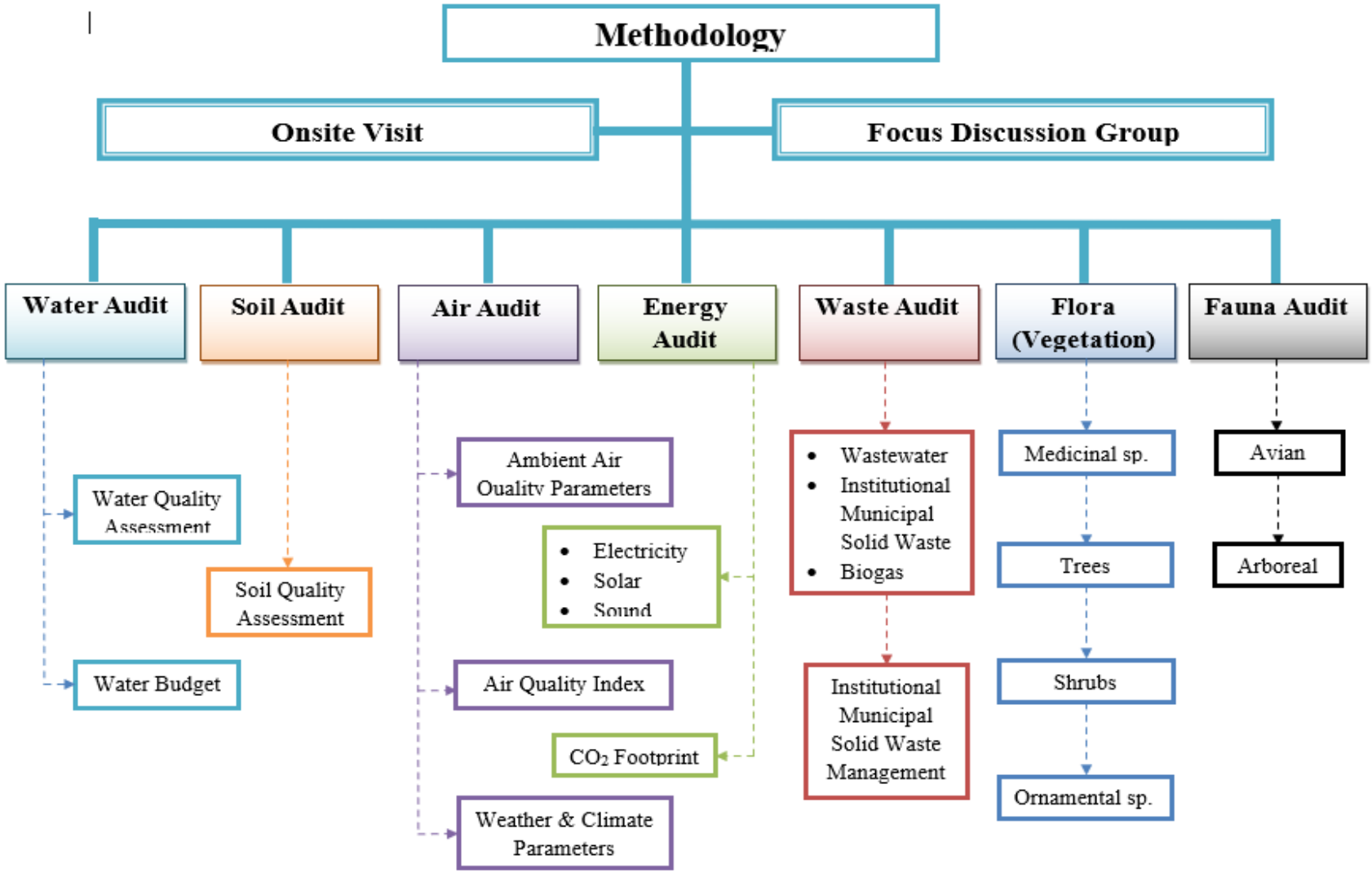
Computer Technology and Electrical Engineering

Applied Science and Humanities

Canteen 1

Stationary & Maintenance Department

Image No.2: Study Methodology adopted to conduct the Environmental Audit of YCCE Institution



Campus Area	:	14 Acres
Location	:	On a hill top, lush green environment with picturesque settings, on Nagpur-Hingna Road.
Accessibility	:	15 Kms from Nagpur Railway station and 14 Kms from Airport.

Table No. 1: Area segments-Total Built-up and Green Area at YCCE

Sr. No.	Description	Area
1)	Campus Area	56,656 sq. m
2)	Built-up Area	37,702.76 sq. m
3)	Vegetation Cover	13,359 sq. m
4)	Parking + Roads	14,307 sq. m

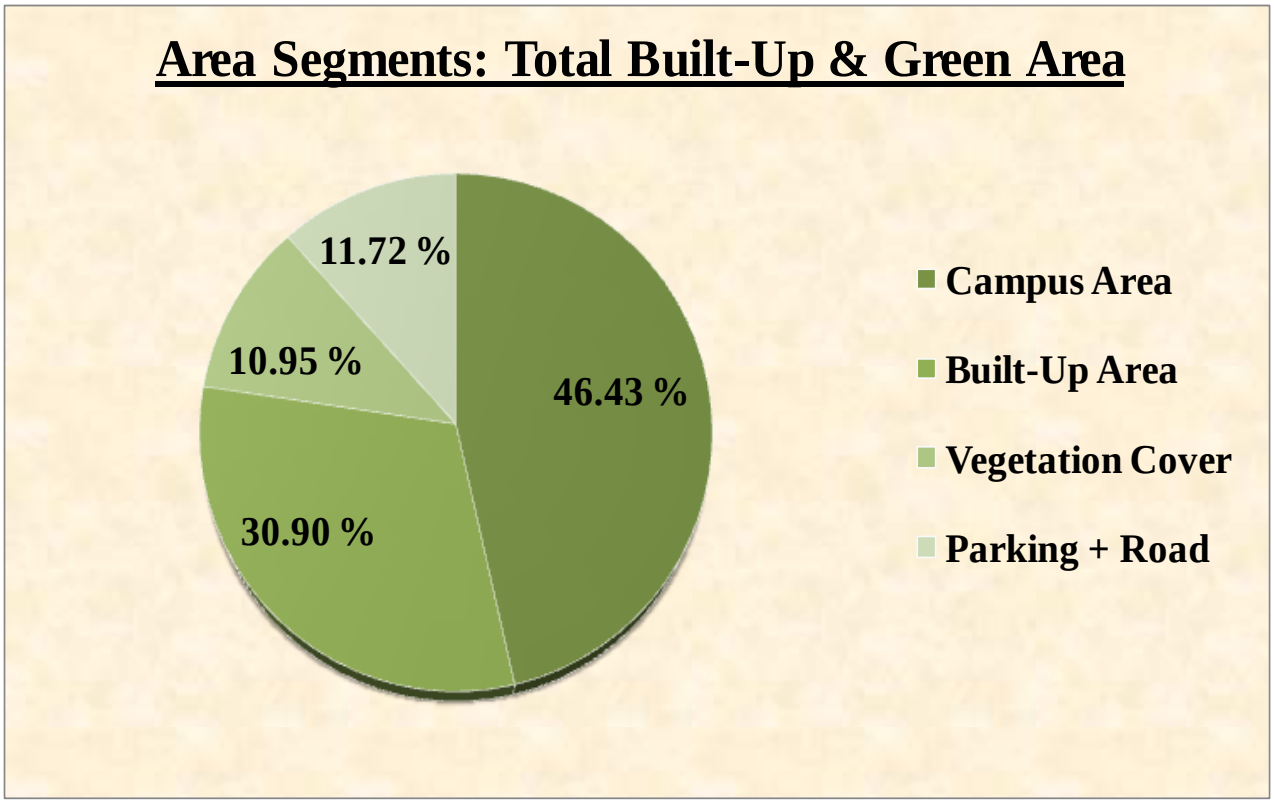


Table No. 2: Department wise built-up Area at YCCE

Sr. No.	Name of Department Building	Floors	Built-up Area (Sq.m)
1	Administrative & Library Building	G+3	4146.054
2	Civil Building	G+3	3619.668
3	Civil Lab Shed	G.F.	513.86
4	Electrical Building	G+3	5229.631
5	Mechanical Building	G+3	3229.63
6	Mechanical Lab Shed	G.F.	1253.736
7	Workshop Shed	G.F.	1403.56
8	Science Building	G+3	3410.754
9	Electronics Building	L. G.F.+ G + 2	6818.75
10	Central Computer Centre Building	G+1	1094.784
11	IT Building	G+3	2977.811
12	Canteen-I	G.F.	241.041
13	Canteen - II	G.F.	298.084
14	Exam Control Building	G+1	1250.412
15	College Building (Block-T)	G+3	2214.985
Total Built- up Area			**37702.76**

* G - Ground Floor

G.F. - Ground Floor

L.G.F.-Left Ground Floor

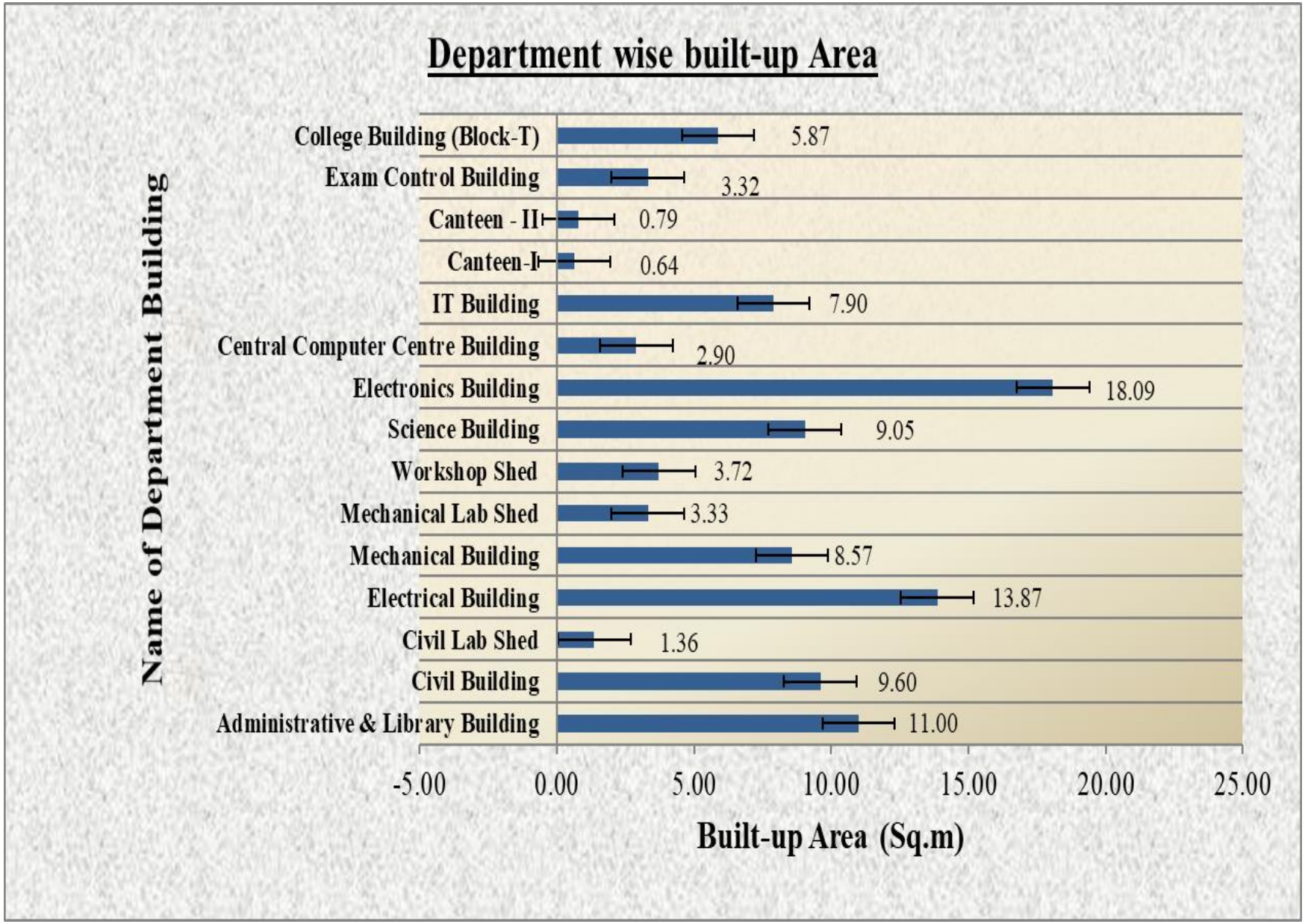

Department wise built-up Area
Name of Department Building
College Building (Block-T)
Exam Control Building
Canteen - II
Canteen-I
IT Building
Central Computer Centre Building
Electronics Building
Science Building
Workshop Shed
Mechanical Lab Shed
Mechanical Building
Electrical Building
Civil Lab Shed
Civil Building
Administrative & Library Building
5.87
3.32
0.79
0.64
7.90
2.90
18.09
9.05
3.72
3.33
8.57
13.87
1.36
9.60
11.00
-5.00
0.00
5.00
10.00
15.00
20.00
25.00
Built-up Area (Sq.m)

Table No. 3: Infrastructure of YCCE

Sr. No.	Description	Nos.
1)	Total Classroom	81
2)	Total Tutorial rooms	
3)	Total Labs	95
4)	Drawing Hall	3
5)	Workshop	5
6)	Seminar Hall	5
7)	Computer Centre	5
8)	Innovation Lab	3

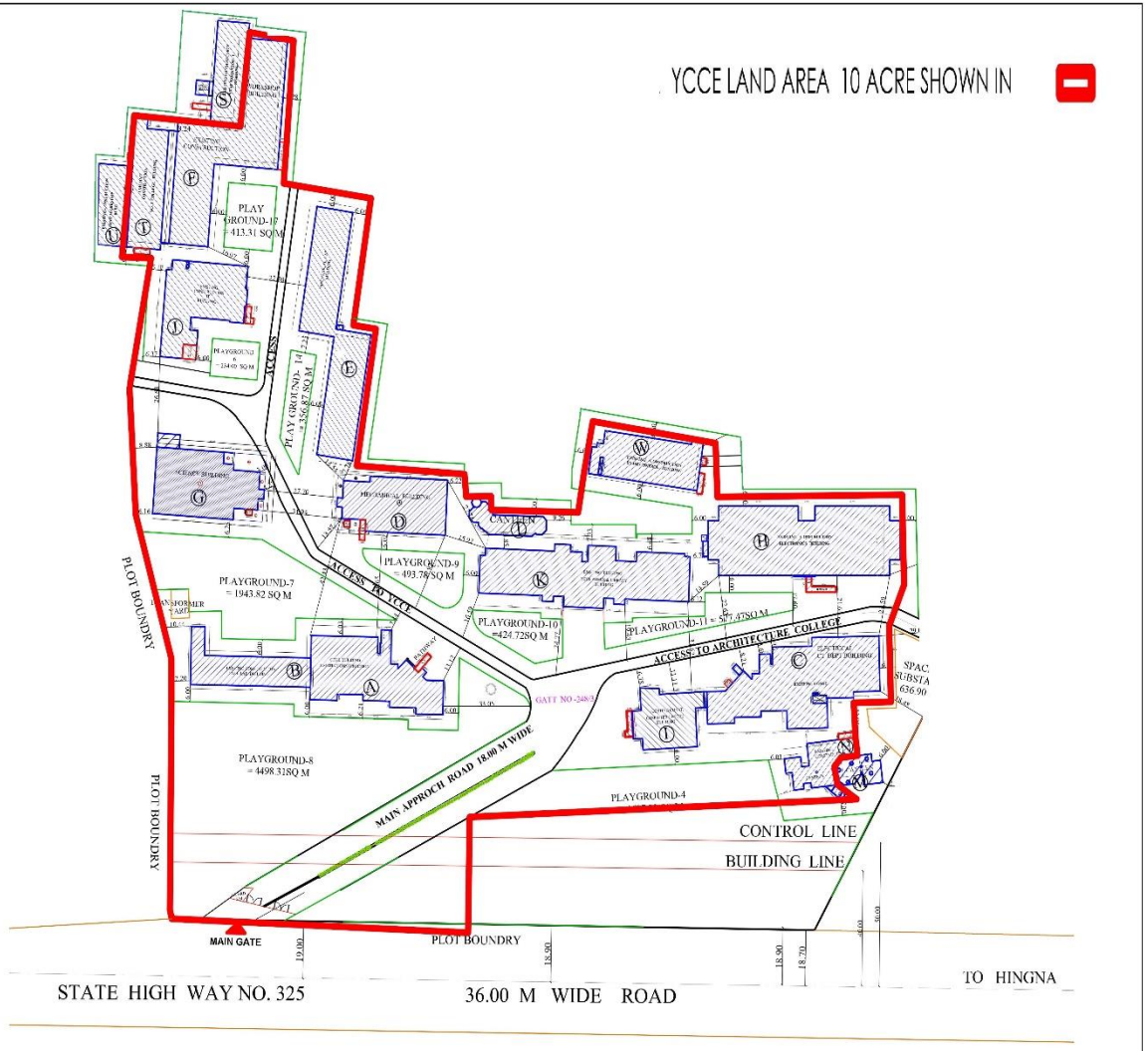
AREA STATEMENT

1 TOTAL LAND AREA	= 40 ACRE
A LAND FOR YCCE CAMPUS	= 10 ACRE
B YCCE EXCESS LAND ALLOTTED FOR MEDICAL COURSES	= 4 ACRE
C LAND ALLOTTED FOR OTHER EDUCATIONAL INSTITUTIONS	= 26 ACRE
TOTAL	= 40 ACRE
A PERMISSIBLE B/UP AREA FOR YCCE WITH FAR RATIO 1:1.10 (40460x1.10) = 44506 SQ M	

A –BUILT UP AREA STATEMENT (YCCE)

S NO	YCCE BUILDING	B/UP AREA IN SQ M	FLOORS
1	CIVIL BUILDING	3619.668 SQ M	G+3
2	ELECTRICAL BUILDING	5229.631 SQ M	G+3
3	MECHANICAL BUILDING	3229.63 SQ M	G+3
4	MECHANICAL LAB SHED	1253.736 SQ M	G.F.
5	WORKSHOP SHED	1403.56 SQ M	G.F.
6	SCIENCE BUILDING	3410.754 SQ M	G+3
7	CIVIL LAB SHED	513.86 SQ M	G.F.
8	ELECTRONICS BUILDING	6818.75 SQ M	LG.F.+G+2
9	CENTRAL COMPUTER CENTER BUILDING	1094.784 SQ M	B+G+1
10	IT BUILDING	2977.811 SQ M	G+3
11	ADMIN & LIBRARY BUILDING	4146.054 SQ M	G+3
12	CANTEEN -1	241.041 SQ M	G.F.
13	CANTEEN - 3	298.084 SQ M	G.F.
14	EXAM CONTROL BUILDING	1250.412 SQ M	G +1
15	COLLEGE BUILDING (BLOCK-T)	2214.985 SQ M	G +3
	TOTAL B/UP AREA	37,702.76 SQ M	

KH. BOUNDARY SHOWN IN
EXISTING BUILDING SHOWN IN
PROPOSED CONSTRUCTION SHOWN IN
PLAYGROUND AREA SHOWN IN
ACCESS SHOWN IN
TRANSFORMER SHOWN IN



Map No. 1 : Marked Boundary Area of YCCE

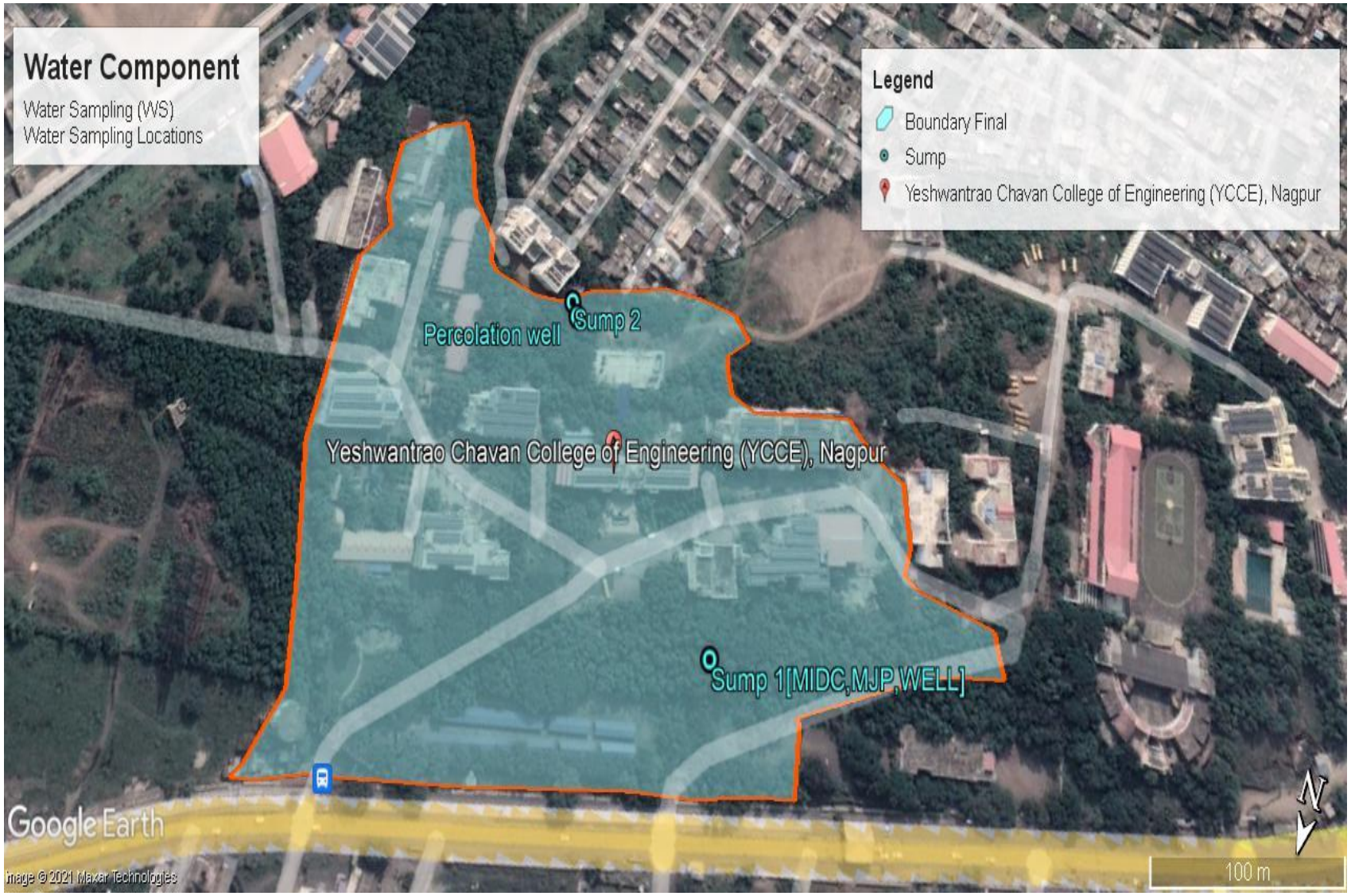
I) Water Audit

Water plays a significant role in maintaining the human health and welfare. Clean drinking water is now recognized as a fundamental right of human beings. Around 780 million people do not have access to clean and safe water and around 2.5 billion people do not have proper sanitation. As a result, around 6–8 million people die each year due to water related diseases and disasters. In the today world, the water use in household supplies, public supplies is commonly defined as domestic water. This water is processed to be safely consumed as drinking water and other purposes. Water quality and suitability for use are determined by its taste, odor, colour, and concentration of organic and inorganic matters. Contaminants in the water can affect the water quality and consequently the human health. Therefore, the investigation of the drinking water quality by researchers and governmental departments/ private organization has been performed regularly throughout the world.

The major Drinking water sources at YCCE are:

1) Maharashtra Jeevan Pradhikaran (MJP)
2) Maharashtra Industrial Development Corporation (MIDC)
3) Groundwater Well
4) Borewell-2 Nos.

The water sample was collected by purposive sampling method from common sump and subjected for the physico-chemical and biological characterization for qualitative and quantitative estimation of water within the campus.



Satellite Imagery No. 1: Water sources within YCCE

Indian Standard DRINKING WATER — SPECIFICATION

Table No. 4: Organoleptic and Physical Parameters (*Foreword* and *Clause* 4)				
Sr. No.	**Characteristic**	**Requirement (Acceptable Limit)**	**Permissible Limit in the Absence of Alternate Source**	**Remarks**
i)	Colour, Hazen units, *Max*	5	15	Extended to 15 only, if toxic substances are not suspected in absence of alter- nate sources a) Test cold and when heated
ii)	Odour	Agreeable	Agreeable	—
iii)	*p*H value	6.5-8.5	No relaxation	b) Test at several dilutions
iv)	Taste	Agreeable	Agreeable	Test to be conducted only after safety has been established
v)	Turbidity, NTU, *Max*	1	5	—
vi)	Total dissolved solids, mg/l,	500	2,000	—
NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.				

Table No. 5: General Parameters Concerning Substances Undesirable in Excessive Amounts (*Foreword* and *Clause* 4)				
Sr. No.	**Characteristic**	**Requirement (Acceptable Limit)**	**Permissible Limit in the Absence of Alternate Source**	**Remarks**
1)	Aluminium (as Al), mg/l, *Max*	0.03	0.2	—
2)	Ammonia (as total ammonia-N), mg/l, *Max*	0.5	No relaxation	—
3)	Anionic detergents (as MBAS) mg/l, *Max*	0.2	1.0	—
4)	Barium (as Ba), mg/l, *Max*	0.7	No relaxation	—
5)	Boron (as B), mg/l, *Max*	0.5	1.0	—
6)	Calcium (as Ca), mg/l, *Max*	75	200	—
7)	Chloramines (as Cl_2), mg/l, *Max*	4.0	No relaxation	—
8)	Chloride (as Cl), mg/l, *Max*	250	1,000	—
9)	Copper (as Cu), mg/l, *Max*	0.05	1.5	—
10)	Fluoride (as F) mg/l, *Max*	1.0	1.5	—

11)	Free residual chlorine, mg/l, *Min*	0.2	1	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/l
12)	Iron (as Fe), mg/l, *Max*	0.3	No relaxation	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
13)	Magnesium (as Mg), mg/l, *Max*	30	100	—
14)	Manganese (as Mn), mg/l, *Max*	0.1	0.3	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
15)	Mineral oil, mg/l, *Max*	0.5	No relaxation	—
16)	Nitrate (as NO_3), mg/l, *Max*	45	No relaxation	—
17)	Phenolic compounds (as C_6H_5OH), mg/l, *Max*	0.001	0.002	—

18)	Selenium (as Se), mg/l, *Max*	0.01	No relaxation	—
19)	Silver (as Ag), mg/l, *Max*	0.1	No relaxation	—
20)	Sulphate (as SO_4) mg/l, *Max*	200	400	May be extended to 400 provided that Magnesium does not exceed 30
21)	Sulphide (as H_2S), mg/l, *Max*	0.05	No relaxation	—
22)	Total alkalinity as calcium carbonate, mg/l, *Max*	200	600	—
23)	Total hardness (as $CaCO_3$), mg/l, *Max*	200	600	—
24)	Zinc (as Zn), mg/l, *Max*	5	15	—

NOTES:

1) In case of dispute, the method indicated by '*' shall be the referee method.

2) It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under ‘acceptable’ render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under ‘permissible limit in the absence of alternate source’ in col 4, above which the sources will have to be rejected.

Table No. 6: : Parameters Concerning Toxic Substances (*Foreword* and *Clause* 4)				
Sr. No.	**Characteristic**	**Requirement (Acceptable Limit)**	**Permissible Limit in the Absence of Alternate Source**	**Remarks**
i)	Cadmium (as Cd), mg/l, *Max*	0.003	No relaxation	—
ii)	Cyanide (as CN), mg/l, *Max*	0.05	No relaxation	—
iii)	Lead (as Pb), mg/l, *Max*	0.01	No relaxation	—
iv)	Mercury (as Hg), mg/l, *Max*	0.001	No relaxation	—
v)	Molybdenum (as Mo), mg/l, *Max*	0.07	No relaxation	—
vi)	Nickel (as Ni), mg/l, *Max*	0.02	No relaxation	—
vii)	Pesticides, µg/l, *Max*	—	No relaxation	—
viii)	Polychlorinated biphenyls, mg/l, *Max*	0.000 5	No relaxation	or APHA 6630
ix)	Polynuclear aromatic hydro-carbons (as PAH), mg/l, *Max*	0.000 1	No relaxation	—
x)	Total arsenic (as As), mg/l, *Max*	0.01	0.05	—
xi)	Total chromium (as Cr), mg/l, *Max*	0.05	No relaxation	—

Table No. 7 : Bacteriological Quality of Drinking Water[1)] (*Clause* 4.1.1)		
Sr. No.	**Organisms**	**Requirements**
1)	All water intended for drinking: a) E. coli or thermo-tolerant coliform bacteria	Shall not be detectable in any 100 ml sample
2)	Treated water entering the distribution system: a) E. coli or thermo-tolerant coliform bacteria b) Total coliform bacteria	Shall not be detectable in any 100 ml sample
3)	Treated water in the distribution system: a) E. coli or thermo-tolerant coliform bacteria b) Total coliform bacteria	Shall not be detectable in any 100 ml sample

Table No. 8: Qualitative & Quantitative Parameters of Drinking Water Source at YCCE

Sr. No	Characteristics Parameters	Values
1)	Odour	Agreeable
2)	Colour	<1 Hazen
3)	Taste	Agreeable
4)	pH	7.8
5)	Electrical Conductivity	417
6)	Water Temperature	21
7)	Turbidity	0.3 NTU
8)	Total Solids (mg/L)	246
9)	Dissolve Solids (mg/L)	241
10)	Suspended solids (mg/L)	<5
11)	Relative Density	1
12)	Dissolve Oxygen (mg/L)	6
13)	Alkalinity (as $CaCO_3$, mg/L)	190
14)	Total Hardness (as $CaCO_3$, mg/L)	190
15)	Calcium (mg/L)	47.3
16)	Magnesium (mg/L)	17.5
17)	Chloride (mg/L)	9
18)	Sulphate (mg/L)	6
19)	Ortho Phosphate (mg/L)	<0.05
20)	Sodium (mg/L)	8.5
21)	Fluorides (mg/L)	0.302
22)	Iron (mg/L)	0.155
23)	Nitrates (mg/L)	1.320
24)	Aluminium (mg/L)	<0.025
25)	Copper(mg/L)	0.016
26)	Zinc(mg/L)	0.044
27)	Fecal coliform (CFU)	Absent
28)	E. Coli (CFU)	Absent

Table No. 9: Water Source at YCCE: I] Maharashtra Industrial Development Corporation (MIDC)

Sr. No.	Month	Year	Meter Readings	Total water quantity (litres)	Total Amount
1	June	2020	166	0	9818
2	July	2020	166	0	21050
3	August	2020	2751	2585	11828
4	September	2020	2751	0	11840
5	October	2020	2751	0	11259
6	November	2020	2751	0	0
7	December	2020	2751	0	0
8	January	2021	2751	0	0
9	February	2021	2751	0	0
10	March	2021	2751	0	0
11	April	2021	2751	0	11320
12	May	2021	2751	0	0
13	June	2021	2751	0	0
14	July	2021	2751	0	0
15	August	2021	2751	0	0
16	September	2021	2751	0	45930

Table No. 10: Water Source at YCCE: II] Maharashtra Jeevan Pradhikaran (MJP)

Sr. No.	Month	Year	Amount charged/1000 litres	Total Units Used	Total Amount
1)	June-July	2020	250	156	39000
2)	August-November	2020	250	501	125250
3)	December - January	2020-21	250	193	4825
4)	February- March	2021	250	186	4650
5)	April- May	2021	250	179	4475
6)	June- July	2021	250	382	9550
7)	August- September	2021	250	307	7675

* 1 Unit-1000 Lit. of water

Table No. 11: Rooftop Rainwater Harvesting Potential at YCCE

Sr. No	Name of the Department	Terrace (Area)	Annual Rainfall (mm)	Runoff factor	RWH Potential (Litres)
1	Civil Building	650.42	1143.8	0.8	595160.32
2	Electrical Building	3620.14	1143.8	0.8	3312572.91
3	Mechanical Building	663.75	1143.8	0.8	607357.80
4	Mechanical Lab Shed	983.705	1143.8	0.8	900129.42
5	Workshop Shed	1128.81	1143.8	0.8	1032906.30
6	Science Building	581.59	1143.8	0.8	532178.11
7	Civil Lab Shed	196.113	1143.8	0.8	179451.24
8	Electronics Building	3628.919	1143.8	0.8	3320606.04
9	Computer science	540.439	1143.8	0.8	494523.30
10	IT Building	568.955	1143.8	0.8	520616.58
11	Admin & Library	695.683	1143.8	0.8	636577.77

*Annual Rainfall (mm) = 1143.8 (January 2020 to December 2020)

Table No. 12: Water Budget of YCCE

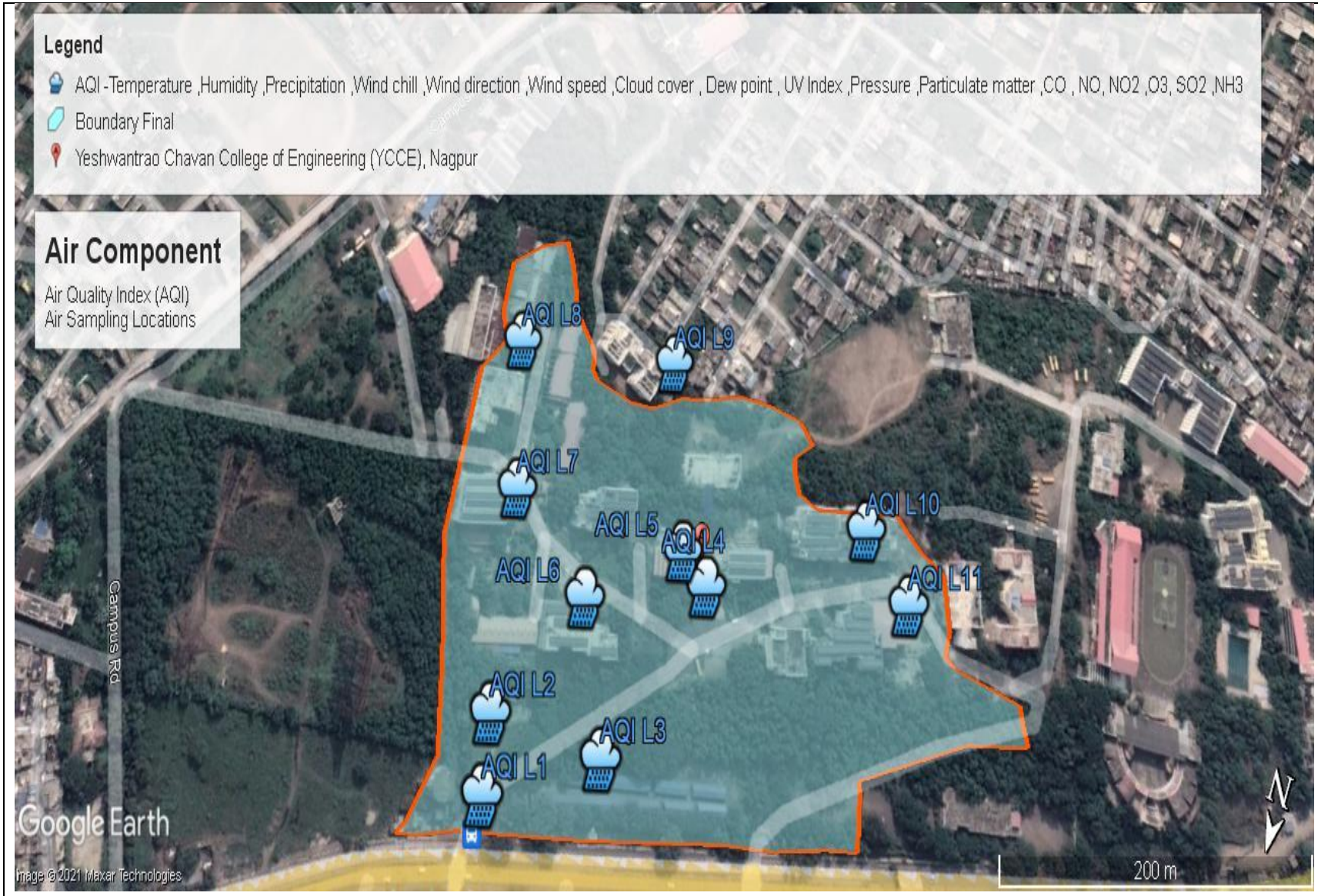
Sr. No.	YCCE Water Source	Total Volume of Water (in Units) 1 Unit =10,00 Litres)	Purpose of Water Use			Waste water Generated at STP (Lit.)	Treated Water & Disposed
			Domestic	Laboratory	Sanitation		
1	MJP	1247	Drinking, Irrigating Lawns	Distillation, Washing Glassware, Others	Flushing, Washing, Cleaning Toilets, etc	2,99,85,100	2,99,21,550
2	MIDC	0	Drinking, Irrigating Lawns	Distillation, Washing Glassware, Others	Flushing, Washing, Cleaning Toilets, etc		

II) AIR AUDIT

In addition to land and water, air is the prime resource for sustenance of life. In recent years, medium and small towns and cities have also witnessed an increase in pollution, thus getting fast reflected in the non-attainment cities of India. Air pollution has increasingly become a serious concern, predominantly because of its health impacts. Thus, regular track of Air Quality is important for human health.

One way to describe air quality is to report the concentrations of all pollutants with acceptable levels. An air quality index is defined as an overall scheme that transforms the weighed values of individual air pollution related parameters (for example, pollutant concentrations) into a single number or set of numbers.

The air sampling was done by purposive random sampling method at different locations within the campus to compute the qualitative and quantitative air pollutant data. The Air pollution index is generated with this data for the college campus.



Satellite Imagery No. 2: Sampling Locations of Air Component & Weather Component

Table No. 13: National Ambient Air Quality Standards

Sr. No.	Pollutants	Time weighted Average	Concentration of Ambient Air	
			Industrial, Residential, Rural Areas	Ecologically Sensitive Area
1.	Sulphur Dioxide (SO_2), µg/m^3	Annual	50	20
		24 hrs	80	80
2.	Nitrogen Dioxide (NO_2), µg/m^3	Annual	40	30
		24 hrs	80	80
3.	Particulate matter (PM_{10}), µg/m^3	Annual	60	60
		24 hrs	100	100
4.	Particulate matter ($PM_{2.5}$), µg/m^3	Annual	40	40
		24 hrs	60	60
5.	Ozone (O_3), µg/m^3	8 hours	100	100
		1 hours	180	180
6.	Carbon monoxide (CO) mg/m^3	8 hours	02	02
		1 hours	04	04

Source: National Ambient Air Quality StandarDs, CPCB, New Delhi, 18th November, 2009

Table No. 14: Qualitative and Quantitative Characteristics of Air at different locations at YCCE

Sr. No.	Location	CO	NO_2	SO_2	PM $_{2.5}$	PM 10	O_3	NH_3
1)	L1	1789	6.76	17.41	179.25	222.46	85.83	23
2)	L2	1789	6.76	17.41	179.25	222.46	85.83	23
3)	L3	527.3	1.84	35.29	60.71	73.92	114.4	23
4)	L4	527.3	1.84	35.29	60.71	73.92	114.4	23
5)	L5	3	1.84	39	140	77	33	23
6)	L6	3	1.73	39	140	77	33	23
7)	L7	527	1.73	35.27	60.71	73.92	112.3	23
8)	L8	527	1.84	35.27	60	73	114	23
9)	L9	527.3	1.84	35.3	60.71	73.92	114.4	23
10)	L10	9	9	39	140	77	33	23
11)	L11	507.3	1.87	50.55	64.41	77.97	133	23

Table No. 15: Assessment of Air Quality Index (AQI) of YCCE

Sr. No.	Location	AQI	PM 2.5
1)	L1	229	179.25
2)	L2	229	179.25
3)	L3	154	60.71
4)	L4	154	60.71
5)	L5	195	140
6)	L6	195	140
7)	L7	154	60.71
8)	L8	153	60
9)	L9	154	60.71
10)	L10	195	140
11)	L11	156	64.41

III) WEATHER & CLIMATE AUDIT

Weather is the mix of events that happen each day in our atmosphere. Even though there's only one atmosphere on Earth, the weather isn't the same all around the world. Weather is different in different parts of the world and changes over minutes, hours, days, and weeks. Most weather happens in the part of Earth's atmosphere that is closest to the ground—called the troposphere. Whereas weather refers to short-term changes in the atmosphere, climate describes what the weather is like over a long period of time in a specific area. Different regions can have different climates.

Weather is made up of multiple parameters, including air temperature, atmospheric (barometric) pressure, humidity, precipitation, solar radiation and wind. Each of these factors can be measured to define typical weather patterns and to determine the quality of local atmospheric conditions. The environmental conditions produced by different weather parameters have an impact on the quality of the surrounding ecosystem. Weather elements form a chain reaction, as the impacts do not remain solely in the atmosphere. Temperature, pressure and humidity (moisture) can interact to form clouds. These clouds, in turn can reduce solar radiation for plants, or increase precipitation, which can runoff into a body of water. Consistently high temperatures can increase the heat transfer to local bodies of water in addition to heating the air. Likewise, a lack of precipitation affects not only weather conditions, but soil moisture and water levels due to evaporation. Wind speed and direction can be indicative of a front moving into the area, or it can create waves and encourage a stratified water column to mix.

Weather monitoring can establish a database of typical conditions. When one or more weather elements deviate from this standard, the information can be used to explain or predict weather events. Monitoring weather conditions is important not only as an environmental baseline, but to maintain quality working conditions, marine studies and recreational safety.

Table No. 16: Qualitative and Quantitative Characteristics of Weather and Climate at YCCE

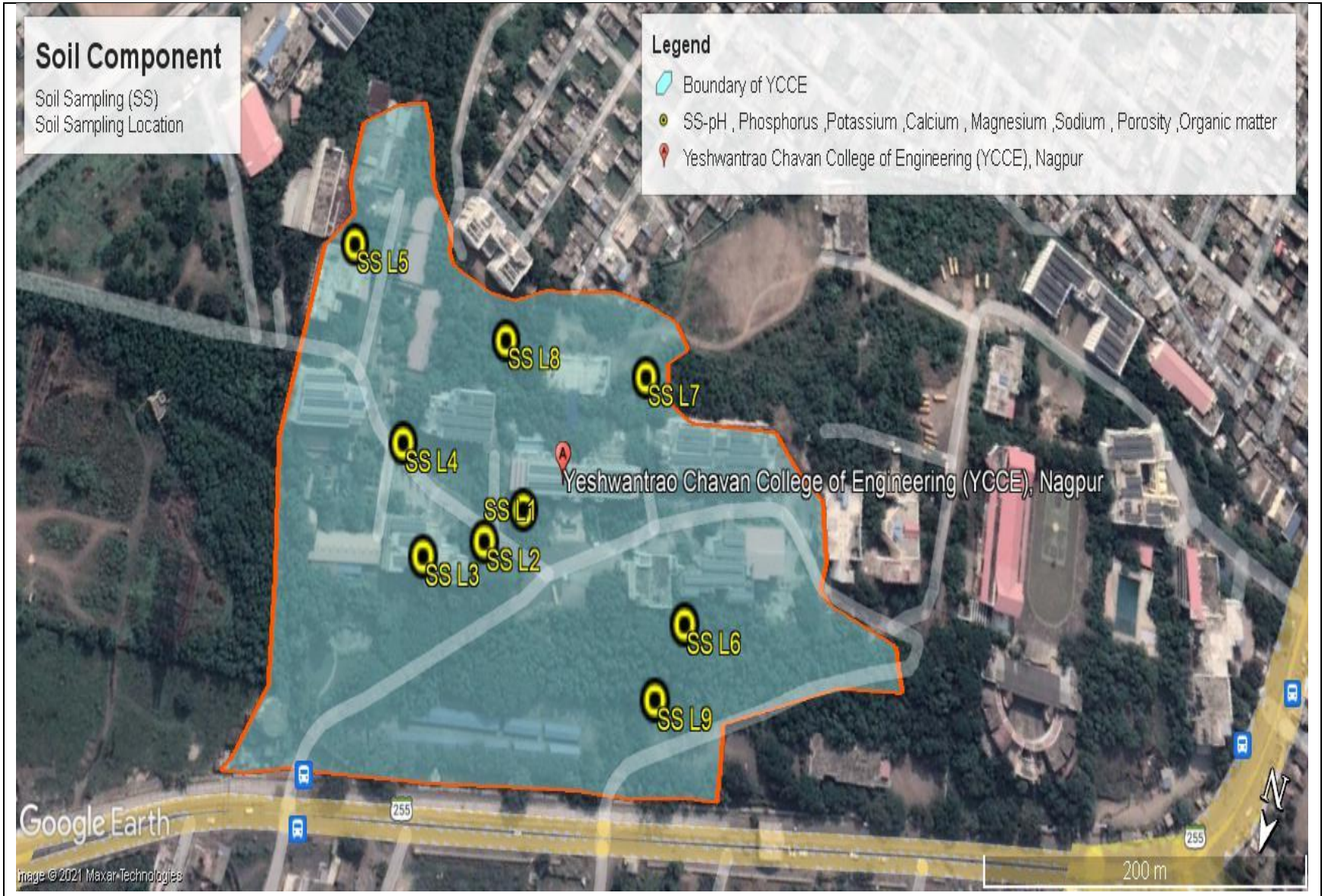
Sr. No.	Location	Air Temp (ºC) Min.-Max.	Relative Humidity (%)	UV Index	Pressure KPa	Wind Speed Km/hr	Wind Chill (%)	Dew Point (ºC)	Cloud Cover (%)
1)	L1	21-29	68	3.95	1019	1.11	26	15	0
2)	L2	22-29	68	6	1019	1.11	26	15	30
3)	L3	16-28	36	5.8	1019	1.11	26	15	38
4)	L4	16-26	50	6	1018	1.11	26	15	30
5)	L5	16-25	43	7	1017	1.11	26	15	0
6)	L6	16-32	43	7	1017	0.55	27	12	37
7)	L7	16-30	36	5.7	1018	1.11	27	12	34
8)	L8	27-28	43	7	1016	0.71	27	12	38
9)	L9	16-28	34	5.82	1016	0.83	27	15	34
10)	L10	16-30	42	7	1017	0.83	27	15	34
11)	L11	16-30	42	7.5	1017	0.83	27	15	34
12)	**Mean**	**18-28.63**	**45.91**	**6.25**	**75.14**	**0.95**	**26.55**	**14.18**	**28.09**
13)	**Std. Dev.**	**3.71-5.96**	**11.78**	**1.00**	**0.011**	**0.20**	**0.52**	**1.40**	**14.15**

IV) SOIL AUDIT

Soil is important as a medium for plant growth and for the support of much animal and human activity. The Soil acts as the reservoir for the nutrients and water providing the plant's needs for these requirements throughout their growth. Indeed soil (and the soil constituents), together with the plant life it supports, the rock on which it lies, and the climate it experiences, forms a finely balanced system.

The soil performs many functions. These include functions related to natural ecosystems, agricultural productivity, and environmental quality, soil as source of raw materials and as base for buildings. Of these the agricultural productivity function is probably the most widely recognized and understood. This function of soil is to support plant and animal productivity whilst maintaining or enhancing water and air quality and also supporting human health and habitation. To perform this production function, the soil must be able to provide the following: a physical, chemical and biological context suitable for the survival and development of living organisms; the conditions for the regulation and partitioning of water flow, storage and recycling of nutrients and other elements; conditions to support biological activity and diversity for plant growth and animal productivity; an environment to filter, buffer, degrade, immobilize, and detoxify organic and inorganic substances; and provide mechanical support for living organisms and their structures.

The soil samples were collected from different locations within the YCCE campus by random sampling method and then further these samples were equilibriated by quartering and coning method. Further the big stones and mudballs were removed and the soil was sieved through the fine sieve and then was subjected for further qualitative and quantitative physico-chemical analysis.



Satellite Imagery No. 3: Sampling Locations of Soil Component

Table No. 17: Standard Soil Classification

Sr. No.	Soil Tests	Range	Classification
1)	pH	<4.5	Extremely acidic
		4.51-5.50	Very strongly acidic
		5.51-6.00	Moderately acidic
		6.01-6.50	Slightly acidic
		6.51-7.30	Neutral
		7.31-7.80	Slightly alkaline
		7.81-8.50	Moderately alkaline
		8.51-9.00	Strongly alkaline
		9.01	Very strongly alkaline
2)	Salinity (mmhos/cm), (1ppm=640 mmhos/cm)	Upto 1.00	Average
		1.01-2.00	Harmful to germination
		2.01-3.00	Harmful to crops
3)	Organic carbon (%)	Upto 0.2	Very Less (for crops)
		0.21-0.4	Less
		0.41-0.6	Medium
		0.61-0.8	On an average sufficient
		0.81-1.0	Sufficient
		>1.0	More than sufficient

4)	Nitrogen (Kg/ha)	Upto 50	Very Less (for crops)
		51-100	Less
		101-105	Good
		151-300	Better
		>300	Sufficient
5)	Phosphorus (Kg/ha)	Upto 15	Very Less (for crops)
		16-30	Less
		31-50	Medium
		51-65	On an average sufficient
		66-85	Sufficient
		>80	More than sufficient
6)	Potash (Kg/ha)	0-120	Very Less (for crops)
		121-180	Less
		181-240	Medium
		241-300	Average
		301-360	Better
		>360	More than sufficient

Source: Hand Book of Agriculture, ICAR, New Delhi

Table No. 18: Qualitative and Quantitative Characteristics of Soil at YCCE

Sr. No.	Parameters	Units	Results	Method Reference
1	Available Nitrogen	mg/kg	207	Manual of Soil Testing, Department of Agriculture & Co-operation, Ministry of Agriculture, Govt. India, Sec.4-17, Page No 89.
2	Available Phosphorous	mg/kg	8.92	FAO Sec. III, 12-1; Page No. 157
3	Available Potassium	meq/100g	0.649	FAO Sec. III, 8-1; Page No. 115
4	Organic Carbon	%	0.843	Manual of Soil Testing, Department of Agriculture & Co-operation, Ministry of Agriculture, Govt. India, Sec.4-17, Page No 89.
5	Bulk Density	g/cm^3	t.37	FAO Sec. III, 1; Page No. 33

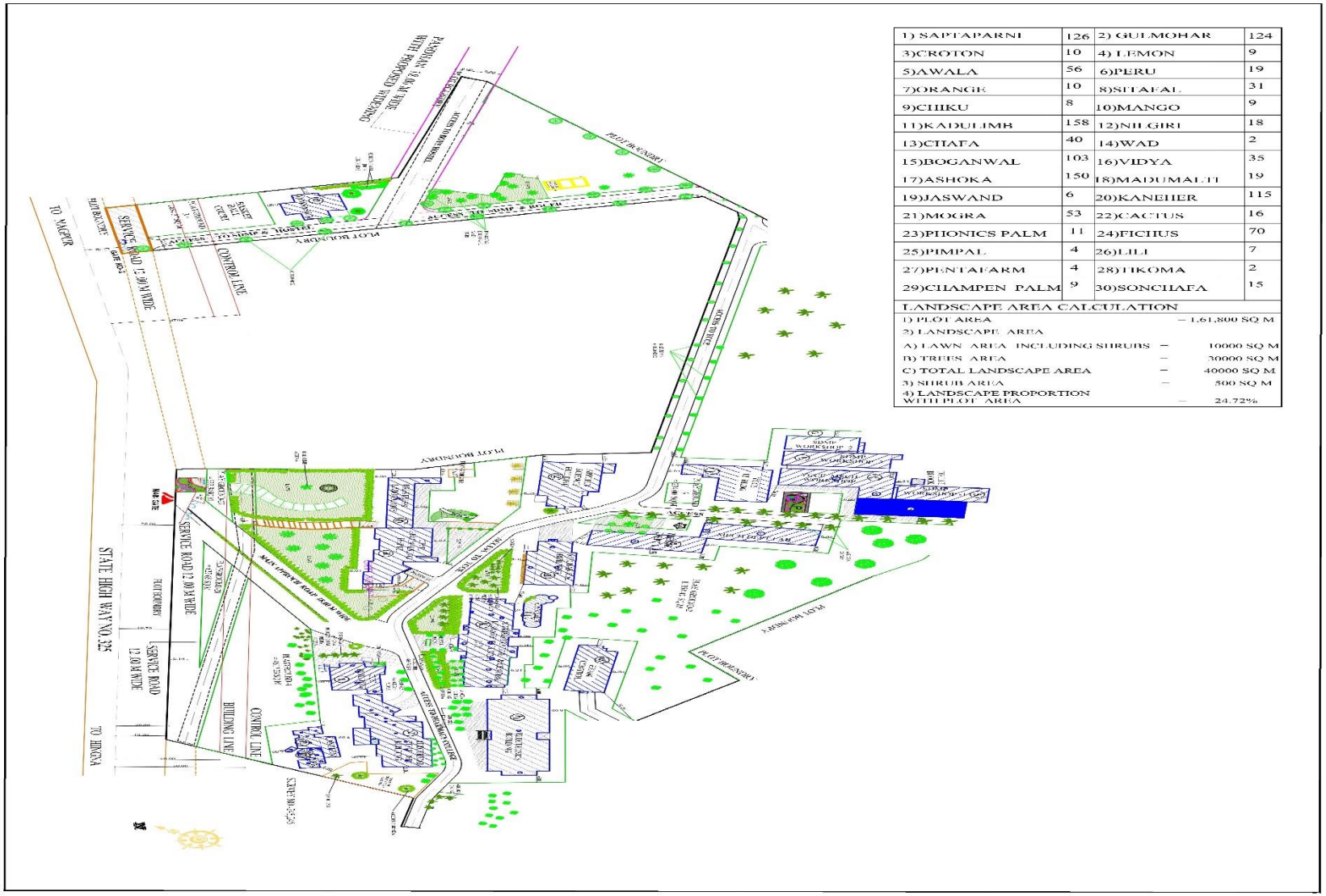
VI) VEGETATION AUDIT

Trees play a critical role for people and the planet. Numerous studies have demonstrated that the presence of trees and urban nature can improve people's mental and physical health, children's attention and test scores, the property values in a neighborhood, and beyond. Trees cool our urban centers. Trees are essential for healthy communities and people. The benefits that trees provide can help cities and countries meet 15 of the 17 internationally supported United Nations Sustainable Development Goals.

Trees provide many ecosystem services that can benefit a city environment, ranging from reducing energy use and removing pollution (Nowak & Greenfield, 2018) to increasing property values, developing the local economy, and supporting tourism (Nesbitt, Hotte, Barron, Cowan, & Sheppard, 2017).

One of the most important benefits for human health that urban forests can provide is the interception and reduction of air pollution. Tree cover is strongly linked to student academic performance (Kuo, Browning, Sachdeva, et al., 2018; Kweon, Ellis, Lee, & Jacobs, 2017; Matsuoka, 2010). In a study, views of trees and shrubs at schools, as opposed to grass, were strongly related to future education plans and graduation rates (Matsuoka, 2010). Li and Sullivan (2016) found that students who had views of trees and green environment from their classrooms, as compared to being in a room without windows or a room with a view of a brick wall, scored substantially higher on tests measuring attention, and they had a faster recovery from a stressful event. Students who learn in the presence of trees and nature have improved classroom engagement (Kuo, Browning, & Penner, 2018). Trees can promote a quality education, which has innumerable advantages for society.

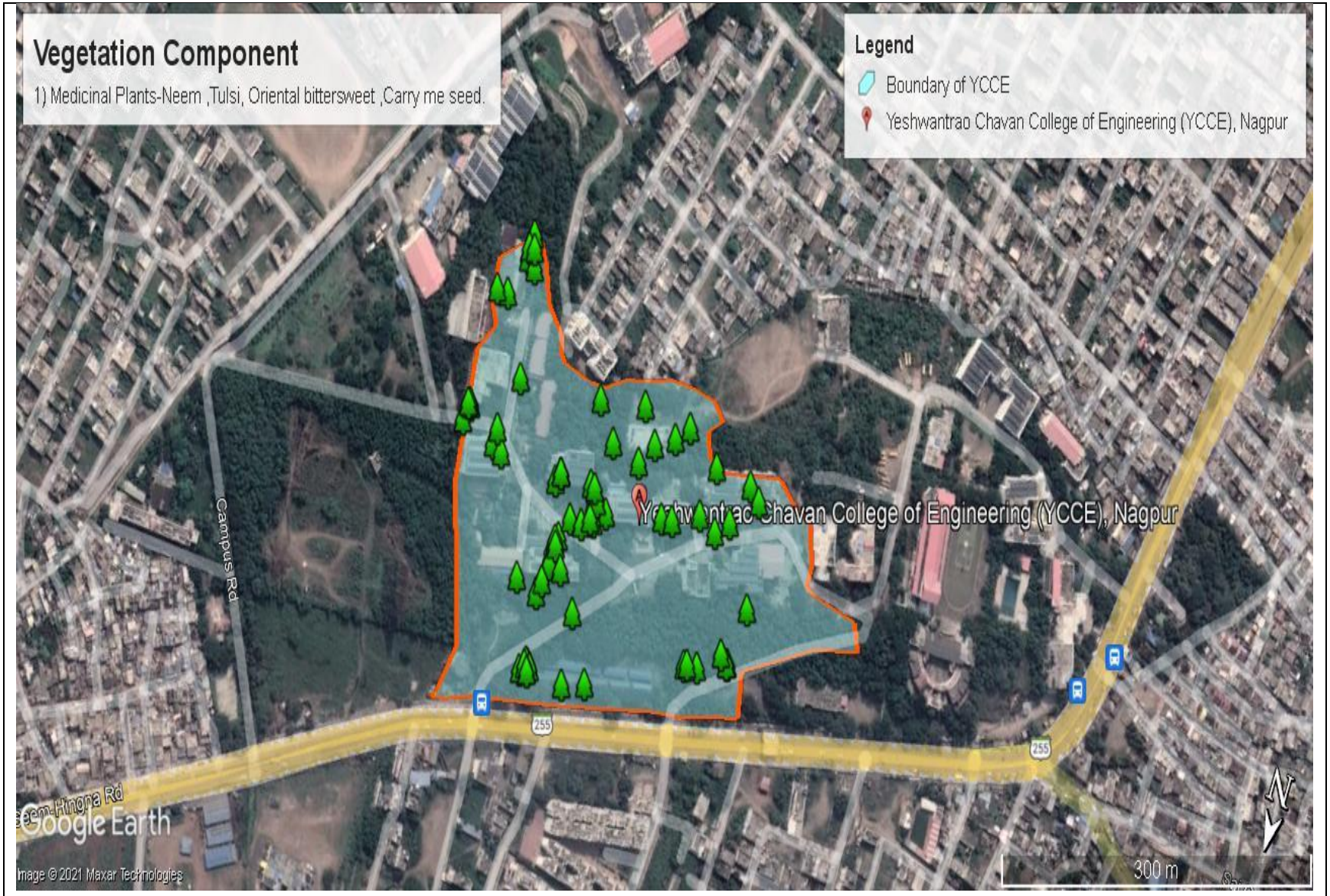
The Flora component was studied by observation and identification method. The vegetation was further categorized as: Shrubs, Ornamental Species, Medicinal Species and Tree Species. The tree species are marked with their geospatial data in map to generate the no. of individual per species present in the YCCE campus. This shall help to generate the highly dominant species.



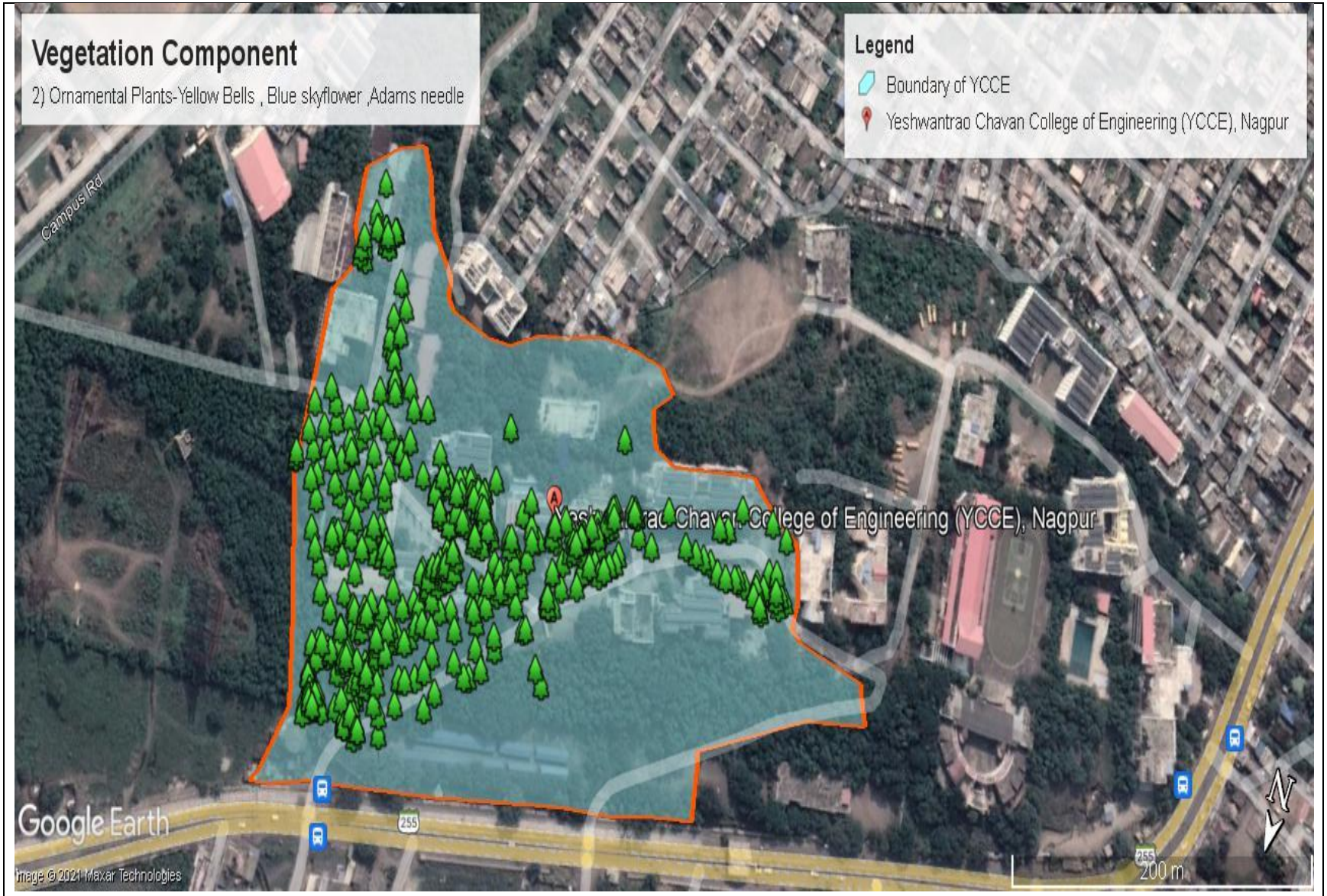
1) SAPTAPARNI	126	2) GULMOHAR	124
3)CROTON	10	4) LEMON	9
5)AWALA	56	6)PERU	19
7)ORANGE	10	8)SITAFAL	31
9)CHIKU	8	10)MANGO	9
11)KADULIMB	158	12)NILGIRI	18
13)CHAFA	40	14)WAD	2
15)BOGANWAL	103	16)VIDYA	35
17)ASHOKA	150	18)MAIDUMALTI	19
19)JASWAND	6	20)KANEHER	115
21)MOGRA	53	22)CACTUS	16
23)PHONICS PALM	11	24)FICHUS	70
25)PIMPAL	4	26)LILI	7
27)PENTAFARM	4	28)TIKOMA	2
29)CHAMPEN PALM	9	30)SONCHAFA	15

LANDSCAPE AREA CALCULATION		
1) PLOT AREA	–	1,61,800 SQ M
2) LANDSCAPE AREA		
A) LAWN AREA INCLUDING SHRUBS	–	10000 SQ M
B) TREES AREA	–	30000 SQ M
C) TOTAL LANDSCAPE AREA	–	40000 SQ M
3) SHRUB AREA	–	500 SQ M
4) LANDSCAPE PROPORTION WITH PLOT AREA	–	24.72%

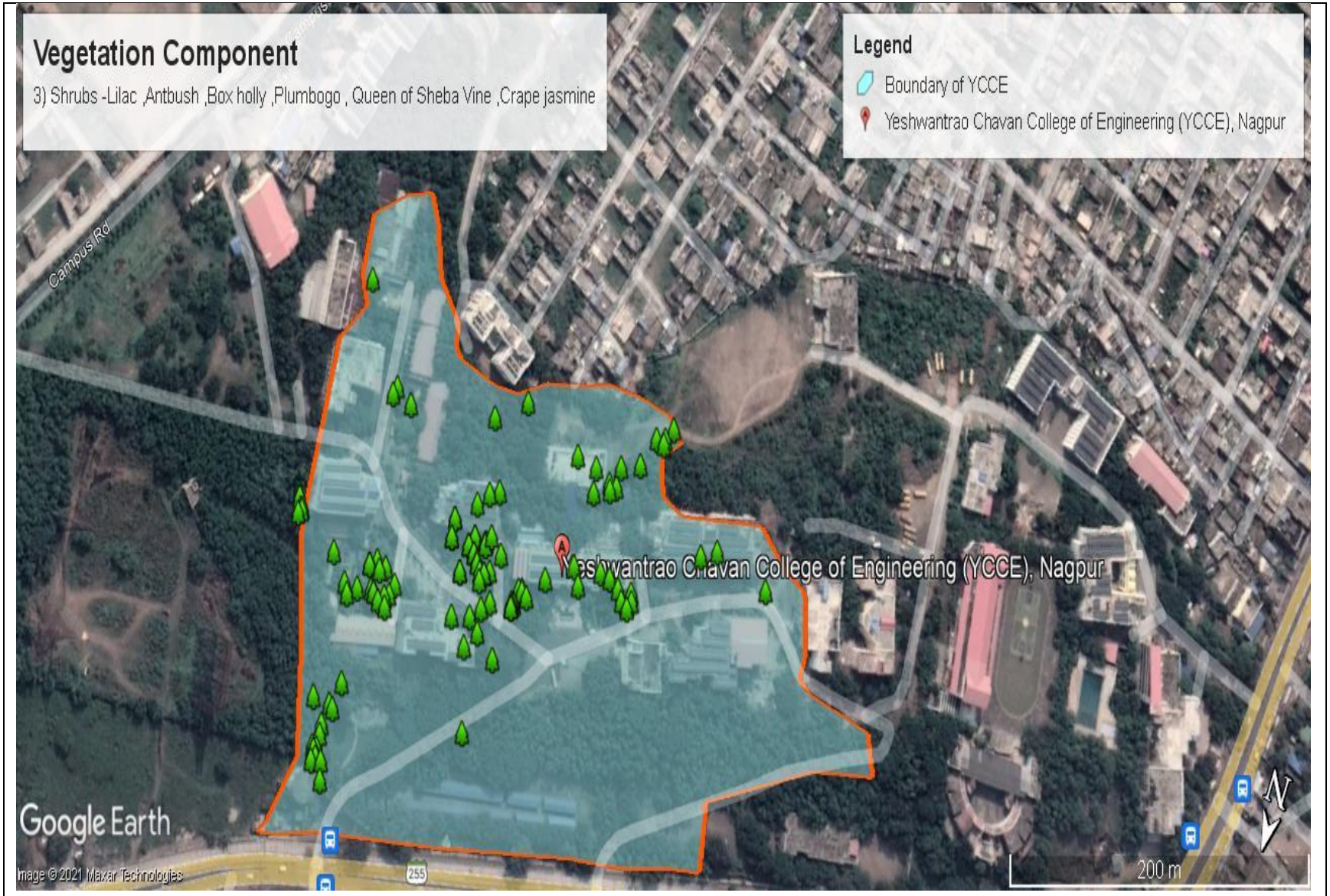
Map No. 2: Vegetation Map of YCCE Campus



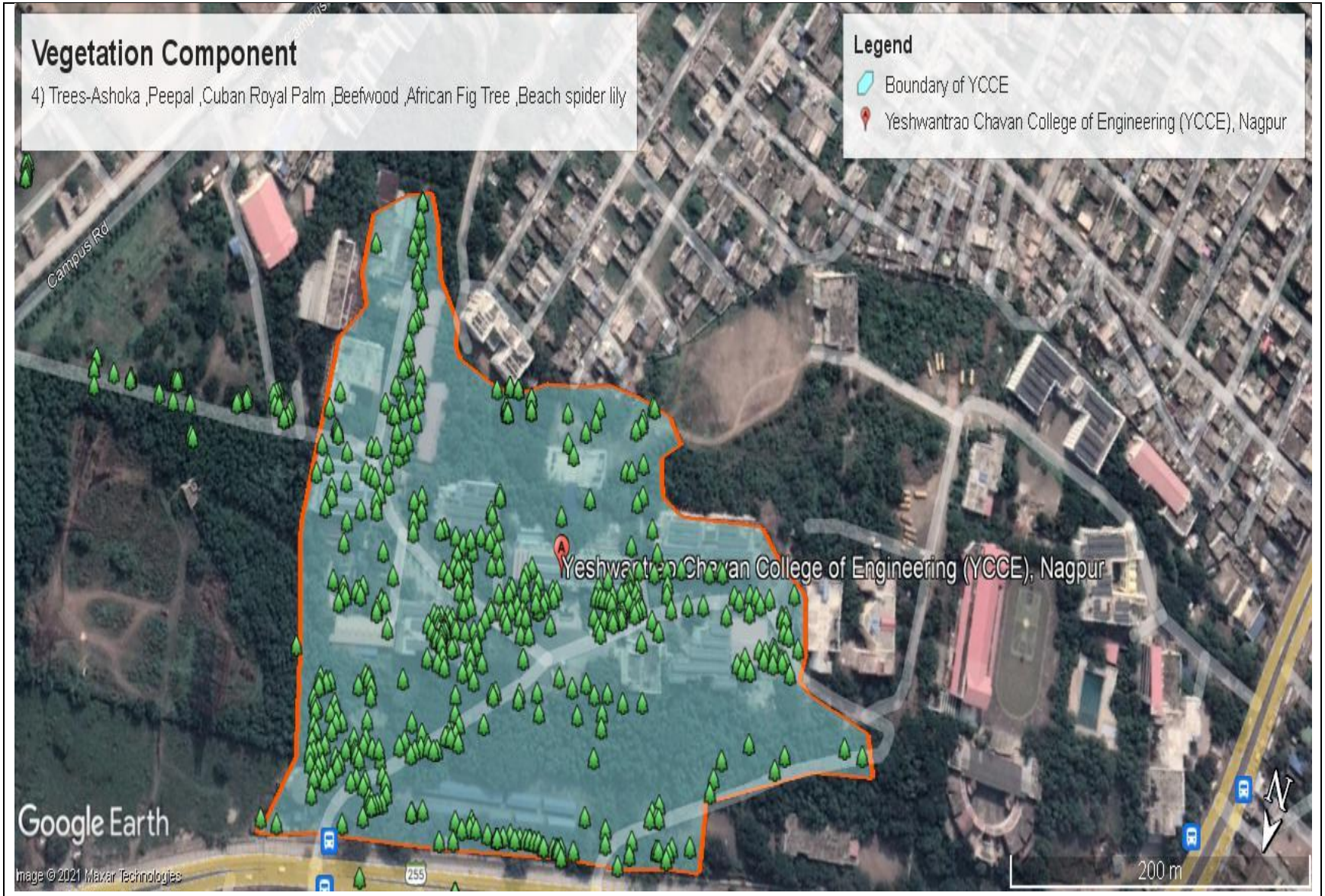
Satellite Imagery No. 4: Sampling Locations of Vegetation Component



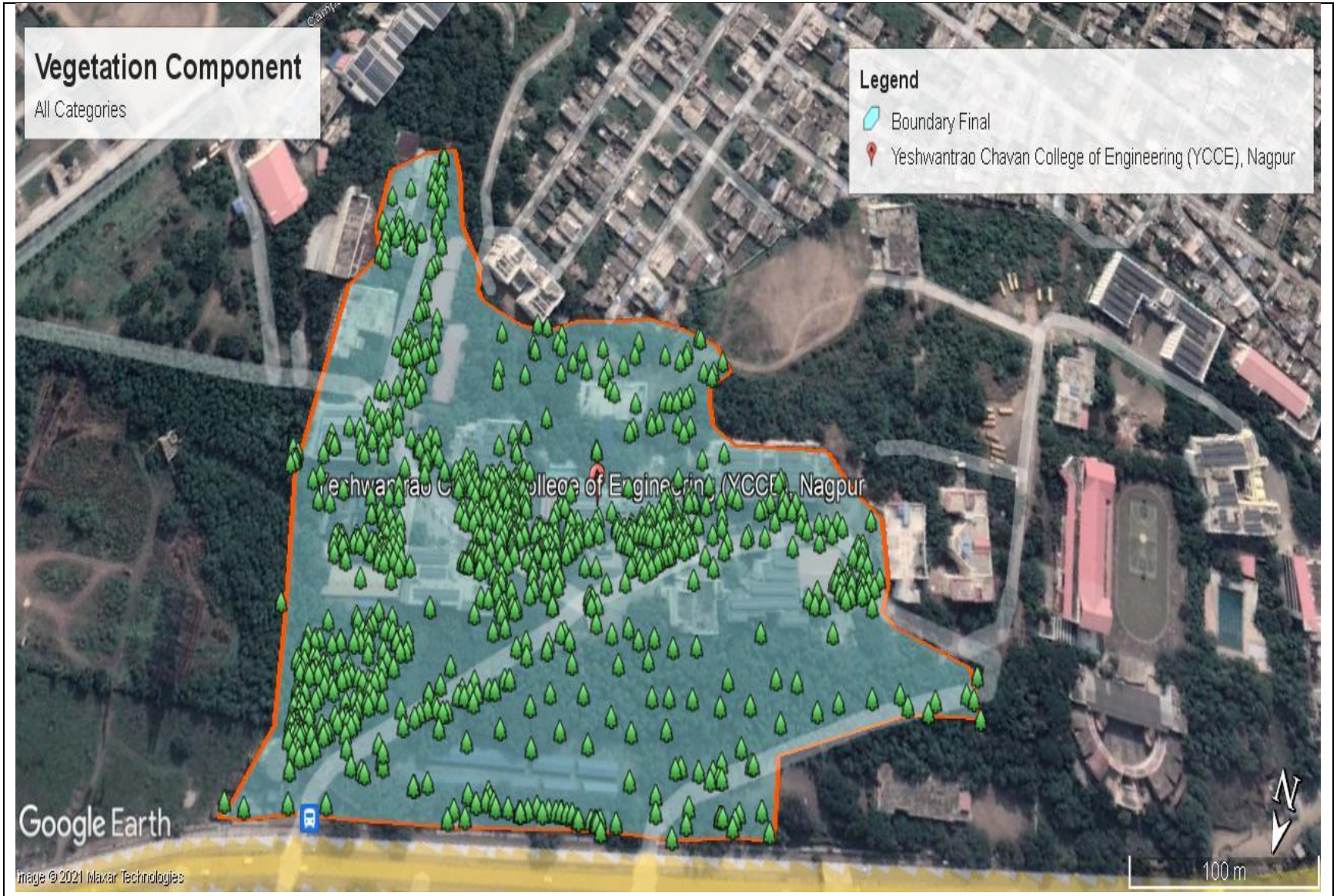
Satellite Imgery No. 5: Sampling Locations of Vegetation Component



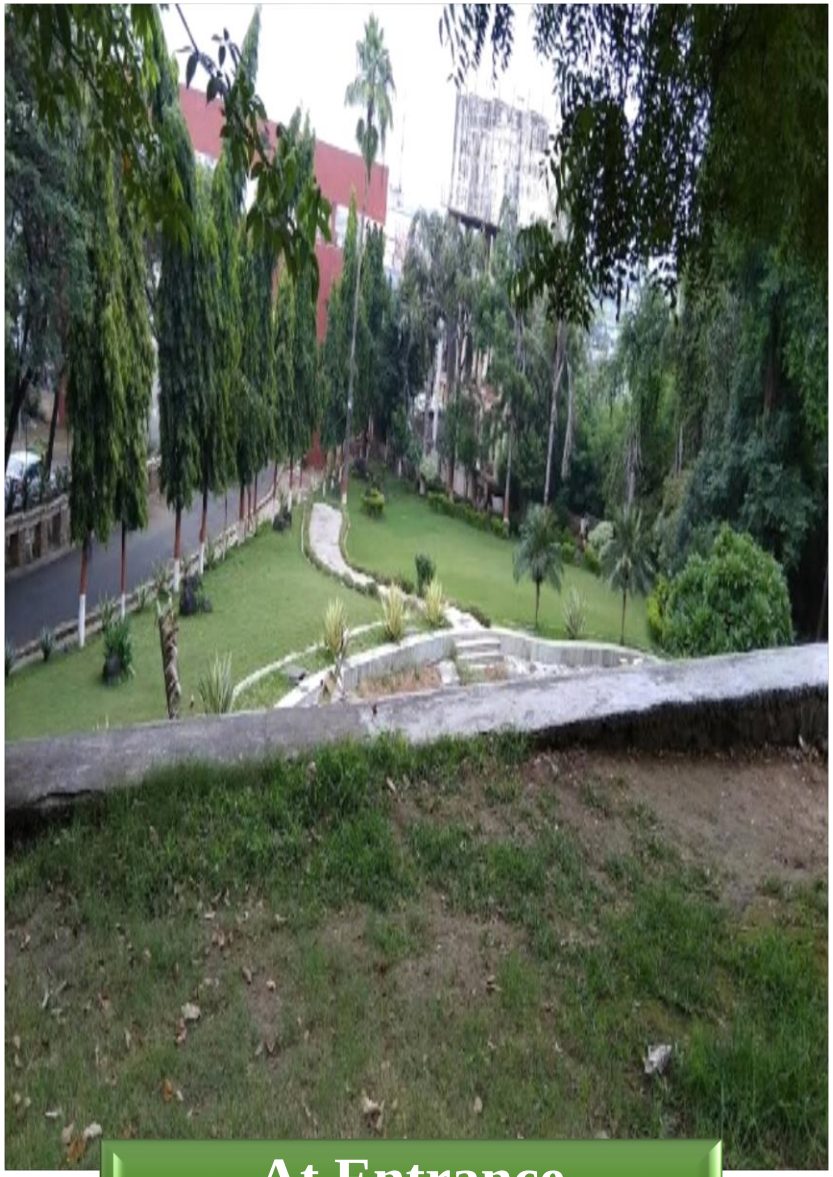
Satellite Imagery No. 6: Sampling Locations of Vegetation Component



Satellite Imagery No. 7: Sampling Locations of Vegetation Component



Satellite Imagery No. 8: Sampling Locations of All Vegetation in Campus



At Entrance

Within Campus

Table No. 19: Vegetation at YCCE: I] Medicinal Species

Sr. No.	Scientific Name	Common Name	Total Species
1)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	7
2)	*Azadirachta indica*	Neem	58
3)	*Phyllanthus amarus*	Carry me seed	1
4)	**Total**		66

Table No. 20: Geospatial Configurations of Medicinal Species

Sr. No.	Species Name	Common Name	Latitude	Longitude
1)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095607	78.979084
2)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095355	78.978985
3)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095361	78.978946
4)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095427	78.978895
5)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095422	78.978923
6)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095545	78.978879
7)	*Celastrus orbiculatus Thunb*	Oriental bittersweet	21.095542	78.978912
8)	*Azadirachata indica*	Neem	21.095598	78.978976
9)	*Azadirachta indica*	Neem	21.095393	78.979272
10)	*Azadirachtaindica*	Neem	21.095393	78.979272
11)	*Azadirachta indica*	Neem	21.094619	78.980264
12)	*Azadirachta indica*	Neem	21.094387	78.979991
13)	*Azadirachta indica*	Neem	21.094293	78.980083
14)	*Azadirachta indica*	Neem	21.094208	78.980070
15)	*Azadirachta indica*	Neem	21.094608	78.980162
16)	*Phyllanthus amarus*	Carry me seed	21.095917	78.981025
17)	*Azadirachta indica*	Neem	21.096460	78.982590
18)	*Azadirachta indica*	Neem	21.094580	78.978418
19)	*Azadirachta indica*	Neem	21.095452	78.979302
20)	*Azadirachta indica*	Neem	21.096524	78.978761

21)	*Azadirachta indica*	Neem	21.096443	78.978565
22)	*Azadirachta indica*	Neem	21.095299	78.978299
23)	*Azadirachta indica*	Neem	21.095276	78.978204
24)	*Azadirachta indica*	Neem	21.095365	78.976744
25)	*Azadirachta indica*	Neem	21.095368	78.979926
26)	*Azadirachta indica*	Neem	21.095484	78.979837
27)	*Azadirachta indica*	Neem	21.095463	78.979928
28)	*Azadirachta indica*	Neem	21.095023	78.979848
29)	*Azadirachta indica*	Neem	21.094285	78.980036
30)	*Azadirachta indica*	Neem	21.094355	78.980071
31)	*Azadirachta indica*	Neem	21.096096	78.979403
32)	*Azadirachta indica*	Neem	21.096010	78.977754
33)	*Azadirachta indica*	Neem	21.095995	78.977729
34)	*Azadirachta indica*	Neem	21.095976	78.977638
35)	*Azadirachta indica*	Neem	21.095826	78.977461
36)	*Azadirachta indica*	Neem	21.095861	78.977393
37)	*Azadirachta indica*	Neem	21.095857	78.977382
38)	*Azadirachta indica*	Neem	21.094827	78.977610
39)	*Azadirachta indica*	Neem	21.094885	78.977501
40)	*Azadirachta indica*	Neem	21.095095	78.977702
41)	*Azadirachta indica*	Neem	21.095153	78.977977
42)	*Azadirachta indica*	Neem	21.095195	78.977807
43)	*Azadirachta indica*	Neem	21.096445	78.979620
44)	*Azadirachta indica*	Neem	21.094842	78.977945
45)	*Azadirachta indica*	Neem	21.095077	78.978629
46)	*Azadirachta indica*	Neem	21.095459	78.978791
47)	*Azadirachta indica*	Neem	21.094718	78.978268
48)	*Azadirachta indica*	Neem	21.094750	78.978706
49)	*Azadirachta indica A.Juss*	Neem	21.095331	78.980209
50)	*Azadirachta indica A.Juss*	Neem	21.09532	78.980225

51)	*Azadirachta indica A.Juss*	Neem	21.095328	78.980237
52)	*Azadirachta indica A.Juss*	Neem	21.095433	78.980246
53)	*Azadirachta indica A.Juss*	Neem	21.095405	78.982548
54)	*Azadirachta indica A.Juss.*	Neem	21.095745	78.97914
55)	*Azadirachta indica A.Juss.*	Neem	21.09577	78.979162
56)	*Aazadirachta indica A.Juss.*	Neem	21.095919	78.979155
57)	*Aazadirachta indica A.Juss.*	Neem	21.095839	78.979166
58)	*Aazadirachta indica A.Juss.*	Neem	21.095799	78.979145
59)	*Azadirachta indica A.Juss*	Neem	21.096034	78.979179
60)	*Azadirachta indica A.Juss*	Neem	21.096119	78.979199
61)	*Azadirachta indica A.Juss*	Neem	21.096839	78.979164
62)	*Azadirachta indica A.Juss*	Neem	21.096584	78.97916
63)	*Azadirachta indica A.Juss*	Neem	21.096542	78.979075
64)	*Azadirachta indica A.Juss*	Neem	21.096525	78.979099
65)	*Azadirachta indica A.Juss*	Neem	21.096519	78.97912
66)	*Azadirachta indica A.Juss*	Neem	21.096541	78.979127
67)	*Azadirachta indica A.Juss*	Neem	21.096569	78.979092

Table No. 21: Vegetation at YCCE: II] Ornamental Species

Sr. No.	Scientific Name	Common Name	Total Species
1)	*Amelanchier laevis*	Juneberry	20
2)	*Bougainvillea spectabilis*	Great bougainvillea	11
3)	*Thevetia neriifolia*	Yellow oleander	5
4)	*Bougainvillea spectabilis*	Great Bougainvillea	1
5)	*Duranta erecta*	Golden dewdrop	12
6)	*Ixora coccinea*	Ixora	2
7)	*Murraya paniculata*	Orange jasmin	1
8)	*Agave desmettiana Jacobi*	Dwarf century plant	11
9)	*Agave sisalana Perrine*	Mescal	3
10)	*Bougainvillea spectabilis Wild*	Great bougainvillea	32
11)	*Duranta erecta L.*	Golden dewdrops	25
12)	*Euphorbia characias L.*	Mediterranean spurge	13
13)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	5
14)	*Phymosia umbellata*	Mexican Bush Mallow	3
15)	*Tecoma stans (L.) juss. Ex Kunth*	Yellow-bells	2
16)	*Acalypha wilkesiana*	Copperleaf	11
17)	*Agave sisalana perrine*	Mescal	5
18)	*Agave vivipara*	Garden sisal	6
19)	*Alternanthera brasiliana*	Ruby leaf	2
20)	*Bougainvillea glabra*	Bougainvillea	11
21)	*Bougainvillea spectabilis*	Great baugainvillea	26
22)	*Breniya disticha*	Foliage flower	1
23)	*Callistemon citrinus*	Crimson bottlebrush	3
24)	*Canna indica*	Canna lily	5
25)	*Carex morrowii Booty*	Japanese sedge	1
26)	*Cascabela thevetia*	Yellow oleander	25

27)	*Catharanthus roseus*	Periwinkle	16
28)	*Cestrum nocturnum*	Night jasmine	1
29)	*Chlorophytum comosum*	Spider plant	3
30)	*Codiaeum variegatum*	Croton	4
31)	*Cordyline fruticosa*	Broadleaf palm lily	1
32)	*Cycas revoluta*	Sago palm	2
33)	*Duranta erecta*	Golden dewdrop	147
34)	*Furcraea foetida*	Mauritius hemp	17
35)	*Heliconia rostrata*	Lobster claw	3
36)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	19
37)	*Ixora coccinea*	Ixora	14
38)	*Jacaranda mimosifolia*	Blue jacaranda	1
39)	*Lagerstroemia indica*	Crapemyrtle	1
40)	*Lantana .montevidensis*	Purple lantana	2
41)	*Lantana camara*	Lantana	2
42)	*Murraya paniculata*	Orange jasmine	9
43)	*Neomarica gracilis*	Brazilian walking iris	9
44)	*Peltophorum pterocarpum*	Copper Rod	1
45)	*Pereskia grandifolia*	Rose Cactus	2
46)	*Rosa chinensis*	Bengal rose	2
47)	*Rosa gallica*	Hungarian rose	3
48)	*Rosmarinus officinalis*	Rosemary	1
49)	*Sphagneticola trilobata*	Wedelia	6
50)	*Tecoma stans*	Yellow bells	18
51)	*Thunbergia grandiflora*	Blue skyflower	1
52)	*Yucca filamentosa*	Adams needle	1
53)	*Yucca gloriosa*	Spanish dagger	1
54)	**Total**		617

Table No. 22: Geospatial Configurations of Ornamental Species

Sr. No.	Species Name	Common Name	Latitude	Longitude
1)	*Amelanchier laevis*	Juneberry	21.095472	78.97894
2)	*Amelanchier laevis*	Juneberry	21.095474	78.978949
3)	*Amelanchier laevis*	Juneberry	21.095428	78.978963
4)	*Amelanchier laevis*	Juneberry	21.095492	78.978935
5)	*Amelanchier laevis*	Juneberry	21.095665	78.979072
6)	*Amelanchier laevis*	Juneberry	21.095555	78.978968
7)	*Amelanchier laevis*	Juneberry	21.095578	78.97897
8)	*Amelanchier laevis*	Juneberry	21.095571	78.97891
9)	*Amelanchier laevis*	Juneberry	21.095563	78.978914
10)	*Amelanchier laevis*	Juneberry	21.095534	78.978918
11)	*Amelanchier laevis*	Juneberry	21.095526	78.978916
12)	*Amelanchier laevis*	Juneberry	21.095519	78.978951
13)	*Amelanchier laevis*	Juneberry	21.095499	78.978929
14)	*Amelanchier laevis*	Juneberry	21.095495	78.978905
15)	*Amelanchier laevis*	Juneberry	21.095493	78.978921
16)	*Amelanchier laevis*	Juneberry	21.095491	78.978884
17)	*Amelanchier laevis*	Juneberry	21.095515	78.978867
18)	*Amelanchier laevis*	Juneberry	21.095527	78.978922
19)	*Amelanchier laevis*	Juneberry	21.09551	78.978931
20)	*Amelanchier laevis*	Juneberry	21.095529	78.978936
21)	*Bougainvillea spectabilis*	Great bougainvillea	21.095525	78.979071
22)	*Bougainvillea spectabilis*	Great bougainvillea	21.095411	78.978985
23)	*Bougainvillea spectabilis*	Great bougainvillea	21.095414	78.978969
24)	*Bougainvillea spectabilis*	Great bougainvillea	21.095382	78.978995
25)	*Bougainvillea spectabilis*	Great bougainvillea	21.095363	78.978989
26)	*Bougainvillea spectabilis*	Great bougainvillea	21.095363	78.978989
27)	*Bougainvillea spectabilis*	Great bougainvillea	21.095379	78.979006
28)	*Bougainvillea spectabilis*	Great bougainvillea	21.095404	78.979038

29)	*Bougainvillea spectabilis*	Great bougainvillea	21.095413	78.979044
30)	*Bougainvillea spectabilis*	Great bougainvillea	21.095437	78.979003
31)	*Bougainvillea spectabilis*	Great bougainvillea	21.095437	78.979003
32)	*Thevetia neriifolia*	Yellow oleander	21.095682	78.979039
33)	*Thevetia neriifolia*	Yellow oleander	21.095395	78.978982
34)	*Thevetia neriifolia*	Yellow oleander	21.095397	78.97905
35)	*Thevetia neriifolia*	Yellow oleander	21.095364	78.979036
36)	*Bougainvillea spectabilis*	Great Bougainvillea	21.095543	78.979228
37)	*Duranta erecta*	Golden dewdrop	2l.095517	78.979037
38)	*Duranta erecta*	Golden dewdrop	21.095427	78.978981
39)	*Duranta erecta*	Golden dewdrop	21.095376	78.979029
40)	*Duranta erecta*	Golden dewdrop	21.095399	78.979065
41)	*Duranta erecta*	Golden dewdrop	21.095435	78.979159
42)	*Duranta erecta*	Golden dewdrop	21.095409	78.979273
43)	*Duranta erecta*	Golden dewdrop	21.095421	78.979132
44)	*Duranta erecta*	Golden dewdrop	21.095494	78.978964
45)	*Duranta erecta*	Golden dewdrop	21.095488	78.979287
46)	*Duranta erecta*	Golden dewdrop	21.095528	78.979092
47)	*Duranta erecta*	Golden dewdrop	21.095507	78.979124
48)	*Duranta erecta*	Golden dewdrop	21.095575	78.979146
49)	*Ixora coccinea*	Ixora	21.095561	78.979216
50)	*Ixora coccinea*	Ixora	21.09553	78.979046
51)	*Murraya paniculata*	Orange jasmin	21.095469	78.979288
52)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096541	78.979424
53)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096558	78.979417
54)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096561	78.979408
55)	*Agave desmettiana Jacobi*	Dwarf century plant	21.09656	78.979407
56)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096506	78.979389
57)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096495	78.979375
58)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096549	78.979329

59)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096545	78.979319
60)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096412	78.979272
61)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096252	78.979128
62)	*Agave desmettiana Jacobi*	Dwarf century plant	21.096261	78.979166
63)	*Agave sisalana Perrine*	Mescal	21.096506	78.979389
64)	*Agave sisalana Perrine*	Mescal	21.096544	78.979322
65)	*Agave sisalana Perrine*	Mescal	21.09644	78.979222
66)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095488	78.981028
67)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095493	78.981068
68)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095567	78.981087
69)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095497	78.981198
70)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095502	78.981206
71)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095515	78.981216
72)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095664	78.981525
73)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095623	78.981504
74)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095616	78.981506
75)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.09562	78.981507
76)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095675	78.981562

77)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095653	78.981729
78)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095674	78.981749
79)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095672	78.981746
80)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095672	78.981751
81)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.09567	78.981016
82)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095675	78.981024
83)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095678	78.981021
84)	*Bougainvillea spectabilis Wild*	Great bougainvillea	21.095682	78.98102
85)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.095398	78.980748
86)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.095398	78.980755
87)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.095399	78.980758
88)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.09542	78.980791
89)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.095457	78.980808
90)	*Bougainvillea spectabilis Wild.*	Great bougainvillea	21.095437	78.980805
91)	*Duranta erecta L.*	Golden dewdrops	21.095741	78.979104
92)	*Duranta erecta L.*	Golden dewdrops	21.095731	78.97903

93)	*Duranta erecta L.*	Golden dewdrops	21.095739	78.97909
94)	*Duranta erecta L.*	Golden dewdrops	21.095726	78.979094
95)	*Duranta erecta L.*	Golden dewdrops	21.095714	78.979094
96)	*Duranta erecta L.*	Golden dewdrops	21.09582	78.979102
97)	*Duranta erecta L.*	Golden dewdrops	21.095771	78.979055
98)	*Duranta erecta L.*	Golden dewdrops	21.095783	78.97907
99)	*Duranta erecta L.*	Golden dewdrops	21.095755	78.979136
100)	*Duranta erecta L.*	Golden dewdrops	21.095768	78.979167
101)	*Duranta erecta L.*	Golden dewdrops	21.095769	78.979131
102)	*Duranta erecta L.*	Golden dewdrops	21.095998	78.979065
103)	*Duranta erecta L.*	Golden dewdrops	21.095892	78.979112
104)	*Duranta erecta L.*	Golden dewdrops	21.095822	78.979173
105)	*Duranta erecta L.*	Golden dewdrops	21.095854	78.97916
106)	*Duranta erecta L.*	Golden dewdrops	21.095801	78.979178
107)	*Duranta erecta L.*	Golden dewdrops	21.095822	78.979225
108)	*Duranta erecta L.*	Golden dewdrops	21.095805	78.979221
109)	*Duranta erecta L.*	Golden dewdrops	21.095999	78.979128
110)	*Duranta erecta L.*	Golden dewdrops	21.09595	78.979176
111)	*Duranta erecta L.*	Golden dewdrops	21.096026	78.979162
112)	*Duranta erecta L.*	Golden dewdrops	21.095868	78.979164
113)	*Duranta erecta L.*	Golden dewdrops	21.096083	78.979175
114)	*Duranta erecta L.*	Golden dewdrops	21.096114	78.9792
115)	*Duranta erecta L.*	Golden dewdrops	21.096975	78.97919
116)	*Duranta erecta L.*	Golden dewdrops	21.096912	78.979218
117)	*Euphorbia characias L.*	Mediterranean spurge	21.095254	78.982714
118)	*Euphorbia characias L.*	Mediterranean spurge	21.095256	78.982711
119)	*Euphorbia characias L.*	Mediterranean spurge	21.095258	78.982709
120)	*Euphorbia characias L.*	Mediterranean spurge	21.095277	78.982692
121)	*Euphorbia characias L.*	Mediterranean spurge	21.095281	78.982716
122)	*Euphorbia characias L.*	Mediterranean spurge	21.095405	78.982634

123)	*Euphorbia characias L.*	Mediterranean spurge	21.095392	78.982626
124)	*Euphorbia characias L.*	Mediterranean spurge	21.09538	78.982631
125)	*Euphorbia characias L.*	Mediterranean spurge	21.095388	78.982676
126)	*Euphorbia characias L.*	Mediterranean spurge	21.09538	78.982635
127)	*Euphorbia characias L.*	Mediterranean spurge	21.095377	78.98268
128)	*Euphorbia characias L.*	Mediterranean spurge	21.095382	78.98264
129)	*Euphorbia characias L.*	Mediterranean spurge	21.095392	78.982638
130)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	21.095395	78.982595
131)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	21.095362	78.982535
132)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	21.095375	78.982537
133)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	21.095796	78.979165
134)	*Hibiscus rosa-sinensis L.*	Hawaiian hibiscus	21.095775	78.979156
135)	*Phymosia 64orficate*	Mexican Bush Mallow	21.095072	78.982594
136)	*Phymosia 64orficate*	Mexican Bush Mallow	21.095082	78.982577
137)	*Phymosia 64orficate*	Mexican Bush Mallow	21.095083	78.982577
138)	*Tecoma stans (L.) juss. Ex Kunth*	Yellow-bells	21.095679	78.981039
139)	*Tecoma stans (L.) Juss. Ex kunth*	Yellow-bells	21.095692	78.981042
140)	*Acalypha wilkesiana*	Copperleaf	21.095638	78.978668
141)	*Acalypha wilkesiana*	Copperleaf	21.095833	78.979453
142)	*Acalypha wilkesiana*	Copperleaf	21.095867	78.979449
143)	*Acalypha wilkesiana*	Copperleaf	21.095733	78.98007
144)	*Acalypha wilkesiana*	Copperleaf	21.095701	78.980041
145)	*Acalypha wilkesiana*	Copperleaf	21.095915	78.979828
146)	*Acalypha wilkesiana*	Copperleaf	21.09584	78.979729
147)	*Acalypha wilkesiana*	Copperleaf	21.095477	78.976318

148)	*Acalypha wilkesiana*	Copperleaf	21.095439	78.976334
149)	*Acalypha wilkesiana*	Copperleaf	21.095385	78.97634
150)	*Acalypha wilkesiane*	Copperleaf	21.095869	78.979801
151)	*Agave sisalana perrine*	Mescal	21.095335	78.978345
152)	*Agave sisalana Perrine*	Mescal	21.096167	78.979374
153)	*Agave sisalana Perrine*	Mescal	21.096201	78.979293
154)	*Agave sisalana Perrine*	Mescal	21.096188	78.979339
155)	*Agave vivipara*	Garden sisal	21.096330	78.979287
156)	*Agave vivipara*	Garden sisal	21.096333	78.979337
157)	*Agave vivipara*	Garden sisal	21.096365	78.979349
158)	*Agave vivipara*	Garden sisal	21.096320	78.979368
159)	*Agave vivipara*	Garden sisal	21.095383	78.978642
160)	*Alternanthera brasiliana*	Ruby leaf	21.095725	78.979030
161)	*Alternanthera brasiliana*	Ruby leaf	21.095871	78.979629
162)	*Bougainvillea glabra*	Bougainvillea	21.096474	78.97947
163)	*Bougainvillea glabra*	Bougainvillea	21.096323	78.979379
164)	*Bougainvillea glabra*	Bougainvillea	21.096225	78.979354
165)	*Bougainvillea glabra*	Bougainvillea	21.096255	78.979364
166)	*Bougainvillea glabra*	Bougainvillea	21.096578	78.979329
167)	*Bougainvillea glabra*	Bougainvillea	21.096276	78.97952
168)	*Bougainvillea glabra*	Bougainvillea	21.096323	78.979535
169)	*Bougainvillea glabra*	Bougainvillea	21.096308	78.97952
170)	*Bougainvillea glabra*	Bougainvillea	21.096298	78.979447
171)	*Bougainvillea glabra*	Bougainvillea	21.096312	78.979692
172)	*Bougainvillea glabra*	Bougainvillea	21.096288	78.979522
173)	*Bougainvillea spectabilis*	Great baugainvillea	21.095853	78.979713
174)	*Bougainvillea spectabilis*	Great Bougainvillea	21.095543	78.979228
175)	*Bougainvillea spectabilis*	Great bougainvillea	21.095709	78.978599
176)	*Bougainvillea spectabilis*	Great bougainvillea	21.096509	78.979188
177)	*Bougainvillea spectabilis*	Great bougainvillea	21.096364	78.979144

178)	*Bougainvillea spectabilis*	Great bougainvillea	21.096219	78.979072
179)	*Bougainvillea spectabilis*	Great bougainvillea	21.096308	78.978964
180)	*Bougainvillea spectabilis*	Great bougainvillea	21.096170	78.979030
181)	*Bougainvillea spectabilis*	Great bougainvillea	21.096995	78.978671
182)	*Bougainvillea spectabilis*	Great bougainvillea	21.096028	78.978695
183)	*Bougainvillea spectabilis*	Great bougainvillea	21.096992	78.978678
184)	*Bougainvillea spectabilis*	Great bougainvillea	21.095920	78.978649
185)	*Bougainvillea spectabilis*	Great bougainvillea	21.095875	78.978675
186)	*Bougainvillea spectabilis*	Great bougainvillea	21.096098	78.978782
187)	*Bougainvillea spectabilis*	Great bougainvillea	21.096087	78.978752
188)	*Bougainvillea spectabilis*	Great bougainvillea	21.095772	78.978498
189)	*Bougainvillea spectabilis*	Great bougainvillea	21.095784	78.978514
190)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096228	78.979345
191)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096263	78.979330
192)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096283	78.979360
193)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096286	78.979394
194)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096553	78.979663
195)	*Bougainvillea spectabilis*	Great Bougainvillea	21.096565	78.979652
196)	*Breniya disticha*	Foliage flower	21.094620	78.980068
197)	*Callistemon citrinus*	Crimson bottlebrush	21.095413	78.978581
198)	*Callistemon citrinus*	Crimson bottlebrush	21.095431	78.978617
199)	*Callistemon citrinus*	Crimson bottlebrush	21.09547	78.978745
200)	*Canna indica*	Canna lily	21.095586	78.979608
201)	*Canna indica*	Canna lily	21.095818	78.979492
202)	*Canna indica*	Canna lily	21.096378	78.979428
203)	*Canna indica*	Canna lily	21.096356	78.979407
204)	*Canna indica*	Canna lily	21.096319	78.979625
205)	*Carex morrowii Booty*	Japanese sedge	21.095320	78.978504
206)	*Cascabala thevetia*	Yellow oleander	21.096044	78.979390
207)	*Cascabala thevetia*	Yellow oleander	21.096087	78.979497

208)	*Cascabala thevetia*	Yellow oleander	21.096048	78.979470
209)	*Cascabala thevetia*	Yellow oleander	21.096099	78.979482
210)	*Cascabala thevetia*	Yellow oleander	21.096121	78.979486
211)	*Cascabala thevetia*	Yellow oleander	21.096099	78.979476
212)	*Cascabala thevetia*	Yellow oleander	21.096115	78.979557
213)	*Cascabala thevetia*	Yellow oleander	21.096106	78.979571
214)	*Cascabala thevetia*	Yellow oleander	21.095144	78.978162
215)	*Cascabala thevetia*	Yellow oleander	21.095129	78.978190
216)	*Cascabala thevetia*	Yellow oleander	21.095115	78.978181
217)	*Cascabala thevetia*	Yellow oleander	21.095107	78.978170
218)	*Cascabela thevetia*	Yellow oleander	21.095063	78.978047
219)	*Cascabela thevetia*	Yellow oleander	21.095077	78.978046
220)	*Cascabela thevetia*	Yellow oleander	21.09508	78.978027
221)	*Cascabela thevetia*	Yellow oleander	21.095942	78.979217
222)	*Cascabela thevetia*	Yellow oleander	21.096103	78.979259
223)	*Cascabela thevetia*	Yellow oleander	21.096139	78.979288
224)	*Cascabela thevetia*	Yellow oleander	21.096127	78.979259
225)	*Cascabela thevetia*	Yellow oleander	21.096091	78.979312
226)	*Cascabela thevetia*	Yellow oleander	21.096112	78.979324
227)	*Cascabela thevetia*	Yellow oleander	21.096114	78.979324
228)	*Cascabela thevetia*	Yellow oleander	21.096115	78.979323
229)	*Cascabela thevetia*	Yellow oleander	21.096090	78.979360
230)	*Cascabela thevetia*	Yellow oleander	21.096088	78.979390
231)	*Catharanthus roseus*	Periwinkle	21.095757	78.979599
232)	*Catharanthus roseus*	Periwinkle	21.095852	78.979491
233)	*Catharanthus roseus*	Periwinkle	21.095141	78.977120
234)	*Catharanthus roseus*	Periwinkle	21.095127	78.977134
235)	*Catharanthus roseus*	Periwinkle	21.04941	78.977016
236)	*Catharanthus roseus*	Periwinkle	21.095728	78.978898
237)	*Catharanthus roseus*	Periwinkle	21.095880	78.978982

238)	*Catharanthus roseus*	Periwinkle	21.095555	78.978684
239)	*Catharanthus roseus*	Periwinkle	21.095622	78.978755
240)	*Catharanthus roseus*	Periwinkle	21.095868	78.978803
241)	*Catharanthus roseus*	Periwinkle	21.095603	78.978422
242)	*Catharanthus roseus*	Periwinkle	21.095623	78.978373
243)	*Catharanthus roseus*	Periwinkle	21.095627	78.978418
244)	*Catharanthus roseus*	Periwinkle	21.095632	78.978406
245)	*Catheranthus roseus*	Periwinkle	21.095101	78.977188
246)	*Catheranthus roseus*	Periwinkle	21.095065	78.977187
247)	*Cestrum nocturnum*	Night jasmine	21.095668	78.980208
248)	*Chlorophytum comosum*	Spider plant	21.094962	78.977085
249)	*Codiaeum variegatum*	Croton	21.095049	78.977141
250)	*Codiaeum variegatum*	Croton	21.095086	78.977165
251)	*Codiaeum variegatum*	Croton	21.095222	78.97638
252)	*Cordyline fruticosa*	Broadleaf palm lily	21.095813	78.979596
253)	*Cordyline fruticosa*	Ti plant	21.095794	78.979999
254)	*Cycas revoluta*	Sago palm	21.094809	78.977085
255)	*Duranta erecta*	Golden dewdrop	2l.095517	78.979037
256)	*Duranta erecta*	Golden dewdrop	21.095427	78.978981
257)	*Duranta erecta*	Golden dewdrop	21.095376	78.979029
258)	*Duranta erecta*	Golden dewdrop	21.095399	78.979065
259)	*Duranta erecta*	Golden dewdrop	21.095430	78.979159
260)	*Duranta erecta*	Golden dewdrop	21.095409	78.979273
261)	*Duranta erecta*	Golden dewdrop	21.095421	78.979132
262)	*Duranta erecta*	Golden dewdrop	21.095490	78.978964
263)	*Duranta erecta*	Golden dewdrop	21.095507	78.979124
264)	*Duranta erecta*	Golden dewdrop	21.095575	78.979146
265)	*Duranta erecta*	Golden dewdrop	21.095488	78.979287
266)	*Duranta erecta*	Golden dewdrop	21.095528	78.979092
267)	*Duranta erecta*	Golden dewdrop	21.095677	78.978651

268)	*Duranta erecta*	Golden dewdrop	21.095713	78.978734
269)	*Duranta erecta*	Golden dewdrop	21.095685	78.978721
270)	*Duranta erecta*	Golden dewdrop	21.097757	78.980257
271)	*Duranta erecta*	Golden dewdrop	21.095783	78.978777
272)	*Duranta erecta*	Golden dewdrop	21.095782	78.978802
273)	*Duranta erecta*	Golden dewdrop	21.095798	78.978860
274)	*Duranta erecta*	Golden dewdrop	21.095832	78.978842
275)	*Duranta erecta*	Golden dewdrop	21.095975	78.979626
276)	*Duranta erecta*	Golden dewdrop	21.095788	78.978851
277)	*Duranta erecta*	Golden dewdrop	21.096173	78.979707
278)	*Duranta erecta*	Golden dewdrop	21.095735	78.978833
279)	*Duranta erecta*	Golden dewdrop	21.097668	78.979825
280)	*Duranta erecta*	Golden dewdrop	21.095650	78.978748
281)	*Duranta erecta*	Golden dewdrop	21.095505	78.978715
282)	*Duranta erecta*	Golden dewdrop	21.096093	78.979012
283)	*Duranta erecta*	Golden dewdrop	21.095729	78.979133
284)	*Duranta erecta*	Golden dewdrop	21.095729	78.979117
285)	*Duranta erecta*	Golden dewdrop	21.095727	78.979122
286)	*Duranta erecta*	Golden dewdrop	21.095657	78.979077
287)	*Duranta erecta*	Golden dewdrop	21.095676	78.979109
288)	*Duranta erecta*	Golden dewdrop	21.095677	78.979103
289)	*Duranta erecta*	Golden dewdrop	21.095674	78.979085
290)	*Duranta erecta*	Golden dewdrop	21.095674	78.979083
291)	*Duranta erecta*	Golden dewdrop	21.095672	78.979065
292)	*Duranta erecta*	Golden dewdrop	21.095677	78.979061
293)	*Duranta erecta*	Golden dewdrop	21.095814	78.978863
294)	*Duranta erecta*	Golden dewdrop	21.095342	78.979095
295)	*Duranta erecta*	Golden dewdrop	21.095369	78.979131
296)	*Duranta erecta*	Golden dewdrop	21.095420	78.979212
297)	*Duranta erecta*	Golden dewdrop	21.095464	78.979275

298)	*Duranta erecta*	Golden dewdrop	21.095500	78.979901
299)	*Duranta erecta*	Golden dewdrop	21.095564	78.980028
300)	*Duranta erecta*	Golden dewdrop	21.095572	78.980028
301)	*Duranta erecta*	Golden dewdrop	21.095542	78.979868
302)	*Duranta erecta*	Golden dewdrop	21.095450	78.979395
303)	*Duranta erecta*	Golden dewdrop	21.095363	78.978347
304)	*Duranta erecta*	Golden dewdrop	21.095358	78.978300
305)	*Duranta erecta*	Golden dewdrop	21.095281	78.978315
306)	*Duranta erecta*	Golden dewdrop	21.095298	78.978325
307)	*Duranta erecta*	Golden dewdrop	21.095300	78.978325
308)	*Duranta erecta*	Golden dewdrop	21.095300	78.978325
309)	*Duranta erecta*	Golden dewdrop	21.095235	78.978281
310)	*Duranta erecta*	Golden dewdrop	21.095204	78.978252
311)	*Duranta erecta*	Golden dewdrop	21.095182	78.978198
312)	*Duranta erecta*	Golden dewdrop	21.095182	78.978165
313)	*Duranta erecta*	Golden dewdrop	21.095198	78.978177
314)	*Duranta erecta*	Golden dewdrop	21.095245	78.978222
315)	*Duranta erecta*	Golden dewdrop	21.095254	78.978228
316)	*Duranta erecta*	Golden dewdrop	21.095237	78.978236
317)	*Duranta erecta*	Golden dewdrop	21.095251	78.978275
318)	*Duranta erecta*	Golden dewdrop	21.095385	78.978227
319)	*Duranta erecta*	Golden dewdrop	21.095361	78.978199
320)	*Duranta erecta*	Golden dewdrop	21.095395	78.978155
321)	*Duranta erecta*	Golden dewdrop	21.095364	78.978132
322)	*Duranta erecta*	Golden dewdrop	21.095335	78.978108
323)	*Duranta erecta*	Golden dewdrop	21.095312	78.978075
324)	*Duranta erecta*	Golden dewdrop	21.095274	78.978070
325)	*Duranta erecta*	Golden dewdrop	21.095298	78.978311
326)	*Duranta erecta*	Golden dewdrop	21.095331	78.978338
327)	*Duranta erecta*	Golden dewdrop	21.095334	78.978364

328)	*Duranta erecta*	Golden dewdrop	21.095278	78.978325
329)	*Duranta erecta*	Golden dewdrop	21.095324	78.979760
330)	*Duranta erecta*	Golden dewdrop	21.095403	78.974834
331)	*Duranta erecta*	Golden dewdrop	21.095235	78.979816
332)	*Duranta erecta*	Golden dewdrop	21.095168	78.979742
333)	*Duranta erecta*	Golden dewdrop	21.095165	78.979743
334)	*Duranta erecta*	Golden dewdrop	21.095157	78.979741
335)	*Duranta erecta*	Golden dewdrop	21.095083	78.979788
336)	*Duranta erecta*	Golden dewdrop	21.095040	78.979843
337)	*Duranta erecta*	Golden dewdrop	21.095007	78.979853
338)	*Duranta erecta*	Golden dewdrop	21.095052	78.979814
339)	*Duranta erecta*	Golden dewdrop	21.095207	78.979719
340)	*Duranta erecta*	Golden dewdrop	21.095395	78.976254
341)	*Duranta erecta*	Golden dewdrop	21.095392	78.976319
342)	*Duranta erecta*	Golden dewdrop	21.095404	78.976115
343)	*Duranta erecta*	Golden dewdrop	21.095385	78.976297
344)	*Duranta erecta*	Golden dewdrop	21.095378	78.976303
345)	*Duranta erecta*	Golden dewdrop	21.095416	78.976306
346)	*Duranta erecta*	Golden dewdrop	21.095405	78.976318
347)	*Duranta erecta*	Golden dewdrop	21.095388	78.976267
348)	*Duranta erecta*	Golden dewdrop	21.095380	78.976293
349)	*Duranta erecta*	Golden dewdrop	21.095354	78.976321
350)	*Duranta erecta*	Golden dewdrop	21.095340	78.976308
351)	*Duranta erecta*	Golden dewdrop	21.095940	78.978308
352)	*Duranta erecta*	Golden dewdrop	21.095314	78.978313
353)	*Duranta erecta*	Golden dewdrop	21.095299	78.978393
354)	*Duranta erecta*	Golden dewdrop	21.095535	78.978359
355)	*Duranta erecta*	Golden dewdrop	21.095492	78.978267
356)	*Duranta erecta*	Golden dewdrop	21.095431	78.978262
357)	*Duranta erecta*	Golden dewdrop	21.095416	78.978261

358)	*Duranta erecta*	Golden dewdrop	21.095419	78.979568
359)	*Duranta erecta*	Golden dewdrop	21.095398	78.979636
360)	*Duranta erecta*	Golden dewdrop	21.095514	78.979611
361)	*Duranta erecta*	Golden dewdrop	21.095352	78.979538
362)	*Duranta erecta*	Golden dewdrop	21.095421	78.979574
363)	*Duranta erecta*	Golden dewdrop	21.095458	78.979518
364)	*Duranta erecta*	Golden dewdrop	21.095407	78.979581
365)	*Duranta erecta*	Golden dewdrop	21.095082	78.977154
366)	*Duranta erecta*	Golden dewdrop	21.095059	78.977049
367)	*Duranta erecta*	Golden dewdrop	21.095073	78.977146
368)	*Duranta erecta*	Golden dewdrop	21.095030	78.977060
369)	*Duranta erecta*	Golden dewdrop	21.095290	78.978943
370)	*Duranta erecta*	Golden dewdrop	21.095497	78.978438
371)	*Duranta erecta*	Golden dewdrop	21.095335	78.978513
372)	*Duranta erecta*	Golden dewdrop	21.095365	78.978505
373)	*Duranta erecta*	Golden dewdrop	21.095373	78.978475
374)	*Duranta erecta*	Golden dewdrop	21.095609	78.978408
375)	*Duranta erecta*	Golden dewdrop	21.095637	78.978403
376)	*Duranta erecta*	Golden dewdrop	21.095273	78.978447
377)	*Duranta erecta*	Golden dewdrop	21.095610	78.978428
378)	*Duranta erecta*	Golden dewdrop	21.096539	78.979672
379)	*Duranta erecta*	Golden dewdrop	21.096518	78.979636
380)	*Duranta erecta*	Golden dewdrop	21.096515	78.979617
381)	*Duranta erecta*	Golden dewdrop	21.096560	78.979575
382)	*Duranta erecta*	Golden dewdrop	21.096612	78.979680
383)	*Duranta erecta*	Golden dewdrop	21.096588	78.979667
384)	*Duranta erecta*	Golden dewdrop	21.096564	78.979634
385)	*Duranta erecta*	Golden dewdrop	21.096577	78.979640
386)	*Duranta erecta*	Golden dewdrop	21.096537	78.979678
387)	*Duranta erecta*	Golden dewdrop	21.096483	78.979695

388)	*Duranta erecta*	Golden dewdrop	21.096580	78.979645
389)	*Duranta erecta*	Golden dewdrop	21.096549	78.979661
390)	*Duranta erecta*	Golden dewdrop	21.096527	78.979658
391)	*Duranta erecta*	Golden dewdrop	21.096510	78.979679
392)	*Duranta erecta*	Golden dewdrop	21.096466	78.979715
393)	*Duranta erecta*	Golden dewdrop	21.096458	78.979721
394)	*Duranta erecta*	Golden dewdrop	21.096462	78.979713
395)	*Duranta erecta*	Golden dewdrop	21.096563	78.979691
396)	*Duranta erecta*	Golden dewdrop	21.096447	78.979711
397)	*Duranta erecta*	Golden dewdrop	21.096381	78.979697
398)	*Duranta erecta*	Golden dewdrop	21.096361	78.979687
399)	*Duranta erecta*	Golden dewdrop	21.096364	78.979687
400)	*Duranta erecta*	Golden dewdrop	21.096361	78.979691
401)	*Duranta erecta*	Golden dewdrop	21.096360	78.979690
402)	*Euphorbia tithymaloides*	Slipper flower	21.095788	78.979495
403)	*Euphorbia tithymaloides*	Slipper flower	21.095287	78.978205
404)	*Furcraea foetida*	Mauritius hemp	21.096494	78.979412
405)	*Furcraea foetida*	Mauritius hemp	21.096359	78.979362
406)	*Furcraea foetida*	Mauritius hemp	21.096438	78.979386
407)	*Furcraea foetida*	Mauritius hemp	21.096441	78.979408
408)	*Furcraea foetida*	Mauritius hemp	21.096420	78.979398
409)	*Furcraea foetida*	Mauritius hemp	21.096433	78.979443
410)	*Furcraea foetida*	Mauritius hemp	21.096453	78.979453
411)	*Furcraea foetida*	Mauritius hemp	21.096443	78.979436
412)	*Furcraea foetida*	Mauritius hemp	21.096516	78.979495
413)	*Furcraea foetida*	Mauritius hemp	21.096560	78.979608
414)	*Furcraea foetida*	Mauritius hemp	21.096287	78.979380
415)	*Furcraea foetida*	Mauritius hemp	21.096302	78.979487
416)	*Furcraea foetida*	Mauritius hemp	21.096320	78.979507
417)	*Furcraea foetida*	Mauritius hemp	21.096336	78.979527

418)	*Furcraea foetida*	Mauritius hemp	21.096335	78.979628
419)	*Furcraea foetida*	Mauritius hemp	21.096182	78.979503
420)	*Furcraea foetida*	Mauritius hemp	21.096166	78.979479
421)	*Heliconia rostrata*	Lobster claw	21.095778	78.979576
422)	*Heliconia rostrata*	Lobster claw	21.095858	78.979536
423)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094618	78.980145
424)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094599	78.980089
425)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094599	78.980088
426)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094612	78.98014
427)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094587	78.980026
428)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094629	78.980057
429)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094564	78.980179
430)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094423	78.980181
431)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094684	78.980209
432)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094734	78.980209
433)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094726	78.980182
434)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094763	78.980204
435)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.094771	78.980161
436)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.096344	78.982569
437)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.096283	78.982714
438)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21,096,380	78.98284
439)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.096352	78.982517
440)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.096445	78.982543
441)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.096402	78.982478
442)	*Hibiscus rosa sinensis*	Hawaiian hibiscus	21.095346	78.978696
443)	*Ixora coccinea*	Ixora	21.095530	78.979046
444)	*Ixora coccinea*	Ixora	21.095561	78.979216
445)	*Ixora coccinea*	Ixora	21.095369	78.978195
446)	*Ixora coccinea*	Ixora	21.095375	78.976253
447)	*Ixora coccinea*	Ixora	21.096342	78.979749

448)	*Ixora coccinea*	Ixora	21.096377	78.979706
449)	*Ixora coccinea*	Ixora	21.096345	78.979636
450)	*Ixora coccinea*	Ixora	21.096315	78.979713
451)	*Ixora coccinea*	Ixora	21.096319	78.979648
452)	*Ixora coccinea*	Ixora	21.095509	78.978613
453)	*Ixora coccinea*	Ixora	21.095580	78.978629
454)	*Ixora coccinea*	Ixora	21.095351	78.978719
455)	*Ixora coccinea*	Ixora	21.095480	78.978763
456)	*Ixora coccinea*	Ixora	21.095569	78.978709
457)	*Ixora coccinea*	Ixora	21.095529	78.978670
458)	*Jacaranda mimosifolia*	Blue jacaranda	21.095307	78.978353
459)	*Lagerstroemia indica*	Crapemyrtle	21.094662	78.980039
460)	*Lantana .montevidensis*	Purple lantana	21.095829	78.979619
461)	*Lantana camara*	Lantana	21.095745	78.979554
462)	*Lantana viburnoides*	Lantana	21.095163	78.976379
463)	*Murraya paniculata*	Orange jasmine	21.095397	78.979241
464)	*Murraya paniculata*	Orange jasmine	21.095381	78.979161
465)	*Murraya paniculata*	Orange jasmine	21.095356	78.979096
466)	*Murraya paniculata*	Orange jasmine	21.095462	78.979847
467)	*Murraya paniculata*	Orange jasmine	21.095373	78.979797
468)	*Murraya paniculata*	Orange jasmine	21.095713	78.979095
469)	*Murraya paniculata*	Orange jasmine	21.095603	78.978804
470)	*Murraya paniculata*	Orange jasmine	21.095284	78.978692
471)	*Murraya paniculata*	Orange jasmine	21.095469	78.979288
472)	*Neomarica gracilis*	Brazilian walking iris	21.094587	78.980016
473)	*Neomarica gracilis*	Brazilian walking iris	21.094657	78.980067
474)	*Neomarica gracilis*	Brazilian walking iris	21.094652	78.980043
475)	*Neomarica gracilis*	Brazilian walking iris	21.094587	78.980016
476)	*Neomarica gracilis*	Brazilian walking iris	21.094657	78.980067
477)	*Neomarica gracilis*	Brazilian walking iris	21.094652	78.980043

478)	*Peltophorum pterocarpum*	Copper Rod	21.095422	78.978252
479)	*Pereskia grandifolia*	Rose Cactus	21.095150	78.977983
480)	*Pereskia grandifolia*	Rose Cactus	21.095162	78.977887
481)	*Rosa chinensis*	Bengal rose	21.095634	78.976235
482)	*Rosa gallica*	Hungarian rose	21.096383	78.979548
483)	*Rosa sinensis*	Hibiscus	21.095694	78.980202
484)	*Rosa sinensis*	Hibiscus	21.095688	78.980204
485)	*Rosmarinus officinalis*	Rosemary	21.094822	78.978237
486)	*Sphagneticola trilobata*	Wedelia	21.095776	78.979590
487)	*Sphagneticola trilobata*	Wedelia	21.096288	78.979580
488)	*Sphagneticola trilobata*	Wedelia	21.096212	78.979608
489)	*Sphagneticola trilobata*	Wedelia	21.096216	78.979605
490)	*Sphagneticola trilobata*	Wedelia	21.096799	78.979565
491)	*Sphagneticola trilobata*	Wedelia	21.096170	78.979536
492)	*Tecoma stans*	Yellow bells	21.096097	78.982601
493)	*Tecoma stans*	Yellow bells	21.095629	78.979583
494)	*Tecoma stans*	Yellow bells	21.095682	78.979730
495)	*Tecoma stans*	Yellow bells	21.095882	78.979836
496)	*Tecoma stans*	Yellow bells	21.095872	78.979828
497)	*Tecoma stans*	Yellow bells	21.095046	78.977189
498)	*Tecoma stans*	Yellow bells	21.094975	78.977134
499)	*Tecoma stans*	Yellow bells	21.095035	78.977023
500)	*Tecoma stans*	Yellow bells	21.095051	78.977059
501)	*Tecoma stans*	Yellow bells	21.095079	78.977024
502)	*Tecoma stans*	Yellow bells	21.095082	78.977154
503)	*Tecoma stans*	Yellow bells	21.095045	78.976988
504)	*Tecoma stans*	Yellow bells	21.095943	78.979737
505)	*Tecoma stans*	Yellow bells	21.094911	78.977453
506)	*Tecoma stans*	Yellow bells	21.094925	78.977508
507)	*Tecoma stans*	Yellow bells	21.095082	78.978029

508)	*Tecoma stans*	Yellow bells	21.095057	78.978950
509)	*Tecoma stans*	Yellow bells	21.095067	78.978068
510)	*Tecoma stans*	Yellow bells	21.094986	78.977842
511)	*Thunbergia grandiflora*	Blue skyflower	21.095632	78.978604
512)	*Yucca filamentosa*	Adams needle	21.095722	78.979096
513)	*Yucca gloriosa*	Spanish dagger	21.095415	78.979835

Table No. 23: Vegetation at YCCE: III] Shrubs Species

Sr. No.	Scientific Name	Common Name	Total Species
1	*Coffea 77orfic L.*	Arabian coffee	11
2	*Comoclinium coelestinum*	Blue mist flower	29
3	*Jasminium sambac*	Arabian jasmin	49
4	*Leucaena leucocephala*	Coffeebush	6
5	*Pseuderanthemum carruthersii*	Purple false erranthemum	5
6	*Acalypha indica*	Indian Copperleaf	6
7	*Buglossoides purpuro caerulea*	Purple gromwell	8
8	*Cardiospermum halicacabum*	Ballon vine	11
9	*Carissa carandas*	Karandang	4
10	*Cordia myxa*	Sebesten plum	2
11	*Cyanthillium cinereum*	Little ironweed	5
12	*Desmodium paniculatum*	Panicled tick clover	9
13	*Galphimia glauca*	Gold shower	13
14	*Hamelia patens*	Redhead	8
15	*Iris foetidissima*	Stinking Iris	5
16	*Lactuca virosa*	Bitter lettuce	6
17	*Leucaena leucocephala*	Coffee bush	14
18	*Ligustrum vulgare*	Common privet	25

19	*Mirabilis jalapa*	Four o' clock flower	2
20	*Myoporum tenuifolium*	Manatoka	4
21	*Nerium oleander*	Oleander	1
22	*Nerium oleander*	Oleander	8
23	*Plumbago auriculata*	Plumbago	5
24	*Podranea ricasoliana*	Queen of sheba vine	3
25	*Pseuderanthemum carruthersii*	Purple False Eranthemum	2
26	*Ruscus aculeatus*	Box holly	5
27	*Senna occidentalis*	Antbush	3
28	*Syringa vulgaris*	Lilac	4
29	*Tabernaemontana 78orficate78*	Crape jasmine	9
30	*Tridax procumbens*	Coatbuttons	12
	Total		274

Table No. 24: Geospatial Configurations of Shrubs Species

Sr. No.	Species Name	Common Name	Latitude	Longitude
1)	*Coffea 78orfic L.*	Arabian coffee	21.095633	78.978942
2)	*Coffea 78orfic L.*	Arabian coffee	21.095534	78.979003
3)	*Coffea 78orfic L.*	Arabian coffee	21.095501	78.979015
4)	*Coffea 78orfic L.*	Arabian coffee	21.095477	78.979048
5)	*Coffea 78orfic L.*	Arabian coffee	21.095468	78.97905
6)	*Coffea 78orfic L.*	Arabian coffee	21.095388	78.97903
7)	*Coffea 78orfic L.*	Arabian coffee	21.095383	78.979035
8)	*Coffea 78orfic L.*	Arabian coffee	21.09534	78.979007
9)	*Coffea 78orfic L.*	Arabian coffee	21.095386	78.978918
10)	*Coffea 78orfic L.*	Arabian coffee	21.095476	78.978955
11)	*Comoclinium coelestinum*	Blue mist flower	21.095361	78.979262

12)	*Conoclinium coelestinum*	Blue mist flower	21.095382	78.979107
13)	*Conoclinium coelestinum*	Blue mist flower	21.095438	78.979248
14)	*Conoclinium coelestinum*	Blue mist flower	21.095447	78.979084
15)	*Jasminium sambac*	Arabian jasmin	21.095548	78.979136
16)	*Jasminium sambac*	Arabian jasmin	21.095498	78.978986
17)	*Leucaena leucocephala*	Coffeebush	21.095376	78.979029
18)	*Pseuderanthemum carruthersii*	Purple false erranthemum	21.095428	78.97913
19)	*Jasminum sambac (L.) Aiton*	Arabian jasmine	21.095732	78.979106
20)	*Acalypha indica*	Indian Copperleaf	21.095792	78.978783
21)	*Buglossoides purpuro caerulea*	Purple gromwell	21.095313	78.978398
22)	*Cardiospermum halicacabum*	Ballon vine	21.095861	78.979525
23)	*Carissa carandas*	Karandang	21.095902	78.979777
24)	*Comocliniumcoelestinum*	Blue mist flower	21.095361	78.979262
25)	*Conoclinium coelestinum*	Blue mist flower	21.095382	78.979107
26)	*Conocliniumcoelestinum*	Blue mist flower	21.095438	78.979248
27)	*Conocliniumcoelestinum*	Blue mist flower	21.095447	78.979084
28)	*Cordia myxa*	Sebesten plum	21.095153	78.97904
29)	*Cyanthillium cinereum*	Little ironweed	21.095814	78.978976
30)	*Desmodium paniculatum*	Panicled tick clover	21.095690	78.9789955
31)	*Galphimia glauca*	Gold shower	21.095589	78.978899
32)	*Galphimia glauca*	Gold shower	21.095707	78.979654
33)	*Galphimia glauca*	Goldshower	21.096537	78.979674
34)	*Galphimia glauca*	Goldshower	21.096481	78.979678
35)	*Hamelia patens*	Redhead	21.096356	78.979651
36)	*Hamelia patens*	Redhead	21.096348	78.979677
37)	*Iris foetidissima*	Stinking Iris	21.095713	78.979590

38)	*Iris foetidissima*	stinking Iris	21.095740	78.979694
39)	*Iris foetidissima*	Stinking iris	21.095830	78.979639
40)	*Iris foetidissima*	Stinking iris	21.095854	78.979577
41)	*Jasminium sambac*	Arabian jasmin	21.095548	78.979136
42)	*Jasminium sambac*	Arabian jasmin	21.095498	78.978986
43)	*Jasminium sambac*	Arabian jasmin	21.094657	78.980218
44)	*Jasminium sambac*	Arabian jasmine	21.095824	78.979546
45)	*Jasminium sambac*	Arabian jasmine	21.09578	78.979934
46)	*Jasminium sambac*	Arabian jasmine	21.095857	78.979725
47)	*Jasminum sambac*	Arabian jasmine	21.09523	78.978151
48)	*Jasminum sambac*	Arabian jasmine	21.095267	78.97811
49)	*Jasminum sambac*	Arabian jasmine	21.095215	78.978064
50)	*Jasminum sambac*	Arabian jasmine	21.095245	78.978047
51)	*Jasminum sambac*	Arabian jasmine	21.09528	78.978065
52)	*Jasminum sambac*	Arabian jasmine	21.095482	78.978689
53)	*Jasminum sambac*	Arabian jasmine	21.095554	78.978765
54)	*Jasminum sambac*	Arabian jasmine	21.095548	78.978764
55)	*Jasminum sambac*	Arabian jasmine	21.095535	78.978768
56)	*Jasminum sambac*	Arabian jasmine	21.095558	78.978764
57)	*Jasminum sambac*	Arabian jasmine	21.095545	78.978758
58)	*Jasminum sambac*	Arabian jasmine	21.095537	78.978756
59)	*Jasminum sambac*	Arabian jasmine	21.095537	78.978754
60)	*Jasminum sambac*	Arabian jasmine	21.095474	78.978748
61)	*Jasminum sambac*	Arabian jasmine	21.095473	78.978725
62)	*Jasminum sambac*	Arabian jasmine	21.095465	78.978728
63)	*Jasminum sambac*	Arabian jasmine	21.09566	78.980244
64)	*Jasminum sambac*	Arabian jasmine	21.095722	78.980224
65)	*Jasminum sambac*	Arabian jasmine	21.0957	78.980217
66)	*Jasminum sambac*	Arabian jasmine	21.095736	78.979624
67)	*Lactuca virosa*	Bitter lettuce	21.095755	78.979505

68)	*Lactuca virosa*	Bitter lettuce	21.096133	78.978833
69)	*Leucaena leucocephala*	Coffee bush	21.095731	78.978921
70)	*Leucaena leucocephala*	Coffeebush	21.095376	78.979029
71)	*Leucaena leucocephala*	Coffeebush	21.094826	78.978497
72)	*Leucaena leucocephala*	Coffeebush	21.095391	78.976693
73)	*Leucaena leucocephala*	Coffeebush	21.095376	78.976586
74)	*Leucaena leucocephala*	Coffeebush	21.095325	78.976562
75)	*Ligustrum vulgare*	Common privet	21.094826	78.97863
76)	*Ligustrum vulgare*	Common privet	21.094851	78.97834
77)	*Ligustrum vulgare*	Common privet	21.094764	78.978346
78)	*Ligustrum vulgare*	Common privet	21.094878	78.978375
79)	*Ligustrum vulgare*	Common privet	21.094855	78.978388
80)	*Ligustrum vulgare*	Common privet	21.094927	78.978469
81)	*Mirabilis jalapa*	Four o’ clock flower	21.095835	78.979618
82)	*Myoporum tenuifolium*	Manatoka	21.094878	78.977259
83)	*Myoporum tenuifolium*	Manatoka	21.094848	78.977617
84)	*Myoporum tenuifolium*	Manatoka	21.094745	78.979030
85)	*Myoporum tenuifolium*	Manatoka	21.094708	78.978233
86)	*Myoporum tenuifolium*	Manatoka	21.094569	78.978181
87)	*Myoporum tenuifolium*	Manatoka	21.094572	78.978128
88)	*Myoporum tenuifolium*	Manatoka	21.094550	78.978126
89)	*Myoporum tenuifolium*	Manatoka	21.094490	78.978093
90)	*Nerium oleander*	Oleander	21.095044	78.979873
91)	*Nerium oleander*	Oleander	21.095009	78.979858
92)	*Nerium oleander*	Oleander	21.095041	78.979743
93)	*Nyctanthes arbor tristis*	Night blooming jasmine	21.095869	78.979811
94)	*Phyllanthus amarus*	Carry me seed	21.095917	78.981025
95)	*Plumbago auriculata*	Plumbago	21.095779	78.97640
96)	*Plumbago auriculata*	Plumbago	21.096593	78.979684

97)	*Plumbago auriculata*	Plumbago	21.096572	78.979662
98)	*Plumbago auriculata*	Plumbago	21.096539	78.979701
99)	*Plumbago auriculata*	Plumbago	21.096550	78.979687
100)	*Plumbago auriculata*	Plumbago	21.096550	78.979688
101)	*Podranea ricasoliana*	Queen of sheba vine	21.095738	78.979693
102)	*Pseuderanthemum carruthersii*	Purple False Eranthemum	21.095369	78.978607
103)	*Pseuderanthemum carruthersii*	Purple false erranthemum	21.095428	78.97913
104)	*Ruscus aculeatus*	Box holly	21.095805	78.97952
105)	*Senna occidentalis*	Antbush	21.096241	78.979643
106)	*Syringa vulgaris*	Lilac	21.095252	78.979153
107)	*Syringa vulgaris*	Lilac	21.095185	78.979097
108)	*Tabernaemontana 82orficate82*	Crape jasmine	21.096644	78.979593
109)	*Tabernaemontana 82orficate82*	Crape jasmine	21.096574	78.979623
110)	*Tabernaemontana 82orficate82*	Crape jasmine	21.09644	78.979687
111)	*Tabernaemontana 82orficate82*	Crape jasmine	21.096357	78.979787
112)	*Tabernaemontana 82orficate82*	Crape jasmine	21.095705	78.980206
113)	*Tabernaemontana 82orficate82*	Crape jasmine	21.095696	78.980206
114)	*Tridax procumbens*	Coatbuttons	21.095829	78.979619

Table No. 25: Vegetation at YCCE: IV] Tree Species

Sr. No.	Scientific Name	Common Name	Total Species
1)	*Saraca asoca*	Ashoka	112
2)	*Ficus religiosa*	Peepul	1
3)	*Roystonea regia*	Cuban royal palm	5
4)	*Casuarina cunninghamiana*	Beefwood	9
5)	*Ficus cyanthistipula*	African fig tree	2
6)	*Syngonium podophyllum*	Arrowhead vine	6
7)	*Hymenocallis littoralis*	Beach spider lily	1
8)	*Ligustrum lucidum*	Chinese privet	2
9)	*Psidium guajava*	Common guava	3
10)	*Roystonea regia*	Cuban royal palm	5
11)	*Murraya koenigii*	Curry leaf	8
12)	*Alstonia scholaris*	Dita bark	41
13)	*Hyphene coriaceae*	Doum palm	4
14)	*Plumeria rubra*	Frangipani	4
15)	*Plumeria pudica*	Golden arrow	4
16)	*Lonicera japonica*	Honeysuckle	4
17)	*Washingtonia robusta*	Mexican 83orficate83 palm	4
18)	*Bauhinia 83orficate*	Orchid tree	4
19)	*Ficus religiosa*	Sacred fig	4
20)	*Cycus revoluta*	Sago palm	4
21)	*Phoenix reclinata*	Senegal date palm	4
22)	*Annona squamosa*	Sugar apple	4
23)	*Citrus sinensis*	Sweet orange	4
24)	*Terminalia catappa*	Tropical almond	4
25)	*Schotia brachypetale*	Weeping boer bean	4
26)	*Platycladus orientalis*	Chinese arborvitae	4
27)	*Juniperus chinensis*	Chinese juniper	4
28)	*Thuja occidentalis*	Northern white cedar	4

29)	*Cupressus sempervirens*	Mediterranean cypress	4
30)	*Carica papaya*	Papaya	4
31)	*Alstonia scholaris*	Ditabark	4
32)	*Roystonea regia*	Cuban royal palm	4
33)	*Senna siamea*	Siamese cassia	6
34)	*Caesalpinia echinata*	Brazil wood	15
35)	*Albizia lebbeck*	Frywood	2
36)	*Alstonia scholaris*	Devil tree	3
37)	*Plumeria obtusa*	Singapore graveyard	10
38)	*Ficus benjamina*	weeping fig	3
39)	*Citrus aurantifolia*	Sweet orange	4
40)	*Campsis radican*	Trumpet vine	7
41)	*Terminalia catappa*	Indian almond	5
42)	*Bambusa vulgaris*	Common bamboo	59
43)	*Alstonia scholaris*	Devil tree	6
44)	*Caesalpinia pulcherrima*	Peacock flower	19
45)	*Caryota urens*	Jaggery palm	11
46)	*Platycladus orientalis*	Chinese arborvitae	9
47)	*Platycladus orientalis*	Chinese arborvitae	26
48)	*Ficus cyanthistipula*	African fig tree	29
49)	*Bismarckia nobilis*	Silver Bismarck Palm	6
50)	*Duranta erecta*	golden dewdrop	19
51)	*Bombax ceiba*	Cotton tree	5
52)	*Ficus sycomorus*	Sycamore fig	9
53)	*Pongamia pinnata*	Indian beech	2
54)	*Ficus religiosa*	Sacred fig	9
55)	*Alstonia scholaris*	Ditabark	8
56)	*Magnolia grandiflora L.*	Southern magnolia	19
57)	*Juniperus thurifera L.*	Incense Juniper	7
58)	*Citrus sinensis (L.)*	Valencia orange	3

59)	*Ravenala madagascariensis*	Traveler's palm	13
60)	*Ficus benjamina*	Weeping fig	10
61)	*Terminalia catappa*	Tropical almond	5
62)	*Gleditsia triacanthos*	Honey locust	3
63)	*Senna siamea*	Ironwood Cassia	4
64)	*Rauvolfia caffra Sond.*	Quininetree	15
65)	*Psidium guajava L.*	Common guava	6
66)	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	18
67)	*Tipuana tipu (benth.) Kuntze*	Tiputree	35
68)	*Theobroma cacao L.*	cocoa	39
69)	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	14
70)	*Prosopis pallida (wild.) Kunth*	Kiawe	6
71)	*Ficus hispida L.f.*	Hairy fig	2
72)	*Dalbergia latifolia Roxb.*	East Indian rosewood	1
73)	**Total**		718

Table No. 26: Geospatial Configurations of Tree Species

Sr. No.	***Name of Species***	Common Name	Latitude	Longitude
1)	*Saraca asoca*	Ashoka	21.095524	78.97886
2)	*Saraca asoca*	Ashoka	21.095418	78.978906
3)	*Saraca asoca*	Ashoka	21.095364	78.978949
4)	*Ficus religiosa*	Peepul	21.095437	78.978957
5)	*Roystonea regia*	Cuban royal palm	21.095532	78.979148
6)	*Roystonea regia*	Cuban royal palm	21.095544	78.979076
7)	*Roystonea regia*	Cuban royal palm	21.095495	78.979106
8)	*Roystonea regia*	Cuban royal palm	21.095517	78.979127
9)	*Roystonea regia*	Cuban royal palm	21.095584	78.979193

10)	*Casuarina cunninghamiana*	Beefwood	21.095414	78.97931
11)	*Casuarina cunninghamiana*	Beefwood	21.095479	78.979184
12)	*Ficus cyanthistipula*	African fig tree	21.094497	78.980268
13)	*Syngonium podophyllum*	Arrowhead vine	21.095921	78.979468
14)	*Syngonium podophyllum*	Arrowhead vine	21.095832	78.979557
15)	*Polyalthia longifolia*	Ashoka tree	21.095052	78.977458
16)	*Polyalthia longifolia*	Ashoka tree	21.094985	78.977325
17)	*Polyalthia longifolia*	Ashoka tree	21.095102	78.977201
18)	*Polyalthia longifolia*	Ashoka tree	21.094887	78.977226
19)	*Polyalthia longifolia*	Ashoka tree	21.094911	78.977309
20)	*Hymenocallislittoralis*	Beach spider lily	21.095427	78.979097
21)	*Casuarinacunninghamiana*	Beefwood	21.095414	78.97931
22)	*Casuarinacunninghamiana*	Beefwood	21.095479	78.979184
23)	*Ligustrum lucidum*	Chinese privet	21.096460	78.979398
24)	*Psidium guajava*	Common guava	21.095868	78.979569
25)	*Roystonea regia*	Cuban royal palm	21.09553	78.979148
26)	*Roystonea regia*	Cuban royal palm	21.095544	78.979076
27)	*Roystonea regia*	Cuban royal palm	21.095495	78.979106
28)	*Roystonea regia*	Cuban royal palm	21.095517	78.979127
29)	*Roystonea regia*	Cuban royal palm	21.095584	78.979193
30)	*Murraya koenigii*	Curry leaf	21.095869	78.979811
31)	*Alstonia scholaris*	Dita bark	21.095456	78.979509
32)	*Alstonia scholaris*	Dita bark	21.095501	78.979492
33)	*Alstonia scholaris*	Ditabark	21.094977	78.977050

34)	*Alstonia scholaris*	Ditabark	21.095076	78.977108
35)	*Alstonia scholaris*	Ditabark	21.095116	78.976979
36)	*Alstonia scholaris*	Ditabark	21.095127	78.977159
37)	*Alstonia scholaris*	Ditabark	21.095094	78.977044
38)	*Alstonia scholaris*	Ditabark	21.094913	78.977098
39)	*Alstonia scholaris*	Ditabark	21.094918	78.977351
40)	*Alstonia scholaris*	Ditabark	21.094959	78.977443
41)	*Alstonia scholaris*	Ditabark	21.094967	78.977404
42)	*Hyphene coriaceae*	Doum palm	21.095385	78.979543
43)	*Plumeria rubra*	Frangipani	21.095848	78.979711
44)	*Plumeria pudica*	Golden arrow	21.095901	78.979780
45)	*Plumeria pudica*	Golden arrow	21.095862	78.979692
46)	*Lonicera japonica*	Honeysuckle	21.094930	78.977272
47)	*Washingtonia robusta*	Mexican 87orficate87 palm	21.095063	78.977110
48)	*Bauhinia 87orficate*	Orchid tree	21.095897	78.979799
49)	*Ficus religiosa*	Sacred fig	21.095347	78.979504
50)	*Cycus revoluta*	Sago palm	21.094809	78.977085
51)	*Phoenix reclinata*	Senegal date palm	21.095713	78.979532
52)	*Annona squamosa*	Sugar apple	21.095537	78.980068
53)	*Citrus sinensis*	Sweet orange	21.095857	78.979725
54)	*Terminalia catappa*	Tropical almond	21.095825	78.979559
55)	*Terminalia catappa*	Tropical almond	21.095821	78.979693
56)	*Terminalia catappa*	Tropical almond	21.095403	78.979480
57)	*Terminalia cattapa*	Tropical almond	21.094375	78.989904
58)	*Schotia brachypetale*	Weeping boer bean	21.095941	78.979809
59)	*Platycladus orientalis*	Chinese arborvitae	21.096708	78.978593
60)	*Platycladus orientalis*	Chinese arborvitae	21.096708	78.978593
61)	*Platycladus orientalis*	Chinese arborvitae	21.096708	78.978593
62)	*Juniperus chinensis*	Chinese juniper	21.095345	78.97871

63)	*Polyalthia longifolia*	Ashoka tree	21.09561	78.979103
64)	*Thuja occidentalis*	Northern white cedar	21.095593	78.979053
65)	*Polyalthia longifolia*	Ashoka tree	21.095669	78.979045
66)	*Polyalthia longifolia*	Ashoka tree	21.095725	78.979096
67)	*Polyalthia longifolia*	Ashoka tree	21.095608	78.978878
68)	*Thuja occidentalis*	Northern white cedar	21.095637	78.979011
69)	*Polyalthia longifolia*	Ashoka tree	21.095597	78.978888
70)	*Polyalthia longifolia*	Ashoka tree	21.095652	78.978898
71)	*Polyalthia longifolia*	Ashoka tree	21.095594	78.978783
72)	*Thuja occidentalis*	Northern white cedar	21.095672	78.979057
73)	*Polyalthia longifolia*	Ashoka tree	21.095614	78.978760
74)	*Polyalthia longifolia*	Ashoka tree	21.095602	78.978607
75)	*Polyalthia longifolia*	Ashoka tree	21.095620	78.978658
76)	*Polyalthia longifolia*	Ashoka tree	21.095703	78.978600
77)	*Cupressus sempervirens*	Mediterranean cypress	21.095766	78.978904
78)	*Cupressus sempervirens*	Mediterranean cypress	21.095752	78.978914
79)	*Cupressus sempervirens*	Mediterranean cypress	21.095718	78.978946
80)	*Cupressus sempervirens*	Mediterranean cypress	21.095701	78.978910
81)	*Carica papaya*	Papaya	21.095818	78.978839
82)	*Carica papaya*	Papaya	21.095804	78.978935
83)	*Carica papaya*	Papaya	21.095902	78.978858
84)	*Alstonia scholaris*	Ditabark	21.096273	78.982674
85)	*Alstonia scholaris*	Ditabark	21.096365	78.982702
86)	*Alstonia scholaris*	Ditabark	21.096206	78.982701
87)	*Alstonia scholaris*	Ditabark	21.096277	78.982760
88)	*Alstonia scholaris*	Ditabark	21.096276	78.982770

89)	*Roystonea regia*	Cuban royal palm	21.096367	78.982742
90)	*Roystonea regia*	Cuban royal palm	21.096252	78.982688
91)	*Roystonea regia*	Cuban royal palm	21.096265	78.982721
92)	*Roystonea regia*	Cuban royal palm	21.096097	78.982509
93)	*Roystonea regia*	Cuban royal palm	21.096173	78.982656
94)	*Roystonea regia*	Cuban royal palm	21.096411	78.982739
95)	*Roystonea regia*	Cuban royal palm	21.096181	78.982613
96)	*Roystonea regia*	Cuban royal palm	21.096058	78.982791
97)	*Roystonea regia*	Cuban royal palm	21.096055	78.982655
98)	*Roystonea regia*	Cuban royal palm	21.096082	78.982540
99)	*Roystonea regia*	Cuban royal palm	21.096058	78.982584
100	*Roystonea regia*	Cuban royal palm	21.096067	78.982574
101	*Roystonea regia*	Cuban royal palm	21.096150	78.982542
102	*Roystonea regia*	Cuban royal palm	21.096243	78.983595
103	*Roystonea regia*	Cuban royal palm	21.096193	78.984550
104	*Roystonia regia*	Cuban royal palm	21.096413	78.982591
105	*Roystonia regia*	Cuban royal palm	21.096193	78.982550
106	*Roystonea regia*	Cuban royal palm	21.096467	78.982634
107	*Roystonea regia*	Cuban royal palm	21.096368	78.982663
108	*Roystonea regia*	Cuban royal palm	21.096383	78.982527
109	*Roystonea regia*	Cuban royal palm	21.09615	78.982466
110	*Roystonea regia*	Cuban royal palm	21.096421	78.982504
111	*Murraya koenigii*	Curryt leaf	21.096405	78.982576
112	*Roystonea regia*	Cuban royal palm	21.096398	78.982595
113	*Roystonea regia*	Cuban royal palm	21.096471	78.982831
114	*Roystonea regia*	Cuban royal palm	21.096458	78.982637
115	*Roystonea regia*	Cuban royal palm	21.096502	78.982810
116	*Roystonea regia*	Cuban royal palm	21.096462	78.982675
117	*Senna siamea*	Siamese cassia	21.094755	78.978314
118	*Albizia julibrissin*	Silktree Mimosa	21.094579	78.978585

119	*Juglans regia*	Walnut	21.094822	78.978660
120	*Euonymus europaeus*	European spindletree	21.094640	78.978584
121	*Euonymus europaeus*	European spindletree	21.094677	78.978771
122	*Dalbergia sissoo*	Shisham	21.094705	78.978627
123	*Pongamia pinnata*	Indian beech	21.094708	78.979021
124	*Caesalpinia echinata*	Brazil wood	21.094706	78.979116
125	*Populus tremula*	European aspen	21.094756	78.978999
126	*Senna siamea*	Kassod tree	21.094717	78.979173
127	*Caesalpinia echinata*	Brazil wood	21.094805	78.979158
128	*Caesalpinia echinata*	Brazil wood	21.094823	78.979145
129	*Caesalpinia echinata*	Brazil wood	21.094823	78.979137
130	*Albizia lebbeck*	Frywood	21.094789	78.978714
131	*Alstonia scholaris*	Devil tree	21.094908	78.978052
132	*Cupressus sempervirens*	Italian cypress	21.095429	78.979333
133	*Alstonia scholaris*	Devil tree	21.095531	78.979183
134	*Cupressus sempervirens*	Italian cypress	21.095571	78.979234
135	*Cupressus sempervirens*	Italian cypress	21.095415	78.979225
136	*Alstonia scholaris*	Devil tree	21.095426	78.979165
137	*Cupressus sempervirens*	Italian cypress	21.095391	78.979130
138	*Plumeria rubra*	Frangipani	21.095351	78.979075
139	*Plumeria obtusa*	Singapore graveyard	21.096094	78.982626
140	*Plumeria obtusa*	Singapore graveyard	21.096596	78.982258
141	*Plumeria obtusa*	Singapore graveyard	21.096104	78.982399
142	*Plumeria obtusa*	Singapore graveyard	21.095736	78.981716
143	*Plumeria obtusa*	Singapore graveyard	21.096106	78.982594
144	*Ficus benjamina*	weeping fig	21.095570	78.980063

145	*Citrus aurantifolia*	Sweet orange	21.095622	78.980070
146	*Ficus benjamina*	weeping fig	21.095569	78.980050
147	*Terminalia catappa*	Indian almond	21.095546	78.979851
148	*Campsis radican*	Trumpet vine	21.096534	78.979381
149	*Campsis radican*	Trumpet vine	21.096573	78.979269
150	*Campsis radican*	Trumpet vine	21.096464	78.979231
151	*Bambusa vulgaris*	Common bamboo	21.096576	78.979251
152	*Bambusa vulgaris*	Common bamboo	21.096481	78.979197
153	*Bambusa vulgaris*	Common bamboo	21.096521	78.979173
154	*Bambusa vulgaris*	Common bamboo	21.096318	78.979183
155	*Bambusa vulgaris*	Common bamboo	21.096218	78.979072
156	*Bambusa vulgaris*	Common bamboo	21.096297	78.979084
157	*Bambusa vulgaris*	Common bamboo	21.096243	78.979019
158	*Bambusa vulgaris*	Common bamboo	21.096251	78.978972
159	*Bambusa vulgaris*	Common bamboo	21.096173	78.978925
160	*Alstonia scholaris*	Devil tree	21.096319	78.979101
161	*Alstonia scholaris*	Devil tree	21.096270	78.979053
162	*Alstonia scholaris*	Devil tree	21.096252	78.979008
163	*Alstonia scholaris*	Devil tree	21.096242	78.978952
164	*Alstonia scholaris*	Devil tree	21.096201	78.979983
165	*Bambusa vulgaris*	Common bamboo	21.096168	78.978913
166	*Bambusa vulgaris*	Common bamboo	21.096145	78.978914
167	*Bambusa vulgaris*	Common bamboo	21.096138	78.978871
168	*Bambusa vulgaris*	Common bamboo	21.096097	78.978867
169	*Bambusa vulgaris*	Common bamboo	21.096164	78.978892
170	*Bambusa vulgaris*	Common bamboo	21.096165	78.978838
171	*Bambusa vulgaris*	Common bamboo	21.095912	78.978713
172	*Bambusa vulgaris*	Common bamboo	21.095864	78.978557
173	*Bambusa vulgaris*	Common bamboo	21.095841	78.978560
174	*Bambusa vulgaris*	Common bamboo	212.095996	78.978760

175	*Bambusa vulgaris*	Common bamboo	21.096037	78.978720
176	*Bambusa vulgaris*	Common bamboo	21.095685	78.978351
177	*Bambusa vulgaris*	Common bamboo	21.095793	78.978458
178	*Bambusa vulgaris*	Common bamboo	21.095692	78.978256
179	*Bambusa vulgaris*	Common bamboo	21.095862	78.978411
180	*Bambusa vulgaris*	Common bamboo	21.095712	78.978035
181	*Bambusa vulgaris*	Common bamboo	21.095642	78.978181
182	*Bambusa vulgaris*	Common bamboo	21.095627	78.978037
183	*Alstonia scholaris*	Devil tree	21.095577	78.977813
184	*Alstonia scholaris*	Devil tree	21.095625	78.977929
185	*Alstonia scholaris*	Devil tree	21.095780	78.978178
186	*Alstonia scholaris*	Devil tree	21.095664	78.978113
187	*Caesalpinia pulcherrima*	Peacock flower	21.096527	78.978993
188	*Caesalpinia pulcherrima*	Peacock flower	21.096524	78.978990
189	*Caesalpinia pulcherrima*	Peacock flower	21.096492	78.978930
190	*Caesalpinia pulcherrima*	Peacock flower	21.096424	78.978606
191	*Caesalpinia pulcherrima*	Peacock flower	21.096563	78.978777
192	*Pongamia pinnata*	Indian beech	21.094708	78.979021
193	*Caesalpinia echinata*	Brazil wood	21.094706	78.979116
194	*Populus tremula*	European aspen	21.094756	78.978999
195	*Senna siamea*	Kassod tree	21.094717	78.979173
196	*Caesalpinia echinata*	Brazil wood	21.094805	78.979158
197	*Caesalpinia echinata*	Brazil wood	21.094823	78.979145
198	*Caesalpinia echinata*	Brazil wood	21.094823	78.979137

199	*Caesalpinia pulcherrima*	Peacock flower	21.096528	78.978696
200	*Caesalpinia pulcherrima*	Peacock flower	21.096466	78.978665
201	*Caesalpinia pulcherrima*	Peacock flower	21.096453	78.978718
202	*Caesalpinia pulcherrima*	Peacock flower	21.096411	78.978622
203	*Caesalpinia pulcherrima*	Peacock flower	21.096441	78.978621
204	*Caesalpinia pulcherrima*	Peacock flower	21.096431	78.978582
205	*Caesalpinia pulcherrima*	Peacock flower	21.096423	78.978505
206	*Polyalthia longifolia*	Ashoka tree	21.095258	78.978272
207	*Cupressus lusitanica*	Mexican cypress	21.095208	78.978230
208	*Caryota urens*	Jaggery palm	21.094988	78.977979
209	*Caryota urens*	Jaggery palm	21.095222	78.977990
210	*Caryota urens*	Jaggery palm	21.095204	78.978098
211	*Caryota urens*	Jaggery palm	21.095192	78.978078
212	*Polyalthia longifolia*	Ashoka tree	21.095178	78.978105
213	*Polyalthia longifolia*	Ashoka tree	21.095168	78.978103
214	*Polyalthia longifolia*	Ashoka tree	21.095143	78.978104
215	*Polyalthia longifolia*	Ashoka tree	21.095191	78.978103
216	*Platycladus orientalis*	Chinese arborvitae	21.095213	78.978103
217	*Platycladus orientalis*	Chinese arborvitae	21.095237	78.978067
218	*Polyalthia longifolia*	Ashoka tree	21.095225	78.978125
219	*Polyalthia longifolia*	Ashoka tree	21.095254	78.978175
220	*Polyalthia longifolia*	Ashoka tree	21.095279	78.978188
221	*Polyalthia longifolia*	Ashoka tree	21.095292	78.978244

222	*Polyalthia longifolia*	Ashoka tree	21.095301	78.978272
223	*Platycladus orientalis*	Chinese arborvitae	21.095287	78.978222
224	*Platycladus orientalis*	Chinese arborvitae	21.095287	78.978165
225	*Platycladus orientalis*	Chinese arborvitae	21.095268	78.978012
226	*Platycladus orientalis*	Chinese arborvitae	21.095287	78.978091
227	*Platycladus orientalis*	Chinese arborvitae	21.095339	78.978125
228	*Platycladus orientalis*	Chinese arborvitae	21.095346	78.978138
229	*Platycladus orientalis*	Chinese arborvitae	21.095361	78.978184
230	*Platycladus orientalis*	Chinese arborvitae	21.095407	78.978206
231	*Platycladus orientalis*	Chinese arborvitae	21.095379	78.978250
232	*Ficus cyanthistipula*	African fig tree	21.095357	78.977921
233	*Ficus cyanthistipula*	African fig tree	21.095251	78.978023
234	*Ficus cyanthistipula*	African fig tree	21.095307	78.978085
235	*Ficus cyanthistipula*	African fig tree	21.095323	78.978095
236	*Ficus cyanthistipula*	African fig tree	21.095320	78.978082
237	*Ficus cyanthistipula*	African fig tree	21.095353	78.978125
238	*Ficus cyanthistipula*	African fig tree	21.095421	78.978183
239	*Caesalpenia pulcherima*	Peacock flower	21.095430	78.976877
240	*Thuja occidentalis*	Northern white cedar	21.095476	78.979773
241	*Bismarckia nobilis*	Silver Bismarck Palm	21.095510	78.979752
242	*Bismarckia nobilis*	Silver Bismarck Palm	21.095710	78.979890
243	*Polyalthia longifolia*	Ashoka	21.095393	78.979823
244	*Polyalthia longifolia*	Ashoka	21.095443	78.979762
245	*Alstonia scholaris*	Devil tree	21.095390	78.979892
246	*Alstonia scholaris*	Devil tree	21.095382	78.979729
247	*Alstonia scholaris*	Devil tree	21.095393	78.979852
248	*Plumeria rubra*	Frangipani	21.095108	78.979819
249	*Plumeria rubra*	Frangipani	21.095112	78.979839
250	*Polyalthia longifolia*	Ashoka tree	21.095169	78.979777

251	*Polyalthia longifolia*	Ashoka tree	21.095276	78.979871
252	*Caryota urens*	Jaggery palm	21.095285	78.979905
253	*Caryota urens*	Jaggery palm	21.095087	78.979902
254	*Polyalthia longifolia*	Ashoka tree	21.094996	78.979871
255	*Polyalthia longifolia*	Ashoka tree	21.095005	78.979824
256	*Mangifera indica*	Mango tree	21.095476	78.979991
257	*Mangifera indica*	Mango tree	21.095033	78.979732
258	*Citrus sinensis*	Sweet orange	21.095034	78.979735
259	*Duranta erecta*	Golden dewdrop	21.095207	78.979719
260	*Polyalthia longifolia*	Ashoka tree	21.095045	78.979794
261	*Polyalthia longifolia*	Ashoka tree	21.094898	78.979741
262	*Polyalthia longifolia*	Ashoka tree	21.094953	78.979718
263	*Polyalthia longifolia*	Ashoka tree	21.095004	78.979702
264	*Polyalthia longifolia*	Ashoka tree	21.095067	78.979774
265	*Polyalthia longifolia*	Ashoka tree	21.095085	78.979677
266	*Polyalthia longifolia*	Ashoka tree	21.095179	78.979691
267	*Alstonia scholaris*	Devil tree	21.095228	78.979696
268	*Alstonia scholaris*	Devil tree	21.095315	78.979773
269	*Alstonia scholaris*	Devil tree	21.095255	78.979722
270	*Thespesia populnea*	Portia tree	21.095218	78.979763
271	*Polyalthia longifolia*	Ashoka tree	21.094539	78.979943
272	*Polyalthia longifolia*	Ashoka tree	21.094571	78.979893
273	*Polyalthia longifolia*	Ashoka tree	21.094598	78.979873
274	*Polyalthia longifolia*	Ashoka tree	21.094675	78.979863
275	*Polyalthia longifolia*	Ashoka tree	21.094694	78.979875
276	*Polyalthia longifolia*	Ashoka tree	21.094717	78.979885
277	*Polyalthia longifolia*	Ashoka tree	21.094796	78.979875
278	*Polyalthia longifolia*	Ashoka tree	21.094816	78.979857
279	*Polyalthia longifolia*	Ashoka tree	21.094875	78.979856
280	*Polyalthia longifolia*	Ashoka tree	21.094885	78.979829

281	*Polyalthia longifolia*	Ashoka tree	21.094893	78.979846
282	*Polyalthia longifolia*	Ashoka tree	21.094913	78.979858
283	*Polyalthia longifolia*	Ashoka tree	21.094505	78.979957
284	*Polyalthia longifolia*	Ashoka tree	21.094506	78.979956
285	*Polyalthia longifolia*	Ashoka tree	21.094453	78.979957
286	*Polyalthia longifolia*	Ashoka tree	21.094398	78.979965
287	*Polyalthia longifolia*	Ashoka tree	21.094422	78.980032
288	*Polyalthia longifolia*	Ashoka tree	21.094373	78.980040
289	*Polyalthia longifolia*	Ashoka tree	21.094333	78.980017
290	*Polyalthia longifolia*	Ashoka tree	21.094293	78.980042
291	*Phoenix dactylifera*	Date palm	21.094221	78.980059
292	*Polyalthia longifolia*	Ashoka tree	21.094221	78.980059
293	*Polyalthia longifolia*	Ashoka tree	21.094219	78.980066
294	*Alstonia scholaris*	Devil tree	21.095084	78.977054
295	*Linistona chinensis*	Chinese fan palm	21.095079	78.977029
296	*Linistona chinensis*	Chinese fan palm	21.095120	78.977098
297	*Phoenix reclinata*	Senegal date palm	21.095060	78.977123
298	*Alstonia scholaris*	Devil tree	21.095093	78.977162
299	*Alstonia scholaris*	Devil tree	21.095200	78.977222
300	*Alstonia scholaris*	Devil tree	21.095216	78.977270
301	*Alstonia scholaris*	Devil tree	21.095207	78.977310
302	*Polyalthia longifolia*	Ashoka tree	21.095165	78.977275
303	*Polyalthia longifolia*	Ashoka tree	21.094921	78.977123
304	*Polyalthia longifolia*	Ashoka tree	21.094932	78.977116
305	*Polyalthia longifolia*	Ashoka tree	21.094932	78.977091
306	*Polyalthia longifolia*	Ashoka tree	21.094979	78.977085
307	*Ficus sycomorus*	Sycamore fig	21.095003	78.976972
308	*Phoenix dactylifera*	Date palm	21.095413	78.976335
309	*Phoenix dactylifera*	Date palm	21.095245	78.976415
310	*Bombax ceiba*	Cotton tree	21.096066	78.979283

311	*Caesalpenia pulcherima*	Peacock flower	21.096279	78.977968
312	*Caesalpenia pulcherima*	Peacock flower	21.096298	78.978048
313	*Caesalpenia pulcherima*	Peacock flower	21.096330	78.978030
314	*Caesalpenia pulcherima*	Peacock flower	21.096313	78.978059
315	*Caesalpenia pulcherima*	Peacock flower	21.096310	78.978067
316	*Caesalpenia pulcherima*	Peacock flower	21.096307	78.978068
317	*Caesalpenia pulcherima*	Peacock flower	21.096310	78.978067
318	*Caesalpenia pulcherima*	Peacock flower	21.096311	78.978066
319	*Caesalpenia pulcherima*	Peacock flower	21.096315	78.978091
320	*Caesalpenia pulcherima*	Peacock flower	21.096335	78.978151
321	*Caesalpenia pulcherima*	Peacock flower	21.096335	78.978158
322	*Caesalpenia pulcherima*	Peacock flower	21.096329	78.978189
323	*Caesalpenia pulcherima*	Peacock flower	21.096338	78.978215
324	*Caesalpenia pulcherima*	Peacock flower	21.096340	78.978244
325	*Caesalpenia pulcherima*	Peacock flower	21.096340	78.978243

326	*Caesalpenia pulcherima*	Peacock flower	21.096343	78.978246
327	*Caesalpenia pulcherima*	Peacock flower	21.096350	78.978269
328	*Caesalpenia pulcherima*	Peacock flower	21.096360	78.978307
329	*Caesalpenia pulcherima*	Peacock flower	21.096377	78.978334
330	*Caesalpenia pulcherima*	Peacock flower	21.096369	78.978368
331	*Caesalpenia pulcherima*	Peacock flower	21.096395	78.978407
332	*Caesalpenia pulcherima*	Peacock flower	21.096415	78.978444
333	*Caesalpenia pulcherima*	Peacock flower	21.096416	78.978444
334	*Caesalpenia pulcherima*	Peacock flower	21.096415	78.978440
335	*Caesalpenia pulcherima*	Peacock flower	21.096415	78.978440
336	*Caesalpenia pulcherima*	Peacock flower	21.095963	78.976828
337	*Caesalpenia pulcherima*	Peacock flower	21.095987	78.977287
338	*Caesalpenia pulcherima*	Peacock flower	21.096034	78.977392
339	*Caesalpenia pulcherima*	Peacock flower	21.096061	78.977404
340	*Caesalpenia pulcherima*	Peacock flower	21.096088	78.977407

341	*Caesalpenia pulcherima*	Peacock flower	21.096075	78.977466
342	*Caesalpenia pulcherima*	Peacock flower	21.096078	78.977478
343	*Caesalpenia pulcherima*	Peacock flower	21.096078	78.977478
344	*Caesalpenia pulcherima*	Peacock flower	21.096078	78.977478
345	*Caesalpenia pulcherima*	Peacock flower	21.096129	78.977959
346	*Caesalpenia pulcherima*	Peacock flower	21.096104	78.977641
347	*Pongamia pinnata*	Indian beech	21.096159	78.977632
348	*Ficus religiosa*	Sacred fig	21.096177	78.977793
349	*Caesalpenia pulcherima*	Peacock flower	21.096226	78.977683
350	*Caesalpenia pulcherima*	Peacock flower	21.096126	78.977815
351	*Ficus religiosa*	Sacred fig	21.095909	78.977538
352	*Caesalpenia pulcherima*	Peacock flower	21.095981	78.977573
353	*Caesalpenia pulcherima*	Peacock flower	21.095951	78.977569
354	*Bauhinia purpurea*	Orchid tree	21.095960	78.977534
355	*Caesalpenia pulcherima*	Peacock flower	21.095958	78.977518
356	*Alstonia scholaris*	Ditabark	21.095291	78.978978
357	*Alstonia scholaris*	Ditabark	21.095333	78.979001
358	*Alstonia scholaris*	Ditabark	21.095351	78.979011
359	*Alstonia scholaris*	Ditabark	21.095247	78.979044

360	*Alstonia scholaris*	Ditabark	21.095232	78.979058
361	*Polyalthia logifolia*	Ashoka	21.095147	78.979036
362	*Caesalpenia pucherrima*	Peacock flower	21.095160	78.979029
363	*Annona squamosa*	Custard apple	21.095830	78.979532
364	*Plumeria pudica*	Frangipani	21.095885	78.979564
365	*Ficus hispida*	Hairy fig	21.095646	78.979636
366	*Juniperus thurifera L.*	Spanish Juniper	21.095558	78.978694
367	*Magnolia grandiflora L.*	Southern magnolia	21.095538	78.978665
368	*Magnolia grandiflora L.*	Southern magnolia	21.095546	78.978657
369	*Magnolia grandiflora L.*	Southern magnolia	21.095432	78.978571
370	*Magnolia grandiflora L.*	Southern magnolia	21.095380	78.978544
371	*Juniperus thurifera L.*	Incense Juniper	21.095426	78.978640
372	*Juniperus thurifera L.*	Incense Juniper	21.095517	78.978688
373	*Juniperus thurifera L.*	Incense Juniper	21.095488	78.978601
374	*Juniperus thurifera L.*	Incense Juniper	21.095379	78.978646
375	*Citrus sinensis (L.)*	Valencia orange	21.095515	78.978498
376	*Citrus sinensis*	Valencia orange	21.095406	78.978527
377	*Citrus sinensis*	Valencia orange	21.095372	78.978519
378	*Ficus religiosa L.*	Sacred fig	21.095469	78.978623
379	*Jatropha podagrica Hook*	Bottle-euphorbia	21.095485	78.978593
380	*Erythrina crista – galli*	cockspur coral tree	21.095455	78.978576
381	*Saraca asoca*	Ashoka tree	21.095471	78.978808
382	*Cordia sebastena L.*	Geranium-tree	21.095498	78.978803
383	*Saraca asoca*	Ashoka tree	21.095469	78.978794

384	*Cordia sebastena L.*	Geranium-tree	21.095519	78.978739
385	*Persea americana Mill.*	Avocado	21.095520	78.978730
386	*Polyalthia longifolia*	Ashoka tree	21.095580	78.978806
387	*Polyalthia longifolia*	Ashoka tree	21.095556	78.978762
388	*Polyalthia longifolia*	Ashoka tree	21.095410	78.978736
389	*Polyalthia longifolia*	Ashoka tree	21.095380	78.978737
390	*Polyalthia longifolia*	Ashoka tree	21.095454	78.978705
391	*Polyalthia longifolia*	Ashoka tree	21.094896	78.977570
392	*Polyalthia longifolia*	Ashoka tree	21.094935	78.977633
393	*Polyalthia longifolia*	Ashoka tree	21.095070	78.977614
394	*Plumeria obtusa*	Singapore graveyard flower	21.094904	78.977553
395	*Polyalthia longifolia*	Ashoka tree	21.095109	78.977709
396	*Alstonia scholaris*	Ditabark	21.095162	78.977801
397	*Alstonia scholaris*	Ditabark	21.095080	78.9778640
398	*Alstonia scholaris*	Ditabark	21.095118	78.977850
399	*Polyalthia longifolia*	Ashoka tree	21.095208	78.978012
400	*Caryota urens*	Jaggery palm	21.095249	78.977998
401	*Caryota urens*	Jaggery palm	21.095170	78.978042
402	*Caryota urens*	Jaggery palm	21.095093	78.978058
403	*Polyalthia longifolia*	Ashoka tree	21.095193	78.978040
404	*Alstonia scholaris*	Ditabark	21.095069	78.977963
405	*Alstonia scholaris*	Ditabark	21.095026	78.977893
406	*Syagrus romanzoffiana*	Giriba palm	21.094988	78.977808
407	*Alstonia scholaris*	Ditabark	21.095235	78.977992
408	*Alstonia scholaris*	Ditabark	21.095252	78.977895
409	*Polyalthia longifolia*	Ashoka tree	21.095276	78.977838
410	*Ficus benjamina*	Weeping fig	21.096618	78.979632
411	*Polyalthia longifolia*	Ashoka tree	21.096888	78.979770
412	*Polyalthia longifolia*	Ashoka tree	21.096699	78.979619

413	*Polyalthia longifolia*	Ashoka tree	21.096641	78.979634
414	*Polyalthia longifolia*	Ashoka tree	21.096625	78.979612
415	*Polyalthia longifolia*	Ashoka tree	21.096622	78.979561
416	*Polyalthia longifolia*	Ashoka tree	21.096589	78.979536
417	*Polyalthia longifolia*	Ashoka tree	21.096521	78.979507
418	*Polyalthia longifolia*	Ashoka tree	21.096538	78.979516
419	*Polyalthia longifolia*	Ashoka tree	21.096519	78.979518
420	*Polyalthia longifolia*	Ashoka tree	21.096510	78.979542
421	*Polyalthia longifolia*	Ashoka tree	21.096459	78.979495
422	*Polyalthia longifolia*	Ashoka tree	21.096435	78.979440
423	*Polyalthia longifolia*	Ashoka tree	21.096440	78.979431
424	*Polyalthia longifolia*	Ashoka tree	21.096452	78.979422
425	*Polyalthia longifolia*	Ashoka tree	21.096399	78.979398
426	*Polyalthia longifolia*	Ashoka tree	21.096368	78.979398
427	*Phoenix 102orficate*	Senegal date palm	21.096303	78.979420
428	*Phoenix 102orficate*	Senegal date palm	21.096363	78.979653
429	*Phoenix 102orficate*	Senegal date palm	21.096343	78.979621
430	*Caryota urens*	Jaggery palm	21.096425	78.979614
431	*Caryota urens*	Jaggery palm	21.096584	78.979628
432	*Caryota urens*	Jaggery palm	21.096540	78.979683
433	*Washingtonia robusta*	Mexican Washington palm	21.096490	78.979629
434	*Caryota urens*	Jaggery palm	21.096504	78.979714
435	*Caryota urens*	Jaggery palm	21.096462	78.979706
436	*Caryota urens*	Jaggery palm	21.096447	78.979731
437	*Caryota urens*	Jaggery palm	21.096375	78.979743
438	*Caryota urens*	Jaggery palm	21.096370	78.979761
439	*Senna siamea*	Ironwood Cassia	21.096348	78.979782
440	*Caryota urens*	Jaggery palm	21.096389	78.979747
441	*Caryota urens*	Jaggery palm	21.096294	78.979771

442	*Caryota urens*	Jaggery palm	21.096255	78.979781
443	*Caryota urens*	Jaggery palm	21.096283	78.979775
444	*Caryota urens*	Jaggery palm	21.096264	78.979736
445	*Caryota urens*	Jaggery palm	21.096254	78.979736
446	*Caryota urens*	Jaggery palm	21.096248	78.979714
447	*Prunes serotina*	Black cherry	21.096318	78.979646
448	*Prunes serotina*	Black cherry	21.096385	78.979603
449	*Citrus sinensis*	Valencia Orange	21.096563	78.979609
450	*Ficus benjamina*	Weeping fig	21.096498	78.979710
451	*Ficus benjamina*	Weeping fig	21.096523	78.979655
452	*Ficus benjamina*	Weeping fig	21.096558	78.979703
453	*Ficus benjamina*	Weeping fig	21.096593	78.979682
454	*Ravenala madagascariensis*	Traveler's palm	21.096397	78.979468
455	*Ravenala madagascariensis*	Traveler's palm	21.096170	78.979458
456	*Ravenala madagascariensis*	Traveler's palm	21.096148	78.979488
457	*Ravenala madagascariensis*	Traveler's palm	21.096138	78.979489
458	*Ravenala madagascariensis*	Traveler's palm	21.096141	78.979513
459	*Roystonea regia*	Cuban royal palm	21.096733	78.979382
460	*Phoenix 103orficate*	Senegal date palm	21.096207	78.979444
461	*Roystonea regia*	Cuban royal palm	21.096196	78.979537
462	*Plumeria rubra*	Frangipani	21.096905	78.979874
463	*Bauhinia purpurea*	Orchidtree	21.096368	78.979569
464	*Pongamia pinnata*	Indian Beech	21.095023	78.978150
465	*Terminalia catappa*	Tropical almond	21.094948	78.978482
466	*Terminalia catappa*	Tropical almond	21.095082	78.978624

467	*Butea monosperma*	Bengal kino	21.094742	78.978277
468	*Butea monosperma*	Bengal kino	21.095232	78.977977
469	*Alstonia scholaris*	Ditabark	21.094443	78.978263
470	*Alstonia scholaris*	Ditabark	21.094444	78.978251
471	*Alstonia scholaris*	Ditabark	21.094518	78.978302
472	*Alstonia scholaris*	Ditabark	21.094538	78.978299
473	*Cassia fistula*	Indian laburnum	21.094574	78.978326
474	*Gleditsia triacanthos*	Honey locust	21.094806	78.978167
475	*Senna siamea*	Ironwood Cassia	21.094846	78.978190
476	*Caesalpinia pulcherrima*	Pride-of-Barbados	21.094685	78.978220
477	*Tipuana tipu (Benth.) Kuntze*	Tiputree	21.095241	78.980234
478	*Azadirachta indica A.Juss*	Neem	21.095364	78.980042
479	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095319	78.980131
480	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095308	78.98014
481	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095302	78.980146
482	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095301	78.980155
483	*Polyalthia longifolia (Sonn.) Thwaites*	Ashoka tree	21.09541	78.9803
484	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095377	78.980365
485	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095397	78.980366

486	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095325	78.98044
487	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095342	78.980449
488	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.09534	78.980469
489	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095353	78.980472
490	*Ficus benjamina L.*	Weeping fig	21.095377	78.980472
491	*Ficus benjamina L.*	Weeping fig	21.095393	78.980493
492	*Bauhinia 105orficate link*	Cow`s-foot	21.095393	78.980493
493	*Bauhinia 105orficate link*	Cow`s-foot	21.095327	78.980602
494	*Ficus benjamina L.*	Weeping fig	21.09536	78.980542
495	*Ficus benjamina L.*	Weeping fig	21.095365	78.980573
496	*Ficus benjamina L.*	Weeping fig	21.095303	78.980574
497	*Ficus benjamina L.*	Weeping fig	21.095304	78.980579
498	*Ficus benjamina L.*	Weeping fig	21.095303	78.98058
499	*Ficus benjamina L.*	Weeping fig	21.09531	78.980586
500	*Ficus benjamina L.*	Weeping fig	21.095313	78.980589
501	*Ficus benjamina L.*	Weeping fig	21.095413	78.980756
502	*Ficus benjamina L.*	Weeping fig	21.0954	78.980761
503	*Ficus benjamina L.*	Weeping fig	21.095401	78.980754
504	*Ficus benjamina L.*	Weeping fig	21.095398	78.980762
505	*Ficus benjamina L.*	Weeping fig	21.095439	78.980804
506	*Ficus benjamina L.*	Weeping fig	21.095452	78.980808
507	*Ficus benjamina L.*	Weeping fig	21.095442	78.980803
508	*Ficus benjamina L.*	Weeping fig	21.095442	78.980806
509	*Ficus benjamina L.*	Weeping fig	21.095495	78.981071

510	*Ficus benjamina L.*	Weeping fig	21.095567	78.981093
511	*Ficus benjamina L.*	Weeping fig	21.095601	78.981201
512	*Ficus benjamina L.*	Weeping fig	21.095503	78.981206
513	*Ficus benjamina L.*	Weeping fig	21.09551	78.981206
514	*Ficus benjamina L.*	Weeping fig	21.095514	78.981215
515	*Ficus benjamina L.*	Weeping fig	21.095513	78.981227
516	*Ficus benjamina L.*	Weeping fig	21.095513	78.981228
517	*Ficus pumila L.*	Climbing fig	21.095515	78.981234
518	*Ficus benjamina L.*	Weeping fig	21.095605	78.981301
519	*Ficus benjamina L.*	Weeping fig	21.095626	78.981505
520	*Ficus benjamina L.*	Weeping fig	21.09562	78.981504
521	*Ficus benjamina L.*	Weeping fig	21.095613	78.981508
522	*Ficus pumila L.*	Climbing fig	21.095616	78.981503
523	*Ficus benjamina L.*	Weeping fig	21.095616	78.981505
524	*Ficus benjamina L.*	Weeping fig	21.095626	78.981757
525	*Ficus benjamina L.*	Weeping fig	21.095641	78.98162
526	*Ficus benjamina L.*	Weeping fig	21.095674	78.981749
527	*Ficus benjamina L.*	Weeping fig	21.095672	78.981751
528	*Ficus benjamina L.*	Weeping fig	21.095673	78.981024
529	*Ficus benjamina L.*	Weeping fig	21.09568	78.981025
530	*Ficus benjamina L.*	Weeping fig	21.095678	78.981022
531	*Ficus benjamina L.*	Weeping fig	21.095688	78.981008
532	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095053	78.982586
533	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095064	78.982599
534	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.095064	78.982597
535	*Rauvolfia caffra Sond.*	Quininetree	21.095085	78.982578
536	*Rauvolfia caffra Sond.*	Quininetree	21.095097	78.982575

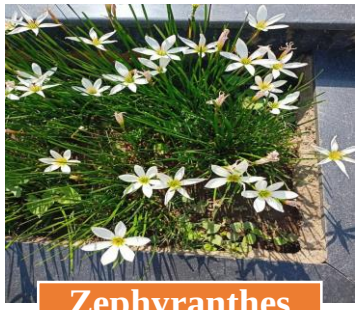
537	*Rauvolfia caffra Sond.*	Quininetree	21.095101	78.982573
538	*Rauvolfia caffra Sond.*	Quininetree	21.09511	78.982568
539	*Rauvolfia caffra Sond.*	Quininetree	21.09512	78.982571
540	*Rauvolfia caffra Sond.*	Quininetree	21.09512	78.982577
541	*Lonchocarpus phaseolifolius Benth.*		21.095249	78.982751
542	*Psidium guajava L.*	Common guava	21.095479	78.982659
543	*Psidium guajava L.*	Common guava	21.095479	78.982659
544	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095517	78.982686
545	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095519	78.982687
546	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.09552	78.982684
547	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095516	78.982683
548	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095507	78.982684
549	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095497	78.982685
550	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095513	78.982691
551	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.09551	78.982688
552	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.095519	78.982676
553	*Roystonea regia (Kunth) 0.F.Cook*	Cuban royal palm	21.09544	78.982622
554	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096562	78.979407

555	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096547	78.979326
556	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096523	78.979324
557	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096412	78.979272
558	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.096378	78.979298
559	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.09639	78.97934
560	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096285	78.979163
561	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.096202	78.979152
562	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.095896	78.978007
563	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.095999	78.97894
564	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.095899	78.97894
565	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.095873	78.978898
566	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.095767	78.978014
567	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.095824	78.978917
568	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.095905	78.978724
569	*Tipuana tipu (benth.) Kuntze*	Tiputree	21.09589	78.978707

570	*Psidium guajava L.*	Common guava	21.095744	78.979105
571	*Theobroma cacao L.*	Cocoa	21.095825	78.979031
572	*Tipuana tipu (Benth.) Kuntze*	Tiputree	21.095743	78.978998
573	*Spathodea campanulate P.Beauv.*	African Tuliptree	21.095756	78.979065
574	*Spathodea campanulate P.Beauv.*	African Tuliptree	21.095759	78.979054
575	*Casuarina cunninghamiana Miq*	Beefwood	21.095727	78.979129
576	*Polyalthia longifolia (Sonn.) Thwaites*	Ashoka tree	21.096066	78.97891
577	*Tipuana tipu (Benth.) Kuntz*	Tiputree	21.09579	78.979115
578	*Polyalthia longifolia (Sonn.) Thwaites*	Ashoka tree	21.095923	78.979057
579	*Theobroma cacao L.*	Cocoa	21.095888	78.979085
580	*Theobroma cacao L.*	Cocoa	21.095841	78.979151
581	*Theobroma cacao L.*	Cocoa	21.095821	78.979197
582	*Theobroma cacao L.*	Cocoa	21.09584	78.979164
583	*Theobroma cacao L.*	Cocoa	21.095834	78.979126
584	*Theobroma cacao L.*	Cocoa	21.095816	78.979132
585	*Theobroma cacao L.*	Cocoa	21.095816	78.979131
586	*Theobroma cacao L.*	Cocoa	21.095799	78.979132
587	*Theobroma cacao L.*	Cocoa	21.095784	78.979131
588	*Theobroma cacao L.*	Cocoa	21.095787	78.979125
589	*Theobroma cacao L.*	Cocoa	21.095788	78.979125
590	*Theobroma cacao L.*	Cocoa	21.095786	78.979126
591	*Polyalthia longifolia (Sonn.) Thwaites*	Ashoka tree	21.095777	78.979129

592	*Ficus benjamina L.*	Weeping fig	21.095765	78.979131
593	*Ficus benjamina L.*	Weeping fig	21.095764	78.97913
594	*Polyalthia longifolia (Sonn.) Thwaites*	Ashoka tree	21.095848	78.979114
595	*Ficus benjamina L.*	Weeping fig	21.095791	78.979167
596	*Ficus benjamina L.*	Weeping fig	21.095779	78.979168
597	*Ficus benjamina L.*	Weeping fig	21.095922	78.979106
598	*Psidium guajava L.*	Common guava	21.095744	78.979168
599	*Psidium guajava L.*	Common guava	21.095754	78.979213
600	*Psidium guajava L.*	Common guava	21.095756	78.979187
601	*Phoenix dactylifera L.*	Date palm	21.095807	78.979231
602	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.095792	78.979137
603	*Tipuana tipu (Benth.) Kuntze*	Tiputree	21.095839	78.979151
604	*Polyalthia longifolia (Sonn.) thwaites*	Ashoka tree	21.095932	78.979176
605	*Alstonia scholaris (L.) R. Br.*	Ditabark	21.096881	78.979182
606	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096658	78.979272
607	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096603	78.979253
608	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096599	78.979242
609	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096589	78.979227
610	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096576	78.97921

611	*Caesalpinia pulcherrima (L.)Sw.*	Pride-of-Barbados	21.096563	78.979184
612	*Ficus hispida L.f.*	Hairy fig	21.095744	78.977259
613	*Dalbergia latifolia Roxb.*	East Indian rosewood	21.095802	78.979155
614	*Prosopis pallida (wild.) Kunth*	Kiawe	21.095836	78.979046
615	*Prosopis pallida (wild.) Kunth*	Kiawe	21.095713	78.976929
616	*Prosopis pallida (wild.) Kunth*	Kiawe	21.095639	78.97695
617	*Prosopis pallida (wild.) Kunth*	Kiawe	21.095505	78.976913



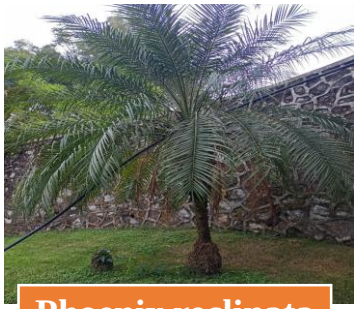
Zephyranthes candida

Musa paradisiaca

Tecoma stans

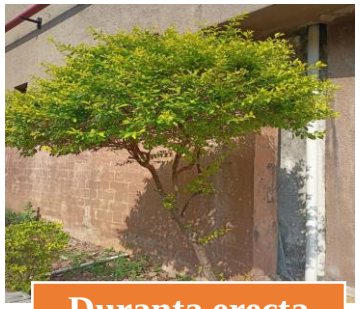
Ficus benjamina

Brahea armata

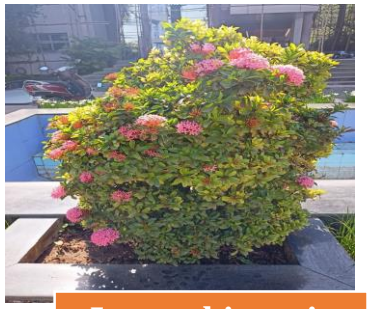


Phoenix reclinata

Bauhinia variegata



Duranta erecta

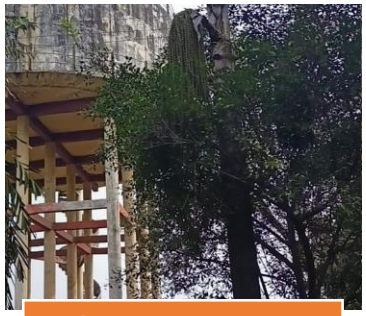


Ixora chinensis

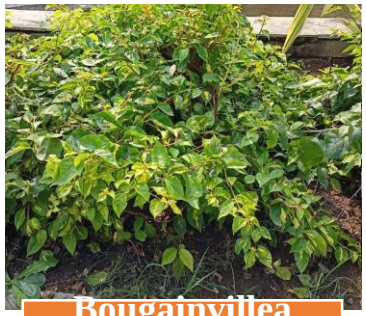
Thuja occidentalis

Murraya paniculata

Plumeria rubra



Caryota urens



Bougainvillea glabra

Galphimia glauca

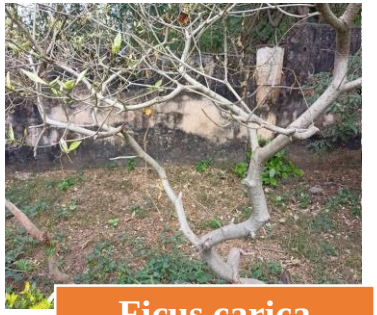
Agave vivipara

Jasminum sambac

Dracaena fragrans

Bougainvillea buttiana

Washingtonia robusta

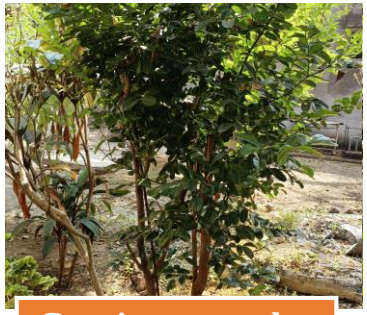


Ficus carica

Hamelia patens

Plumbago auriculata

Agave sisalana



Carrisa carandas

Jatropha podagrica

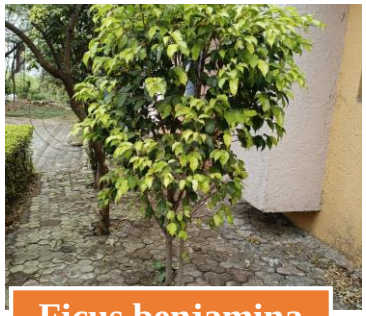
Alistonia scholaris

Magnifera indica

Leucaena leucocephala

Senna siamea

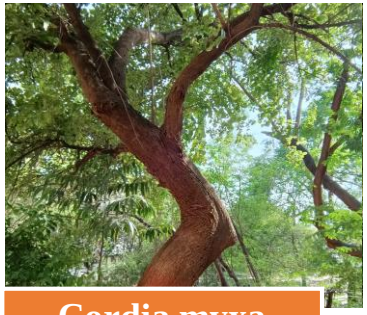
Acacia farnesiana



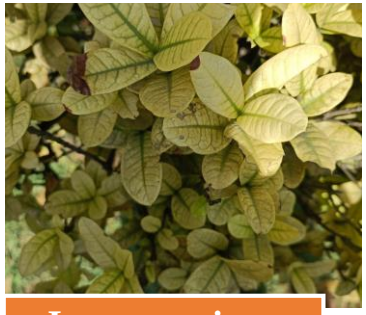
Ficus benjamina

Ficus microcarpa

Thespesia populnea



Cordia myxa



Ixora coccinea

VII) Fauna Audit

Diversity of avifauna is one of the most important ecological indicators to evaluate the quality of habitats. Random destruction of natural habitats by cutting nesting trees and foraging plants for commercial use of woods and lands are the main factors responsible in narrowing down the avian foraging habitat and nesting sites. Urban bird densities are normally extremely high (Walsh, 2006). Increase in bird densities may be the result of high food density, low predation pressure or combination of both (Shochat, 2004). Birds are essential animal group of an ecosystem that maintains a trophic level. Therefore, a detail study on avifauna and their ecology is important to protect them (Sruti, 2008).

Birds are considered as excellent bio-indicators of the effects urbanization has on ecosystems since they are highly diverse and conspicuous elements of the ecosystems. Also they respond rapidly to changes in landscape configuration, composition and function (Hobson & Rempel, 2001). Comparitive studies on avian community structure in different habitats can improve our knowledge of the general patterns and processes that characterize the bird species and communities.

The fauna species were documented by observation and identification method durig the field excursion. The observed species are photographed as an evidence of presence in the YCCE campus. This data shall help understand the type of Ecological food chain existing in the environmental segment of YCCE.

Satellite Imagery No. 9: Sampling Area for Fauna Audit

Table No. 27 : Bird Species at YCCE

LIST OF BIRDS SPECIES		
Sr. No.	**Scientific Name**	**Common Name**
1	Merops orientalis	Asian green bee-eater
2	Columbia livia domestica	Rock dove
3	Spilopelia senegalensis	Laughing dove
4	Psittacula krameri	Rose-ringed parakeet
5	Leptocoma zeylonica	Purple-rumped sunbird
6	Pericrocotus cinnamomeus	Small minivet
7	Halcyon smyrnensis	White-throated kingfisher
8	Dendrocitta vagabunda	Rufous treepie
9	Turdoides striata	Jungle babbler
10	Saxicoloides fulicatus	Indian robin
11	Pycnonotus cafer	Red-vented bulbul
12	Dicrurus macrocercus	Black drongo
13	Trochilidae	Humming bird
14	Myadestes obscurus	Oma'o
15	Cinnyris asiaticus	Purple sunbird
16	Lonchura punctulata	Scaly-breasted munia

Table No. 28: Insect species at YCCE

LIST OF INSECTS		
Sr. No.	**Scientific Name**	**Common Name**
1	Apis mellifera	Western honey bee comb
2	Omocestus viridulus	Green grasshopper
3	Catopsilia florella	African emigrant
4	Orthetrum sabina	Slender skimmer
5	Euthalia nais	Baronet
6	Ariadne merione	Common castor
7	Papilio demodocus	Citrus swallowtail
8	Anisoptera	Dragonfly
9	Appias libythea	Striped albatross
10	Euploea core	The common crow

Table No. 29: Reptiles Species at YCCE

LIST OF REPTILES		
Sr. No.	**Scientific Name**	**Common Name**
1	Eutropis multifasciata	Many striped skink
2	Anoplodesmus saussurii	Millipedes
3	Sitana ponticeriana	Pondichery fan throated lizard
4	Takydromus tachydeomoides	Grass lizard
5	Achatina fulica	Giant african snail

Table No. 30 : Amphibian Species at YCCE

LIST OF AMPHIBIAN		
Sr. No.	**Scientific Name**	**Common Name**
1	Duttaphrynus melanostictus	Asian common toad
2	Strongylopus grayii	Gray's steam frog

Table No. 31 : Rodent Species at YCCE

LIST OF RODENT		
Sr. No.	**Scientific Name**	**Common Name**
1	Funambulus palmarum	Three-striped palm squirrel

Merops orientalis

Apis mellifera comb

Columba livia domestica

Omocestus viridulus

Euploea core

Spilopelia senengalensis

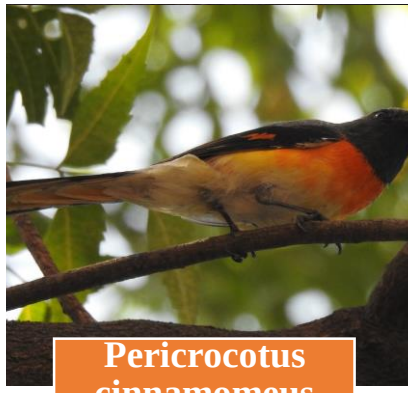
Catopsilia florella

Psittacula krameri


Achatina fulica


Funambulus palmarum


Leptocoma zeylonica


Pericrocotus cinnamomeus


Orthetrum sabina


Halcyon smyrnensis


Dendrocitta vagabunda

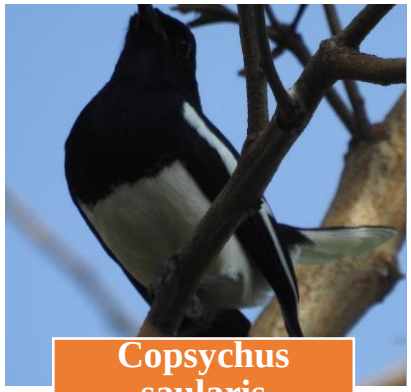

Turdoides striata


Papilio demodocus


Pycnonotus cafer


Dicrurus macrocerus


Trochilidae


Copsychus saularis


Myadestes obscurus


Cinnyris asiaticus


Lonchura punctulata

Euthalia nails

Ariadne merione

Papilio demodocus

Anisoptera

Duttaphrynus melanostictus

Appias libythea

Anoplodesmus saussurii

Takydromus tachydromoides

VII) ENERGY AUDIT:
B] ELECTRIC ENERGY

Electricity is a basic part of nature and it is one of our most widely used forms of energy. Many cities and towns were built alongside waterfalls (a primary source of mechanical energy) that turned water wheels to perform work. An electric utility power station uses a turbine, engine, water wheel, or other similar machine to drive an electric generator or a device that converts mechanical or chemical energy to generate electricity. Electricity is measured in units of power called watts. It was named to honor James Watt, the inventor of the steam engine. The amount of electricity a power plant generates or a customer uses over a period of time is measured in kilowatt-hours (kWh).

The electric energy component was analyzed with due details about no. of units utilized daily/monthly and also departmentwise all the electrical equipments utilizing electrical energy were enlisted with the amount of energy they utilize.

Table No. 32: List of Electrical Equipments at Department of Civil

Sr No	Name of Lab	Fan 60 w	Tube light		LED 18 W	CFL 18x2 w	Tube Light 36 w	PC	Printer	Projector	Monitor	EPBX m/c	TV	Exhaust Fan	Wall Fan	AC Split	AC Window	Freez	Universal Testing m/c	M/C 5 HP	Oven	motor 0.75 hp	motor 2 hp	motor 180 w	motor 2.5 hp	coil 1000w	Motor 0.5 hp	motor 3.7 kw	Heater5 000 w
			T5	20 w																									
	Ground Floor																												
1	1 staff Room	2		2				2	1																				
2	2 Lab	4		3			4	1							1				1	1									
3	3 & 4 Office	2	1	2	1	5	1		1	2		1		1		2													
4	5 Office	2	1	5				1	1							2													
5	Passage			4									1																
6	Gents Toilet pannel Room			2										1															
7	Transportation Engg 006	4		2			5	1							1							1	1	1	1	2			
8	Structures Lab 007	4		3			2	1																					
9	Geology Engg Lab 008	3	4	1			1	2	1																				
10	CE 009	4		4			3															2					1		
11	12 Lab	4		7				4																					
12	13 Lab	4		7				4																					
13	14 Lab	3	2	1				3	1																				
14	15 Girls Common Room	3		4										1															
15	Strength of Material	4	1	2			2	2																					
16	Geotechnical Lab	6		4			5	1							1												1		
17	Concret Lab	10	7	1			10																4		2			1	1
18	Sarve Lab	3	2	2			5	1																					
19	**First Floor**																												
20	Staff Room	2	1	2				2																					
21	Computer Lab 102	8			15			40									3												
22	Computer Lab 103	8			15			25	2	1	3						4												
23	Computer Lab 104	4		2			6														3								
24	Computer Lab 105	4				24		30									3												
25	Water supply Lab 106 A	4		2			4	1													4	1							
26	Servey Lab	4					6	1																					
	CE 110	1		2																									
	Structual Dynamics 109	7	7	1				2							1							1							
27	CE 108	1		2				1	1																				
28	Passage			3			1																						
29	Toilet			1										1															
30	CE 111	7	5	1				2										1			1								
31	**Second Floor**																												
32	Room no 203 A	3		3																									
	Room no 203 B	3		3			1																						
	Room No 204A	3		5																									
33	Room no 204 B	4		3			1																						
34	Room no 205 A	3		4			1																						
	Room no 205 B	2		4																									
35	Room no 208	8	3	5																									
36	Room no 209	9	6	4																									
37	Toilet			1										1															
38	Passage			2			2																						
39	**Third Floor**																												
40	Room no 302	7	5	4																									
41	Room no 303	7	4	5																									
42	Room no 304	7	6	2																									
43	Room no 305	9	4	5																									
44	Room no 306	7	2	6																									
45	Room no 308	7	2	5																									
46	Room no 310	9	4	7																									
47	Toilet			3										2															
48	Passage		3	4																									
49	**Total**	200	70	147	31	29	60	127	8	3	3	1	1	7	4	4	10	1	1	1	8	5	5	1	3	2	2	1	1
50	**Watts**	60	28	20	18	36	36	150	100	100	100	200	100	300	60	2000	2000	500	500	3730	2000	560	1492	180	1865	1000	373	3700	5000
51	**Total Watts**	12000	1960	2940	558	1044	2160	19050	800	300	300	200	100	2100	240	8000	20000	500	500	3730	16000	2800	7460	180	5595	2000	746	3700	5000
52	**Per day Hrs**	7	7	7	7	7	7	7	1	1	24	24	2	12	7	7	7	7	2	2	2	2	2	1	1	1	2	2	1
53	**Per Month KWH**	2016	329.3	493.92	93.7	175.39	362.88	3200.4	19.2	7.2	172.8	115.2	4.8	604.8	40.3	1344	3360	84	24	179	768	134.4	358.1	4.32	134.28	48	35.808	177.6	0

Table No. 33: List of Electrical Equipments at Department of Electronics

Sr no.	Name of Lab	Fan 60 w	Tube light			LED 6 W	LED 18 w	CFL 36x2 W	CFL 18x2 w	Tube Light 36 w	PC	Printer	Projector	Monitor	Dotmatrix Pri.	Ducting Cooler	Exhaust Fan	Wall Fan	AC Split	Ducting AC	Speeker	CRO	Water cooler	Zerox M/C	Calibration M/c	Naplin m/c
			T5	20w	36x2																					
	First Floor																									
1	HOD Office	2				1	2	2	4		1	1					1		1					1		
2	HOD Office	4						2	4		1	1		1												
3	Dept.Library	6							7		1		1					6	2							
4	Faculty Room	11						6	17		14			1		1										
5	Toilet		2														1									
6	Faculty Room		2								1	1						2								
7	Conference Hall	12						8	18		1		1							1	6					
8	PG Lab 102	6						4	14		25									1						
9	Faculty Room 101	2							6		3							3	1							
10	Faculty Room 110	3					2		5		2	1							1							
11	PG Lab 111	7						6	14		23		1													
12	Electronics measurument116	6						6	14		8											10				
13	AIC Lab 115	7		1				6	14		8											26				
14	Passage						3		13														1			
15	Ground Floor																									
16	Reserch Lab	3							6		10														1	
17	Microprocessor Lab	12					1	10	7		37							2		1		2				
18	DSD Lab 005 B	12						10	8		47	1	1			1		2								
19	Gents Toilet			1													1									
20	Passage Right						3		19																	
21	Passage Left						2		14														1			
22	Workshop Lab	6	2	4							12			1							2	4				
23	Electronics Device 007B	11	6	5					4		11											8				
24	Second Floor																									
25	Class Room 206	7	3	5						1	1		1													
26	Class Room 207	7		8				2			1		1													
27	Class Room 208	11						10	12		1		1													
28	Class Room 209	7		5				2		1	1		1													
29	Class Room 210	7	1	7						1	1		1													
30	Class Room 211	8	3	4						1	1		1													
31	Class Room 212	3	1	1						1	1		1													
32	Passage Left		1				3		13								1						1			
33	Girls Common Room								4									2								1
34	Students Activity Room								2									1								
35	Passage Right						4		23								1						1			
36	Third Floor																									
37	ET 325	6						2	12		25															
38	Distance Education center 302	3						6	10		1		1						1							
39	Class Room 315	3		2							1		1													
40	Class Room 315 B	3		2							1		1													
41	Passage left						3		4																	
42	Toilet			1													1						1			
43	Deshmukh sir Store Cabin	1		1	1			1			2	1			1											
44	Issue Counter	2		3							1	1			1											
45	Store Room		1	9																				1		
46	Passage	1		3																						
47	Vastage Room	1		1																						
48	Out Side	0		2																						
49	**Total**	180	22	65	1	1	23	83	261	5	243	7	14	3	2	2	6	18	6	3	8	50	5	2	1	1
50	**Watts**	60	28	20	72	6	18	72	36	36	150	100	100	100		###	300	60	2000	2000	100	50	1500	500	100	200
51	**Total Watts**	####	616	1300	72	6	414	5976	9396	180	36450	700	1400	300		###	1800	1080	12000	6000	800	2500	7500	1000	100	200
52	**Per day Hrs**	7	7	7	7	2	7	7	7	7	7	1	2	24		2	12	7	7	2	2	1	7	1	1	1
53	**Per MonthKWH**	1890	108	228	13	0.3	72	1046	1644	31.5	6379	17.5	70	180		200	540	189	2100	300	40	62.5	1313	25	2.5	5

Table No. 34: List of Electrical Equipments at Department of Electronics and Teleecommunication

Sr no.	Name of Lab	Fan 60 w	Tube light		LED 6 W	LED 18 w	CFL 36x2 W	CFL 18x2 w	Tube Light 36 w	PC	Printer	Projector	Monitor	Ducting Cooler	TV	Exhaust Fan	Wall Fan	AC Split	Speeker	CRO	Zerox M/C	Hand Drill m/c
			T5	20																		
	Ground Floor																					
1	Electronics Device 011	6	2	7						10										6		
2	Cumunication Lab	11		4			6	4	5						8					10		
3	Micro vave Lab	9	5	8			1			1										10		
4	Programing 001A	12					10	6		41		1					1	1				
5	Digital Signal 002A	12					10	6		42		1	1				1	1				
6	Faculty Room	1		1						1							1					
7	Passage							10							1							
	First Floor																					
8	Dept. Library119	3						10		1		1						2				
9	HOD Office 118	3						10		3	2		2					1			1	
10	Faculty Room 117	3		1		1		8		4	2							2				
11	Faculty Room 112	11		1		1	6	20		15	3			2		1	5					
	Second Floor																					
12	ETC Dept.218	3		3					3	7	1						1					
13	Class Room 217	7	1	5					1	1		1										
14	Class Room 216	7		7					3	1		1										
15	Class Room 215	7	1	3					5	1		1										
16	Class Room 201	10					9	12		1		1							2			
17	Class Room 202	7				1	5	9		1		1										
18	Class Room 203	7		6					1	1		1										
	Third Floor																					
19	Class Room318	3	1	1																		
20	PG Lab321	7	1	7					1	21	1											
21	Anolog Circuit 317	6	2	3						5										10		
22	Project Lab 322	6	2	2						6										3		2
23	Class Room 316	6	10																			
24	Class Room 323	8	1	6																		
25	Class Room 324	3	2	2																		
26	Faculty Room 313	4					4	6		3							1					
27	Faculty Room 311	4					4	6		3	1											
28	Lab 309	4					4	12		5							1	1				
29	Conference Hall 304	16					8	17		1	1			2					4			
30	Class Room 308	6					6	2														
31	Micro Controler 307	6					6			23	1							1				
32	Toilet			1												1						
33	Passage					3		23								1						
34	Total	198	28	68	0	6	79	161	19	198	12	9	3	4	9	3	11	9	6	39	1	2
35	Watts	60	28	20	6	18	72	36	36	150	100	100	100	2000	200	300	60	2000	100	50	500	100
36	Total Watts	11880	784	1360	0	108	5688	5796	684	29700	1200	900	300	8000	1800	900	660	18000	600	1950	500	200
37	Per day Hrs	7	7	7	2	7	7	7	7	7	2	2	24	2	2	12	7	7	2	2	2	1
38	Per MonthKWH	1995.8	132	228	0	18	955.6	974	115	4990	57.6	43.2	173	384	86.4	259.2	111	3024	29	93.6	24	4.8

Table No. 35: List of Electrical Equipments at Department of Information Technology

Sr no.	Name of Lab	Fan 60 w	Tube light		CFL 1x18 w	LED 18 w	PC	Printer	Projector	Monitor	Ducting Cooler	TV	Exhaust Fan	Wall Fan	AC Split	Zero x M/C
			T5	20												
	Second Floor															
1	Software Engg Lab	10			14		20									
2	Advance NetWorking	6			13		20									
3	Project Lab	10			14		21	1		1						
4	Staff Room	1			3	1	1									
5	Staff Room 2				8		2	1						3		
6	Ladies Toilet		2	2									1			
7	Passage				18						5	1				
8	HOD Office				11		2	2		1					1	1
9	Dept. Library	3			8		2		1						2	
10	ACL Lab	8			15		22	1						1	1	
11	Tutorial Room	3			8				1							
12	IT Staff Room 1	10			14		23									
	Third Floor															
13	Open Source Lab	10			14		21		1							
14	Com. Program Lab2	7			13		20									
15	Com. Program Lab1	10			14		22			1						
16	Staff Room 3	2		2			5	1						3		
17	Gentes Staff Room															
18	Class Room 309		3	1												
19	Class Room 302	9	4	2					1							
20	Class Room 301	9	4	3					1							
21	Tutorial Room	9	3	5					1							
22	Passage	2	2	1					1							
23	311			8		6					3					
	First Floor															
24	Class Room 102	6	1	3												
25	Class Room 107	6	2	3												
26	Class Room 105	6	2	3												
27	Toilet			2												
28	Passage		5	2												
29	Student Activity															
30	Engg Graphics															
31	**Total**	127	28	37	167	7	181	6	7	3	8	1	1	7	4	1
32	**Watts**	60	28	20	18	18	150	100	100	100	2000	200	300	60	2000	500
33	**Total Watts**	7620	784	740	3006	126	27150	600	700	300	16000	200	300	420	8000	500
34	**Per day Hrs**	7	7	7	7	7	7	1	2	24	2	2	12	7	7	2
35	**Per MonthKWH**	1280	132	124	505	21	4561	14	33.6	173	768	9.6	86.4	70.6	1344	24

Table No. 36 : List of Electrical Equipments at Department of Old Science

Sr no.	Name of Lab	Fan 60 w	Tube light			CFL 18x2 w	LED 15 w	LED 9 w	PC	Printer	Scaner	Monitor	Water Cooler	Exhaust Fan	Wall Fan	AC Split	Oven	Oven	sodium lamp
			T5	36	LED 20												2000w	1000 w	250w
	Ground Floor																		
1	SC-004	1	1	1					3						1				
2	SC-006	1			2				1	1									
3	SC-005	1			2				1	1									
4	Porch				1														
5	Gentes Toilet				1									1					
6	Students Toilet				1									1					
7	Class Room	6			8														
8	Class Room	6	1	6	6														
9	Chemistry Lab	1			2														
10	Chemistry Lab	6		8	3									2			2	1	
11	Staff Room	1		3	1				1										
12	Class Room	2		1	2														
13	Staff Room	3	2	2	1				4										
14	Class Room	9	1			16													
15	Passage				4								1						
	First Floor																		
16	Cabin	1		2					3	1					2				
17	Cabin	1		2					1	1	1	1							
18	Cabin	1		1	1				2	1					1				
19	Toilet Gents				1									2					
20	Ladies Toilet				1									1					
21	Class Room	7		4	2														
22	Lab	6		9	3				1								1		
23	Class Room	10				16													
24	Lab	6	1	8	3														
25	Dark Room	2		2										1					5
26	Staff Room	1	1	2					1										
27	Lab			1															
28	Lab	1		2					1										
29	Lab	2	2											1					4
30	Passage			2	2														
	Second Floor																		
31	Room no-205	2		1	2				2	1									
32	Room no-206	1			2				1						1				
33	Room no-207	1	1		1				2	1									
34	Room no-208	7	2	3	2														
35	Gentes Toilet				1									1					
36	Students Toilet				1									1					
37	Language Lab	6					12		36	1						3			
38	Class Room	7	1	2	3														
39	Class Room	10				12													
40	Class Room	9		1	4														
41	First year co-or	1					3												
42	Passage	1	2		3														
	Third Floor																		
43	Toilet Gents				1									1					
44	Ladies Toilet				2									2					
45	Staff Room	4						7	5										
46	Class Room	7						15											
47	Room 304	5						3											
48	Room 303	9						15											
49	Room310	9						15											
50	Room 311	5						12											
51	Room 301	9						16											
52	Room 302	7						6	5	1									
53	**Total**	175	15	63	69	44	15	89	70	9	1	1	1	14	5	3	3	1	9
54	**Watts**	60	28	36	20	36	15	9	150	100	100	100	1500	300	60	2000	2000	1000	250
55	**Total Watts**	10500	420	2268	1380	1584	225	801	10500	900	100	100	1500	4200	300	6000	6000	1000	2250
56	**Per day Hrs**	7	7	7	7	7	7	7	7	1	1	24	7	12	7	7	2	2	2
57	**Per MonthKWH**	1764	71	381	231.8	266	38	135	1764	22	2.4	57.6	252	1210	50.4	1008	288	48	108

Table No. 37 : List of Electrical Equipments at Department of Mechanical

Sr no.	Name of Lab	Fan 60 w	Tube light				CFL 36x	CFL 18x2 w	PC	Printer	Projector	Monitor	Water Cooler	Exhaust Fan	Window AC	AC Split	2x16 x M/C	Sanitary M/C
			T5	36	36x 2	20												1000
	Ground Floor																	
1	Mech Dept. Library	4		6		2			3	1								
2	Toilet 010					1								1				
3	Toilet 009					1								1				
4	Lab	4		1	3	2			3									
5	Class Room	2		2					1									
6	Cad Lab	11						24	36	1	1					3		
7	**First Floor**																	
8	HOD Office 109	2		1		1			1			2				1		
9	Staff Room 107	1				2			1	1								
10	Room No 108	1		2													1	
11	Class Room 106	8					6		1		1							
12	Class Room 101A	2		3														
13	Class Room 101B	2		2		2												
14	Staff Room 102	2	1	1		2			6	1								
15	enter of Excellance 105A+	2		6			6		10						4			
16	Lab 103	4		6														
17	Lab 104A	2	1			1												
18	Lab 104	5		10														
19	Passage	1		1		1							1					
20	Toilet Ladies 111					1								1				
21	Gentes Toilet 110			1										1				
	Second Floor																	
22	Class Room 206	5	3	4		1												
23	Class Room 202	7	1	5														
24	Class Room 205	5		3		3												
25	Class Room 201	9						11										
26	Class Room 204	7		4		5								1				
27	Staff Room 203	2	1	1		2			3									
28	Staff Room 209	2				2			3									
29	Room No 208	1		1		1												
30	Room No 207	1		1		1												
31	Toilet 210					1								1				
32	Toilet 211					1								1				
	Third Floor																	
33	Class Room 307	9				10												
34	Class Room 303	9				9												
35	Class Room 306	9				10												
36	Class Room 305	9				10												
37	Class Room 301	9				10												
38	Class Room 302	6				2			9									
39	Class Room 304	2				2			1	1								
40	Passage					6												
41	Boys Toilet					1												
42	Toilet 309					1												2
43	Staff Room 308	4				2												
44	**Total**	149	7	61	3	96	12	35	78	5	2	2	1	7	4	4	1	2
45	**Watts**	60	28	36	72	20	72	36	150	100	100	100	1500	300	2000	2000	500	1000
46	**Total Watts**	8940	196	###	216	###	864	1260	11700	500	200	200	1500	2100	8000	8000	500	2000
47	**Per day Hrs**	7	7	7	7	7	7	7	7	1	1	24	7	12	7	7	1	1
48	**Per MonthKWH**	1502	33	369	36	323	145	212	1966	12	4.8	115	252	604.8	1344	1344	12	48

Table No. 38 : List of Electrical Equipments at Department of Electrical

Sr no.	Name of Lab	Fan 60 w	Tube light		LED	LED 15 w	LED 12 w	CFL 36x2	CFL 18x2 w	PC	Printer	Projector	Wall Fan	Exhaust Fan	AC Split	Motor 5 hp	Load 5 kw	Rheostate 500 w	Load 10 kw	Rheo state
			T5	36	20															
1	Ground Floor																			
2	EL 001	2		1	2					2										
3	EL 002	8			9					10										
4	EL 003	2				2	2		9	3	2				1					
5	EL 004	4							12						2					
6	EL 005	4	1	5	26					26		1			2					
7	EL 012	4		7																1
8	EL 006	10	8	4	1					1						30	2	4	1	
9	EL 011	2																		
10	EL 007 A+B	8			40				24	40		1								
11	EL 010	2		8									7	2						
12	EL 008	4		10	1					1							1			
13	EL 009	4	1	7	1					1						8				
14	Passage			1																
15	Toilet & Pannel													1						
16	EL 101	2		1	2					2										
17	EL 102	4		6																
18	EL 103	7																		
19	Toilet 114 A													1						
20	Room No 202	2			4			5		4	2									
21	Staff Room	2			4			6		4			3							
22	Class Room 204	5		1																
23	EL 205 B	12	13																	
24	EL 212																			
25	EL 205A	6												1						
26	EL 213 B																			
27	EL 206	5																		
28	EL 207	6																		
29	EL 208	5		2																
30	Passage																			
31	El 307	4							6											
32	Power Electronics Lal	5				5			5											
33	EL 310	5							7											
34	EL 311	7							9											
35	EL 312	2							8											
36	EL 308	4				2			6											
37	Passage					1			3											
38	Girls Toilet				1															
39	El 304	8		6	2															
40	Total	145	23	59	93	10	2	11	89	94	4	2	10	5	5	38	3	4	1	1
41	Watts	60	28	36	20	15	12	72	36	150	100	100	60	300	2000	3730	5000	500	10000	200
42	Total Watts	8700	644	2124	1860	150	24	792	3204	14100	400	200	600	1500	10000	1E+05	15000	2000	10000	200
43	Per day Hrs	7	7	7	7	7	7	7	7	7	1	1	7	12	7	2	2	2	2	2
44	Per MonthKWH	1462	108	357	312	25	4	133	538	2369	9.6	4.8	101	432	1680	6804	720	96	480	9.6

Table No. 39 : List of Electrical Equipments at Admin Building

Sr no.	Name of Lab	Fan 60 w	Tube light			LED	LED 15 w	LED 20 w	LED 12 w	CFL 1x18 w	LED 5 w	LED 9 w	CFL 36x2	CFL 18x2 w	PC	Printer	Projector	Monitor	Wall Fan	Table Fan	Water Cooler	RO	Exhaust Fan	AC Split	Zerox M/C	Ducting Cooler	Scaner	Freez	Table AC	TV
			T5	36	2x36	20																				2 HP				
1	AD 105		1																			1	1							
2	Principal Office	2	3				9	1							1	1								1						
3	AD 115					1				4					1	1														
4	AD 103	1							4										1											
5	AD 104	1	1	1																			1							
6	AD 102	1		4					6						2	1								1						
7	AD 101	1												6	1	1								1						
8	Passage	2	3			3	2				10	3																		
9	Porch					2						8																		
10	Information Res	4		9								4																		
11	Wankhede mad	1		2											2	1								1						
12	AD 120	16		5		34								11	41				2	1						4				
13	Library	14		8		24																								
14	AD 014	2		2		1																								
15	Thakre Sir	1				1									4	1												1		
16	AD 013	9		15		9													1				1		1					
17	AD 222	1												4	1	1								1						
18	Passage	2				2								4																
19	AD 212	1												4	1	1								1						
20	AD 213																		1											
21	AD 213 B																		1											
22	AD 214	1												4	1	1								1						
23	AD 215	1												4	1	1								1						
24	AD 216	1												4	1	1								1						
25	AD 217	1												4	1	1								1						
26	AD 218	1		1																								1		
27	Passage						1							5																
28	AD 211					2																	1							
29	AD 221	11		12																										
30	Stear Case Library			3																										
31	AD 118		1																											
32	Porch			2																										
33	AD 201	2											2		1	1								1						
34	Students Placen	2											2											1						
35	AD 202	4											6		3	1														
36	Electrical Engg I	9			12									11					4											
37	Inovetion Galler	6									63	15												4						
38	Passage			2										3					2											
39	Main Passage	2												9																
40	Admin Office	11				2	12							16	16	13			4	1						2				
41	Passage	3					1	3						4	1										1					
42	Toilet					2																	1							
43	A O Office	1												5	1	1								1				1		
44	AD 005	1				1								4				1												
45	Record Room	2				2																								
46	ERP 006	2		2		2									6	2								1						
47	Scholership Sec	2						1						2	2	1														
48	Admission Roo	4	9				1							6	4										1			2	1	
49	Board Room	6					26										1							2					1	
50	**Total**	132	18	68	12	88	52	5	10	4	73	30	10	110	92	31	1	1	16	2	1	1	4	20	3	6	1	2	2	2
51	**Watts**	60	28	36	72	20	15	20	12	18	5	9	72	36	150	100	100	100	60	60	1500	100	300	2000	500	1492	100	500	2000	200
52	**Total Watts**	7920	504	2448	864	1760	780	100	120	72	365	270	720	3960	13800	3100	100	100	960	120	1500	100	1200	40000	1500	8952	100	1000	4000	400
53	**Per day Hrs**	7	7	7	7	7	7	7	7	7	7	7	7	7	7	1	1	24	2	2	7	7	12	7	7	4	1	7	4	2
54	**Per MonthKWH**	1331	85	411.3	145	296	131	17	20	12	61	45	121	665	2318	74.4	2.4	57.6	46.1	5.76	252	16.8	345.6	6720	252	859.4	2.4	168	384	19

Table No. 40 : Monthly utilization of Electricity at YCCE

Sr. No.	Months /Year	Total Units (KVA)	Amount charged per unit	Amount (Rs)
1	Jan-20	350	391	136850
2	Feb-20	350	391	136850
3	Mar-20	350	391	136850
4	Apr-20	385	411	136850
5	May-20	385	411	158235
6	Jun-20	385	411	158235
7	Jul-20	385	411	158235
8	Aug-20	385	411	158235
9	Sep-20	385	411	158235
10	Oct-20	385	411	158235
11	Nov-20	385	411	158235
12	Dec-20	385	411	158235
13	Jan-21	385	411	158235
14	Feb-21	385	411	158235
15	Mar-21	385	411	158235

Table No. 41: Carbon Footprint based on Electrical Consumption

Sr. No.	Months /Year	Total Units	Amount	CO_2 Emission kt
1)	Apr-20	385	136850	308
2)	May-20	385	158235	308
3)	Jun-20	385	158235	308
4)	Jul-20	385	158235	308
5)	Aug-20	385	158235	308
6)	Sep-20	385	158235	308
7)	Oct-20	385	158235	308
8)	Nov-20	385	158235	308
9)	Dec-20	385	158235	308
10)	Jan-21	385	158235	308
11)	Feb-21	385	158235	308
12)	Mar-21	385	158235	308


1 MILLION EFFORTS


Latitude: 21.004333
Longitude: 78.077128
Elevation: 337.05m
Time: 20-11-2021 11:20
Note: Admin


EXIT
Latitude: 21.0953
Longitude: 78.078585
Accuracy: 7.6m
Time: 20-11-2021 11:16
Note: Admin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VII) ENERGY AUDIT:
B] SOLAR ENERGY

The sun is an incredible and renewable resource that has the power to fuel life on earth and provide clean, sustainable energy to all of its inhabitants. In fact, more energy from the sun reaches our planet in one hour than is used by the entire population of the world in one year. The sun's energy can be converted into electricity through solar photovoltaic (PV) modules. The potential for solar energy is enormous, since about 200,000 times the world's total daily electric-generating capacity is received by Earth every day in the form of solar energy. Unfortunately, though solar energy itself is free, the high cost of its collection, conversion, and storage still limits its exploitation in many places. Solar radiation can be converted either into thermal energy (heat) or into electrical energy, though the former is easier to accomplish.

The college campus is having Solar panels installed on rooftop of each of the departmental building. The electricity generated is further directed to the adjacent polytechnic college premises where the required electric energy is utilized and the remaining unutilized is led to the powergrid.

The data regarding Solar energy generation was measured to understand the solar energy potential at YCCE campus.

Table No. 42 : Solar Energy Potential and CO_2 Emission at YCCE

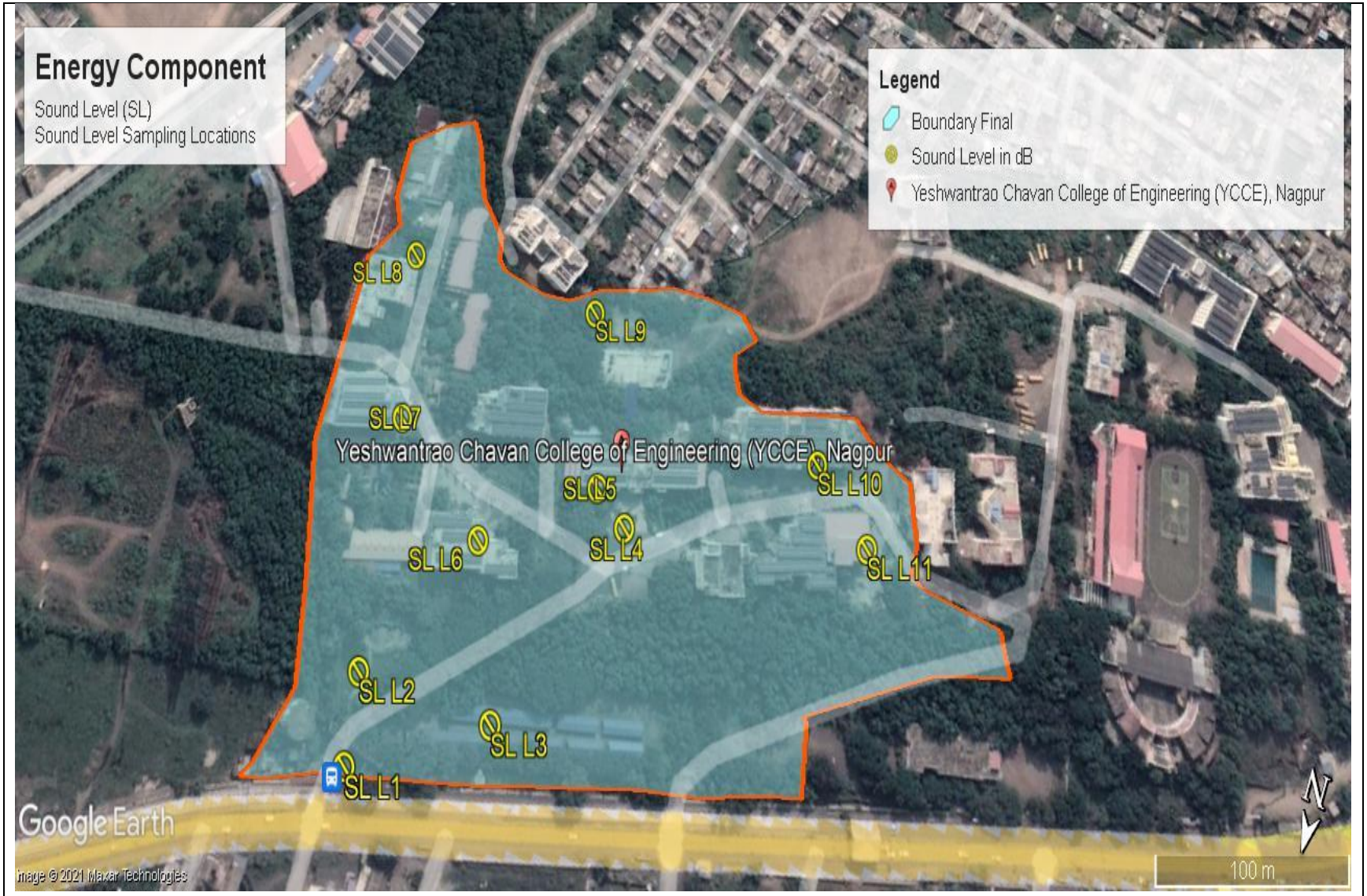
Sr. No.	Bill Month	Roof top solar net metering capacity (kW)	Total Solar Energy Generation	Emission Factor	CO_2 Emission kt
1)	Mar.21	400	70787	0.8	56629.6
2)	Feb.21	400	50396	0.8	40316.8
3)	Jan.21	400	53513	0.8	42810.4
4)	Dec.2020	400	54817	0.8	43853.6
5)	Nov-2020	400	53347.00	0.8	42677.6
6)	Oct-2020	400	62835.00	0.8	50268
7)	Sep. 2020	400	55198.00	0.8	44158.4
8)	Aug-2020	400	37386.00	0.8	29908.8
9)	Jul-2020	400	60578.00	0.8	48462.4
10)	Jun-2020	400	55058.00	0.8	44046.4
11)	May-2020	400	72138.00	0.8	57710.4
12)	Apr-2020	400	146156.00	0.8	116925
13)	Mar-2020	400	0.00	0.8	0

Image No. 3 : Rooftop Solar Panels Installed

VII) ENERGY AUDIT:
C] SOUND LEVEL

Sound is all around us and can be measured to inform and protect us, as some sounds are not safe. In fact, loud noise can be very damaging to hearing. The level of noise, where a person is in relation to the noise (distance to the noise), and the amount of time they listen to it can all result in risk for hearing loss. Sound can be measured with a device called a decibel meter. It samples and measures sound, giving a readout. Decibel meters (also called sound-level meters) can even be accessed on a smartphone through apps. Sound is measured in units called decibels (dB). The higher the decibel level, the louder the noise. On the decibel scale, the level increase of 10 means that a sound is actually 10 times more intense, or powerful. A Sound Level Meter (SLM) is an instrument (commonly hand-held) that is designed to measure sound levels in a standardized way.

The noise level was measured at different locations within the campus to understand the noise pollution level points and the calm zones. This help understand the sound level conforms to the prescribed range in daytime and night time in the educational institute.



Satellite Imagery No. 10: Sampling Locations of Sound Component

Table No. 43 : Sound Level Standard

CPCB Standards of Noise Levels					
Rural	**Sub-Urban**	**Residential (Urban)**	**Urban (Residential & Business)**	**City**	**Industrial**
25-35	30-40	35-45	40-50	45-50	50-60

Table No. 44 : Noise Quality Standards

Sr. No.	**Category of Area**	**Noise level in Leq dB (A)**	
		Day Time	Night Time
1)	Industrial Area	75	70
2)	Commercial Area	65	55
3)	Residential Area	55	45
4)	Silence Zone	50	40

Source: Notification of MoEF, dated 26-12-1989

Note:

1. Day time is reckoned between 6 a.m − 10 p.m
2. Night time is reckoned between 10 p.m − 6 a.m
3. Silence Zone is defined as areas upto 100 m around premises as hospitals, educational institutions and courts. The silence zones are to be declared by Competent Autority. Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these Zones.
4. Mixed categories of areas should be declared as one of the four above mentioned categories by the Competent Authority and the Corresponding standards shall apply.

Table No. 45 : WHO Guidelines for Sound Level

Specific Environment	Time Base (hours)	Standards limits as per WHO guidelines	
		LAeq (dB)	LAmax,fast (dB)
Outdoor living area	16	50-55	-
Dwelling , indoors, inside bedrooms	16	30	-
	8	35	45
Outside Bedrooms	8	45	60
School Classrooms and preschool , indoors	During class	35	-
Preschool bedrooms,indoors	Sleeping time	30	45
School playground, outdoors	During play	55	-
Hospital, ward rooms, indoors	8	30	40
	16	30	-
Hospital , Treatment rooms , indoors	-	As low as possible	-
Industrial Commercial, shopping and traffic areas, indoors and outdoors	24	70	110

Ceremonies, festivals and entertainment events	4	100	110
Public addresses, indoors and outdoors	1	85	110
Music through headphones and earphones	1	85 (under headphones, adapted to free-field valued)	110
Impulse sounds from toys , fireworks and firearms	-	-	120-140 (peak sound pressure) not LAmax, fast), measured 100mm from the car)
Outdoor in parkland and conversation areas	-	Exiting quite outdoor areas should be preserved and the of intruding noise to natural background sound should be kept low	-

Source: http://cpcb.nic.in/who-guidelines-for-noise-quality

Table No. 46: Quantitative Characteristics of Noise Level at YCCE

Sr. No.	Locations	Noise level (Day Time)	Noise level (Night Time)
1)	Location 1	75 dB	55 dB
2)	Location 2	66 dB	53 dB
3)	Location 3	69 dB	54 dB
4)	Location 4	65 dB	53 dB
5)	Location 5	62 dB	52 dB
6)	Location 6	62 dB	52 dB
7)	Location 7	67 dB	53 dB
8)	Location 8	65 dB	53 dB
9)	Location 9	69 dB	54 dB
10)	Location 10	73 dB	55 dB
11)	Location 11	70 dB	54 dB

VIII) WASTE GENERATION & DISPOSAL AUDIT:

A) Institutional Municpal Solid Waste

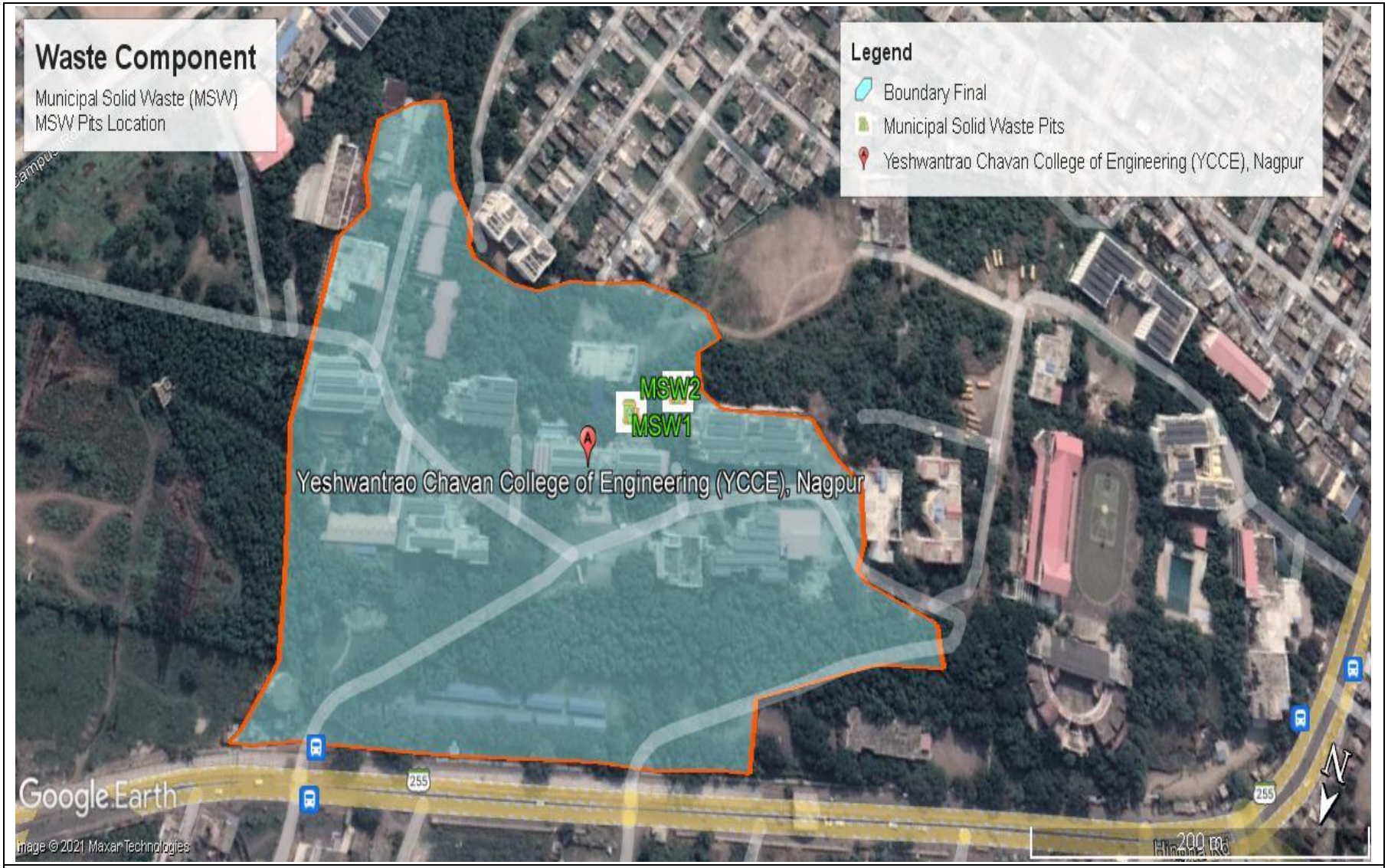
Solid waste refers to the range of garbage materials arising from animal and human activities that are discarded as unwanted and useless. Solid waste is generated from industrial, residential, and commercial activities in a given area, and may be handled in a variety of ways. As such, landfills are typically classified as sanitary, municipal, construction and demolition, or industrial waste sites.

Waste can be categorized based on material, such as plastic, paper, glass, metal, and organic waste. Categorization may also be based on hazard potential, including radioactive, flammable, infectious, toxic, or non-toxic wastes. Categories may also pertain to the origin of the waste, whether industrial, domestic, commercial, institutional, or construction and demolition.

Regardless of the origin, content, or hazard potential, solid waste must be managed systematically to ensure environmental best practices. As solid waste management is a critical aspect of environmental hygiene, it must be incorporated into environmental planning.

The Institutional Municipal Solid Waste data was generated with due consideration to the number of individuals per department and the duration of day they spend at each of the department.

Institutional Municipal Solid Waste (IMSW) Standard Unit =0.147 kg/per person/day



Satellite Imagery No. 11 : Institutional Municipal Solid Waste Pit

Table No. 47 : Institutional Municipal Solid Waste Generation (IMSW) at YCCE

Sr. No	Name of Department	Departmental sub-categories	Teaching Faculty	Non-Teaching Staff	Total no. of Individuals	Solid waste generated per department (kg)/day
1	Administrative Office			63	63	9.261
2	Library			9	9	1.323
3	Applied Science and Humanities		38	5	43	6.321
4	Computer Technology	M.Tech.Computer Science & Engineering	21	6	27	3.969
5	Electronics Engineering	M.Tech . Electronics Engineering	26	6	32	4.704
6	Electronics &Telecommunication Engineering	M.Tech .Communication Engg	31	7	38	5.586
		M.tech .CAD-CAM				
7	Electrical Engineering	M. Tech . Integrated Power Systems	35	4	39	5.733
8	Information Technology		16	9	25	3.675
9	Mechanical Engineering		38	9	47	6.909
10	Civil Engineering	M.Tech Environmental Engg	43	7	49	7.203
		M.Tech . Structural Engg				
11	**Total**					**54.684**

- **Due to pandemic the college was conducted in online mode and thus the students are not considered in Institutional Municipal Waste generation.**

Henceforth,

Total Institutioonal Municipal Solid Waste (IMSW) = 54.684 kg

generated at YCCE per day

Waste generated for Session 2020-2021 (July 2020 to July 2021) = 54.684 kg*365 days

= 19,959.66 kgs/yr

Institutional Municipal Solid Waste Management Plan

- Future Projections
  - Population Forecast of College
  - Anticipated Lifestyle Changes
  - Change in Socio-economic Status
- Conformation to Rules, Regulations and Municipal Bye-Laws
- Stakeholders Participation/Information, Education and Communication (IEC)
- Institutional and Financial Structuring
  - Timeline
  - Manpower Requirement
  - Financial Viability
- Storage, Collection, Transportation
- Identification of Land within campus
- Selection of Process and Best Available Technology for Processing and Disposal

VIII) WASTE GENERATION & DISPOSAL AUDIT:

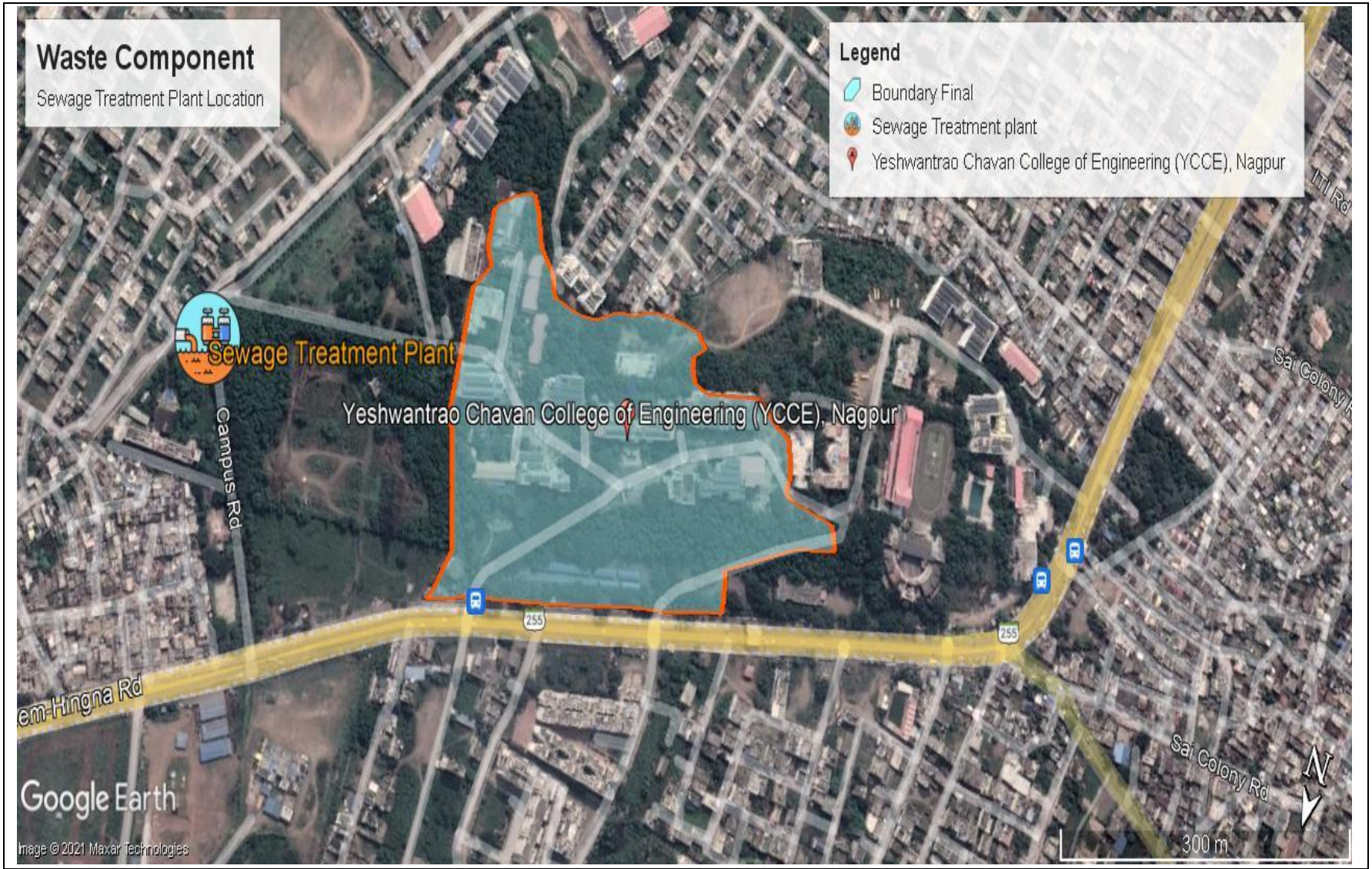
B) Wastewater

Wastewater or sewage is the byproduct of many uses of water. There are the household uses such as showering, dishwashing, laundry and, of course, flushing the toilet. The sewer or collection system is designed so that it flows to a centralized treatment location. The collection system is comprised of smaller sewers with a diameter of about four inches. We need to remove the wastewater pollutants to protect the environment and protect public health. When water is used by our society, the water becomes contaminated with pollutants. If left untreated, these pollutants would negatively affect our water environment. For example, organic matter can cause oxygen depletion in lakes, rivers, and streams. Waterborne diseases are also eliminated through proper wastewater treatment. Sewerage (or sewage system) is the infrastructure that conveys sewage or surface runoff (storm water, rainwater) using sewers. It encompasses components such as receiving drains, manholes, pumping stations, storm overflows, and screening chambers of the combined sewer or sanitary sewer. Sewerage ends at the entry to a sewage treatment plant or at the point of discharge into the environment. It is the system of pipes, chambers, manholes, etc. that conveys the sewage or storm water.

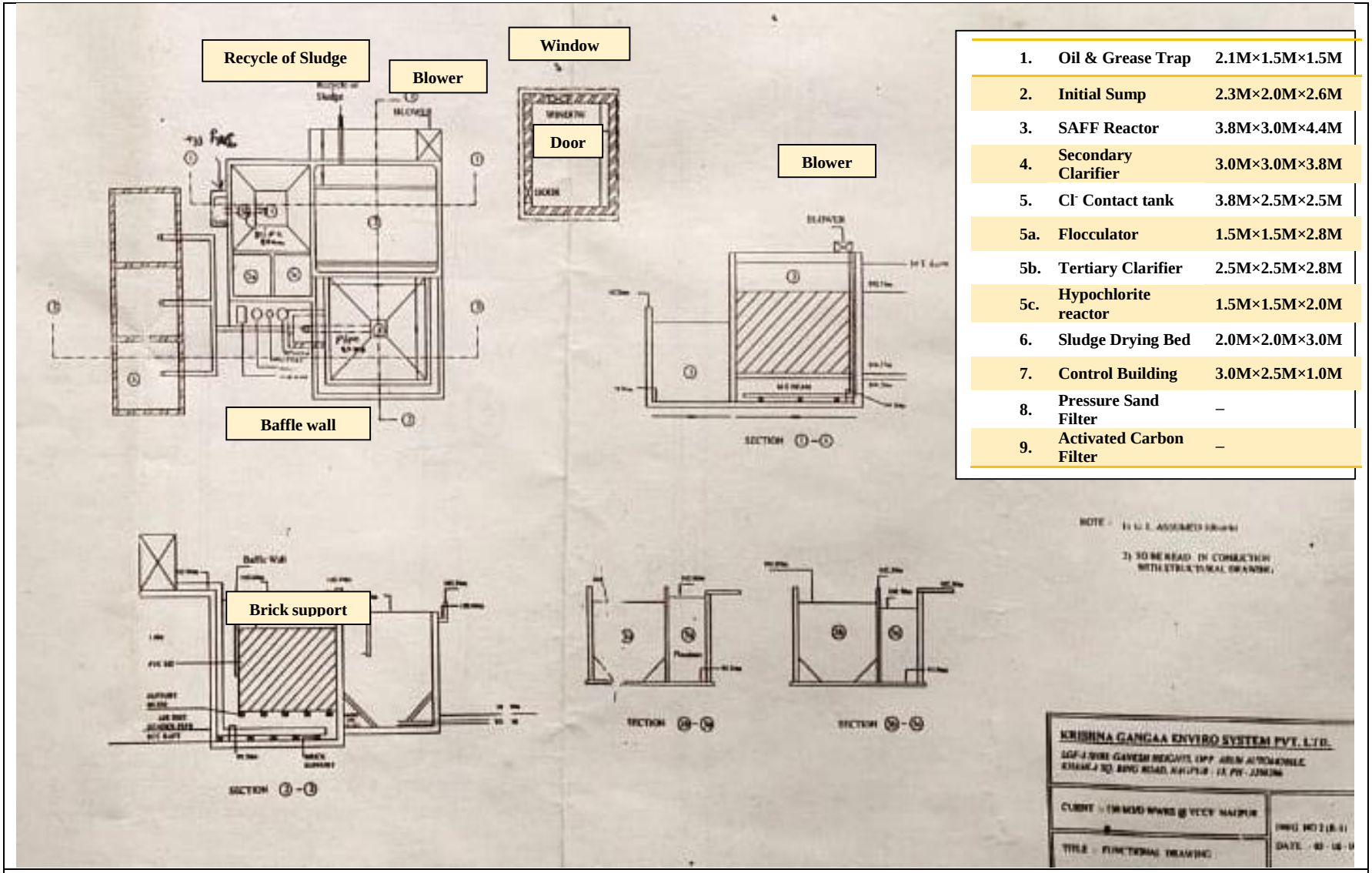
The YCCE campus has a own Sewage Treatment Plant (STP) with 1,25000 lpd capacity with the regeneration of treated water further subjected to gardening and wahing as well as flushing activities. The college has a combined type of efficient wastewater collection system well connected to all the departments and administration building for conveyance of wastewater. The downhill location of STP is selected to utilize the benefit of elevation and henceforth the conveyance of sewage and wastewater flows by gravity to STP.

The STP has inclusion of unit processes:

1) Primary Treatment
2) Secondary Treatment and
3) Tertiary Treatment



Satellite Imagery No. 12: Sewage Treatment Plant Location



1.	Oil & Grease Trap	2.1M×1.5M×1.5M
2.	Initial Sump	2.3M×2.0M×2.6M
3.	SAFF Reactor	3.8M×3.0M×4.4M
4.	Secondary Clarifier	3.0M×3.0M×3.8M
5.	Cl^- Contact tank	3.8M×2.5M×2.5M
5a.	Flocculator	1.5M×1.5M×2.8M
5b.	Tertiary Clarifier	2.5M×2.5M×2.8M
5c.	Hypochlorite reactor	1.5M×1.5M×2.0M
6.	Sludge Drying Bed	2.0M×2.0M×3.0M
7.	Control Building	3.0M×2.5M×1.0M
8.	Pressure Sand Filter	–
9.	Activated Carbon Filter	–

Image No.4: Sewage Treatment Plant Design and Description

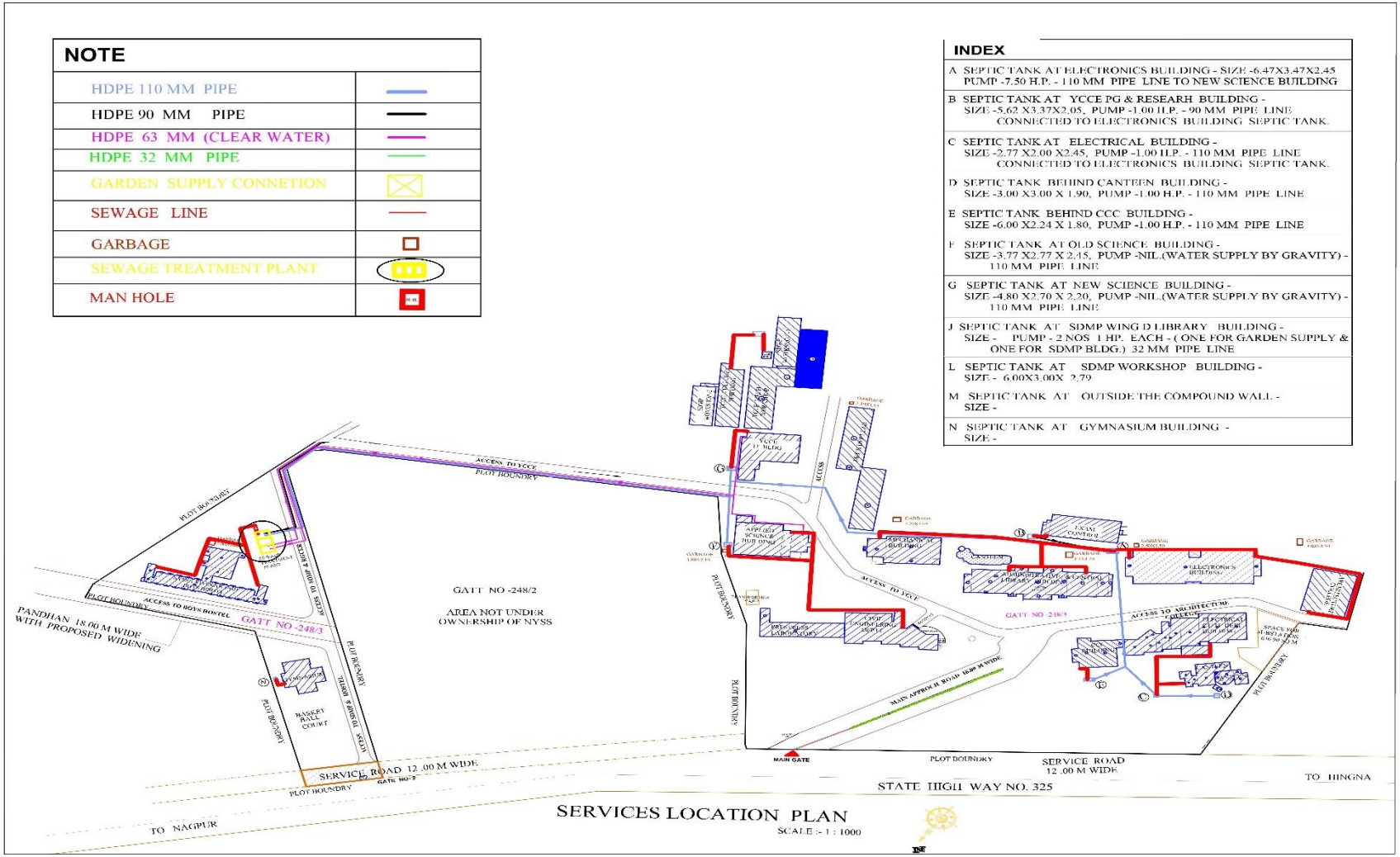


Image No. 5: Sewer Line Drainage Map

Table No. 48: Sewage Standards

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE New Delhi, the 13th October, 2017				
Sr. No.		**Parameters**	**Standards**	
			Effluent discharge standards (applicable to all mode of disposal)	
			Location	**Concentration not to exceed**
			(a)	(b)
1)	Sewage Treatment Plant	pH	Anywhere in the country	6.5-9.0
2)		Bio-Chemical Oxygen Demand (BOD)	Metro Cities*, all State Capitals except in the State of Arunachal Pradesh, Assam, Manipur, Meghalaya Mizoram, Nagaland, Tripura Sikkim, Himachal Pradesh, Uttarakhand, Jammu & Kashmir, and Union territory of Andaman and Nicobar Islands, Dadar and Nagar Haveli Daman and Diu and Lakshadweep	20-30
3)		Total Suspended Solids (TSS)	Same as above [(2)-BOD]	50-100
4)		Fecal Coliform (FC) (Most Probable Number per 100ml, MPN/100ml	Anywhere in the country	<1000

Table No. 49: Qualitative and Quantitative Characteristics of Sewage at YCCE

Sr. No.	Parameters	Unit	Result		Limit	Method Reference
			STP Inlet	STP Outlet		
1	pH	–	7.6	8.3	–	APHA 23rd Ed. 2017, 4500-H^+- B, 4-95
2	Total Dissolve Solids	mg/L	319	308	–	IS 3025 (Part 16): 1984 Reaffirmed 2006, Ed.2.1 (1999-12)
3	Total Suspended Solids	mg/L	43	29	100 Max	APHA 23rd Ed. 2017, 2500-D, 2-70
4	Chlorides (as Cl^-)	mg/L	40	44	–	APHA 23rd Ed. 2017, 4500-Cl- B, 4-75
5	Sulphates (as SO_4)	mg/L	48.6	54.2	–	APHA 23rd Ed. 2017, 4500-SO4-E,4-199
6	Dissolved Oxygen	mg/L	4.7	5.9	–	APHA 23rd Ed. 2017, 4500-O,B,4-144&C,4-146
7	Bio-chemical Oxygen Demand	mg/L	10	5.8	100 Max	IS 3025 (Part 44): 1993, Reaffirmed 2009
8	Chemical Oxygen demand	mg/L	32	20	–	APHA 23rd Ed. 2017, 5220-B,5-18
9	Oil & Grease	mg/L	Not Detected	Not Detected	–	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1

Sewage Treatment Plant

Sedimentation Tank

Photograph No. : Sewage Treatment Plant

Biogas Technology

The college campus has two canteens, with their own individual mess, where daily generated kitchen waste is subjected for Biogas generation. For harnessing the maximum energy pre-digester tank in which any type of kitchen waste, manure etc. is fermented, has been installed. In order to maintain the temperature of biogas plant the solar water heater fully home made using copper coil and glass has also been used.

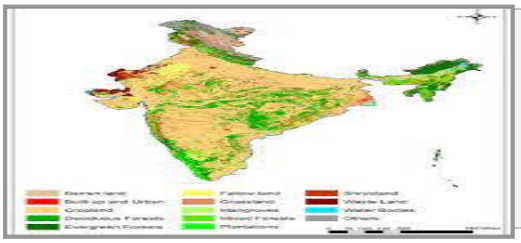
Biodigester consist a plastic tank of capacity 1000 liters. The retention time period for production of gas is about 30-45 days depending upon season, temperature and many other environmental factors. The biodigestion process involves the four key stages of anaerobic digestion- hydrolysis, acidogenesis, acetogenesis and methanogenesis. The overall process can be described by the chemical reaction, where organic material such as glucose is biochemically digested into carbon dioxide (CO_2) and methane (CH_4) by the anaerobic microorganisms.

The major nutrients required by the bacteria in the digester are C, H_2, O_2, N_2, P and S of these nutrients N_2 and P are always in short supply and therefore to maintain proper balance of nutrients an extra raw materials rich in phosphorus and chopped leguminous plants should be added along with the cow dung to obtain maximum production of gas.

Digester tank

Biogas Plant

Use of food crusher helps in reducing the solid contents in the feedstock, which makes the anaerobic digestion process faster, resulting in increase in output of gas. In Biogas model by considering the size and capacity of the digester tank by 7 Kg of feedstock daily. The feedstock is fed daily and in 1:2 proportion with water and feedstock. Since bacteria in the digester have very limited reach to their food it is necessary that slurry is properly mixed and bacteria get their proper supply. The biogas generation process is highly depends upon the C/N ratio of the feedstock. Higher the C/N ratio higher will be the production. The temperature affects in large extent to the gas production. It is found that the production of gas is faster in summer days as compared to winter days.



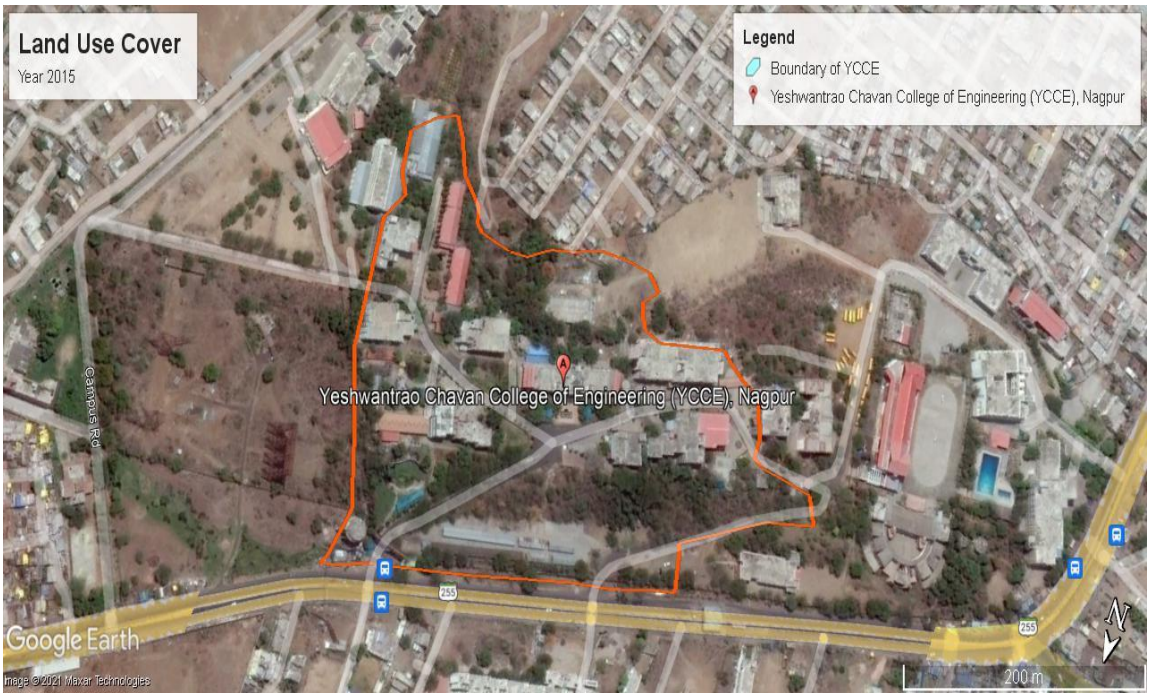
IX) Land Use Land Cover

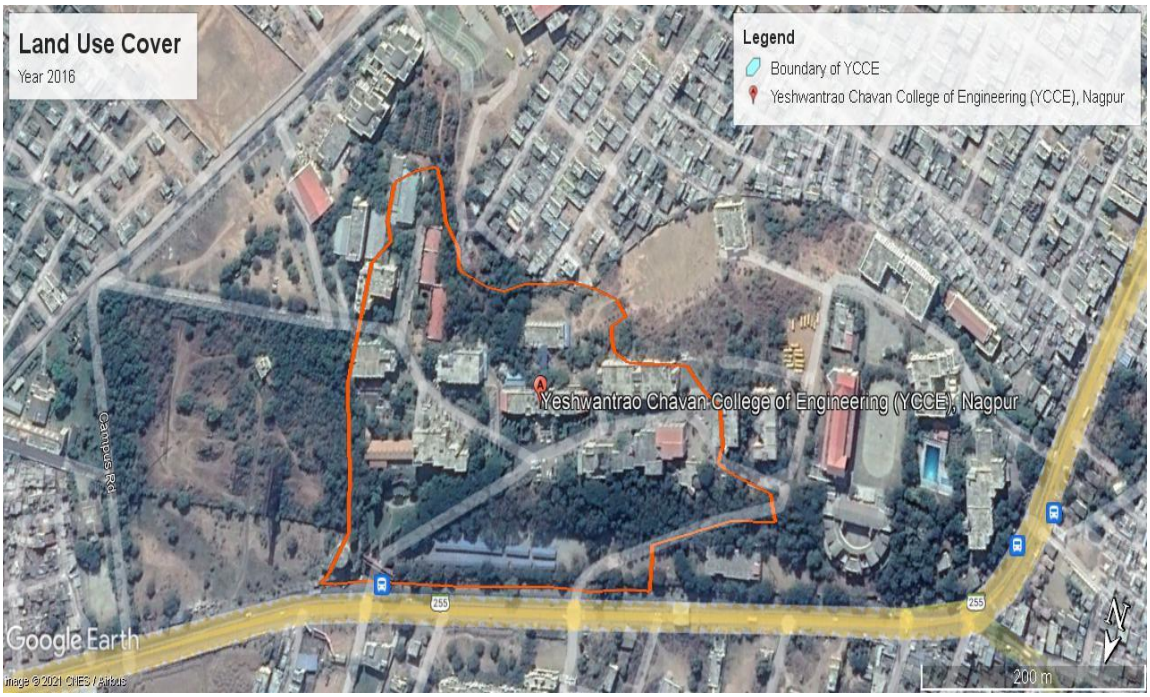
Land Use Land Cover (LULC) maps of an area provide information to help users to understand the current landscape. Annual LULC information on national spatial databases will enable the monitoring of temporal dynamics of agricultural ecosystems, forest conversions, surface water bodies, etc. on annual basis.

Land use and land cover change (LULCC) is **the conversion of different land use types** and is the result of complex interactions between humans and the physical environment. LULCC is a major driver of global change and has a significant impact on ecosystem processes, biological cycles and biodiversity.

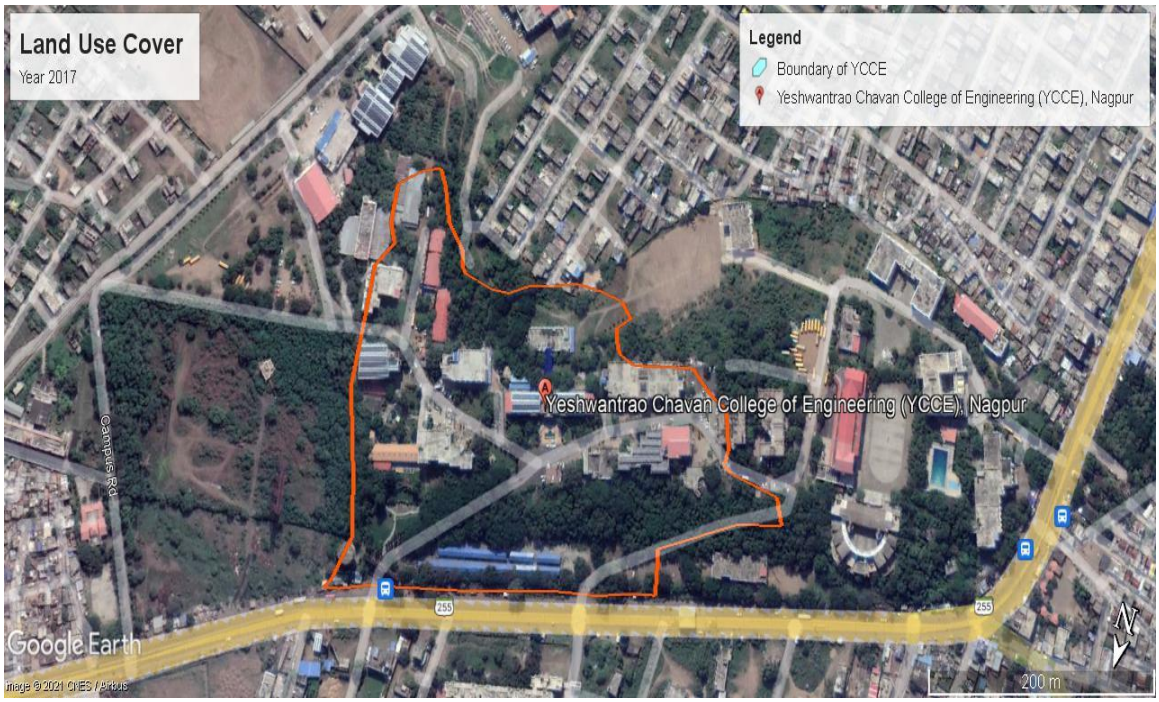
They play an important role in agricultural policy making. Moreover, land-cover data are used as basic information for sustainable management of natural resources; they are increasingly needed for the assessment of impacts of economic development on the environment.

Land Use Land Cover Change Over the past 5 Years at YCCE

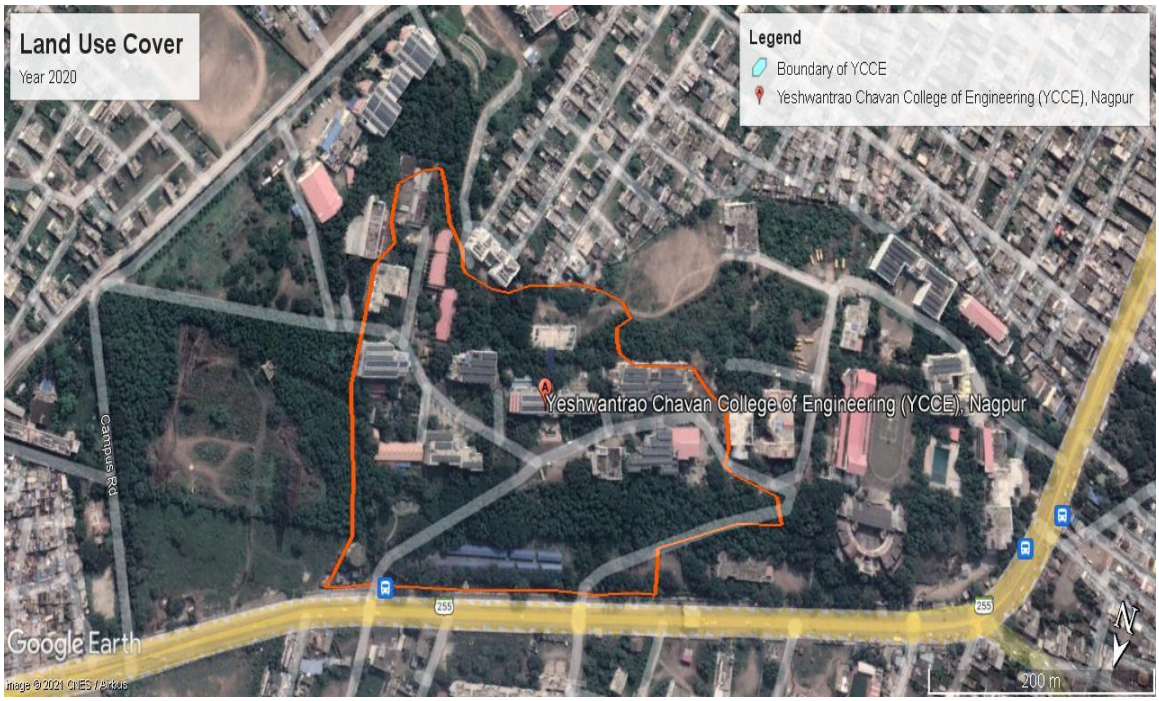




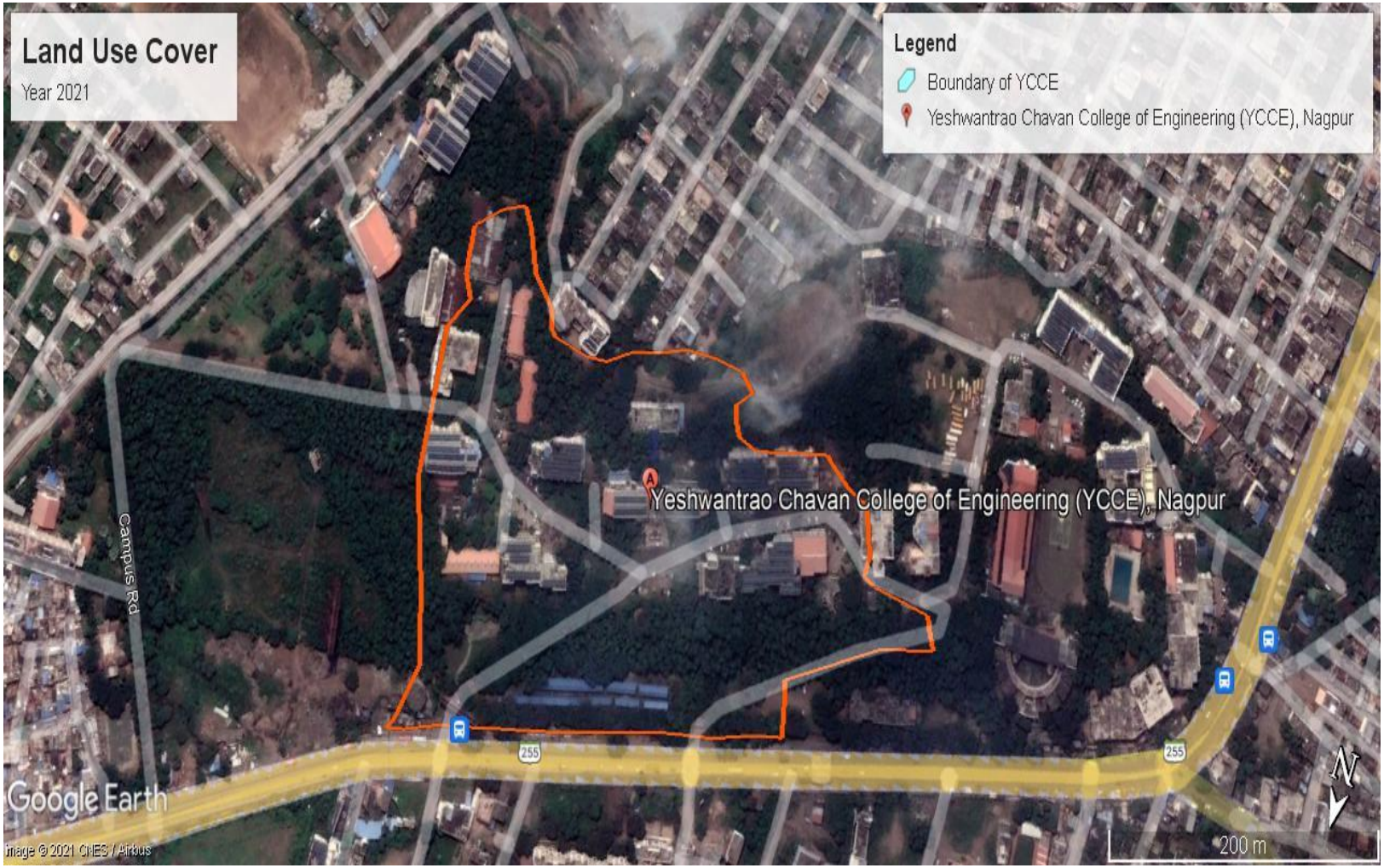
Satellite Imagery No. 13: Land Use Land Cover in 2015-16



Satellite Imagery No. 14: Land Use Land Cover in 2017-18



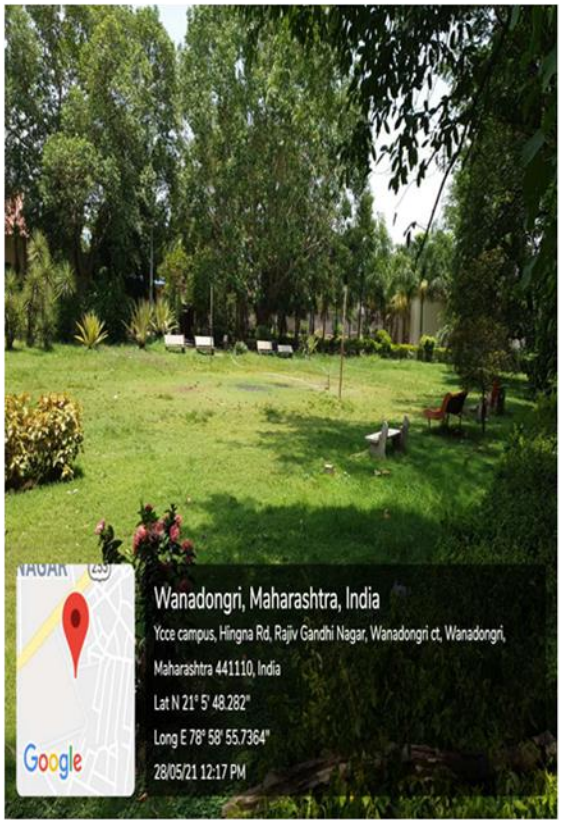
Satellite Imagery No. 15: Land Use Land Cover in 2019-20



Satellite Imagery No. 16: Land Use Land Cover in 2021

Green Initiatives/ Activities in Campus

- ♣ Mass Plantation drive
- ♣ Plastic collection day in campus
- ♣ Interactive sessions for students to explore and channelize the young for environmental conservation
- ♣ Environment friendly and safe disposal of E-waste
- ♣ Conversion of Canteen waste to energy used in laboratory
- ♣ Sustainable construction of buildings
- ♣ Display board of conservation and prevention of resources within the campus for awareness
- ♣ Expert talks on Environmental Conservation practices
- ♣ Surface water run-off recharge to the well
- ♣ Solar Energy conversion to Electric energy
- ♣ Rooftop Rainwater Harvesting Systems are implemented
- ♣ Wastewater Treatment Recycle and Reuse for Gardening and Flushing purposes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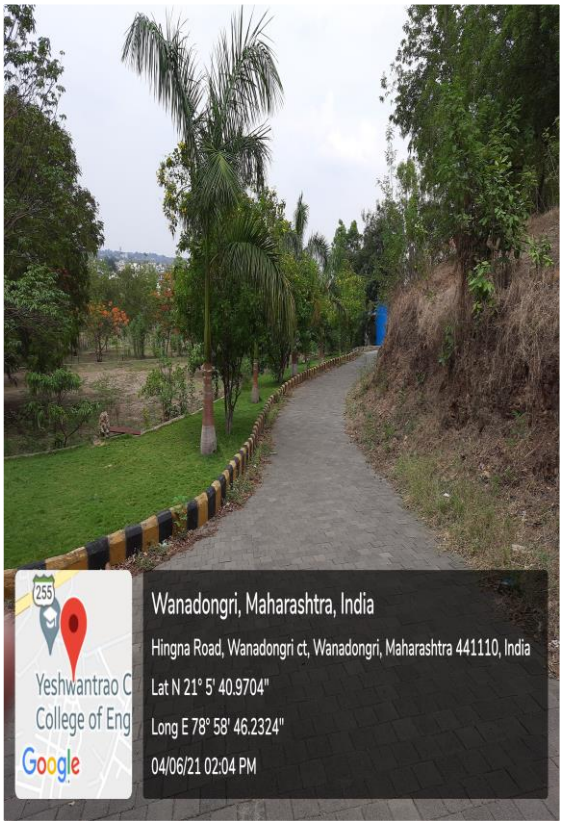
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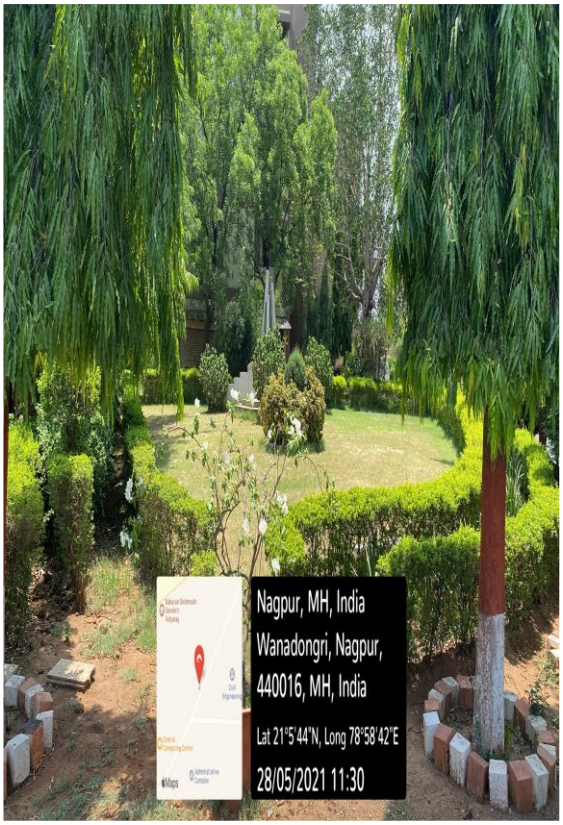
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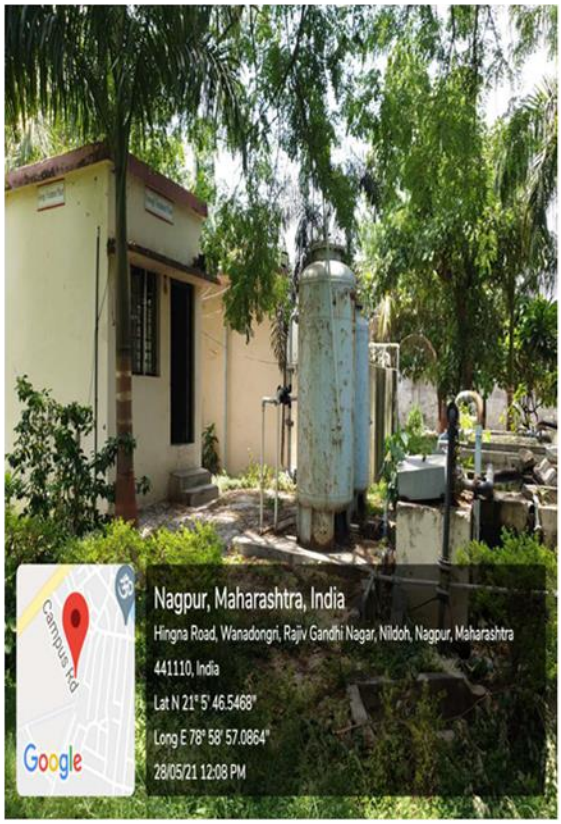
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Long E 78° 58' 57.0864"
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Suggestions

1) Plastic waste management needs to be practiced efficiently.
2) Regular check should be done at STP in regard of inlet and outlet wastewater characteristic parameters to maintain the work efficiency of STP.
3) Implementation of proper Institutional Municipal Solid Waste management plan is essential.
4) Ecosystem of the college should be managed properly. Snails spreaded all over the garden, great concern for biodiversity.
5) Each of the trees and plants should be numbered and their scientific classification in regards of common name, genus and scientific name should be displayed.
6) Fallen twigs and leaves can be used for bio-composting and the manure can be produced by integrating students in these practices.
7) A piece of land could be dedicated for organic farming and the students could be motivate to take responsibility to maintain the same during their physical activity hours.
8) Use of Solar energy for street lights and electrical equipment in laboratory should be encouraged.
9) Plantation should be done with due consideration to the indigenous species for balancing the native ecology.

Clean and Green Campus Award 2020-21

Municipal Council Wanadongri
Th. Hingna, Dist. Nagpur

स्वच्छ भारत
एक कदम स्वच्छता की ओर

Clean & Green Campus Award

This certificate has been awarded to **Yeshwantrao Chavan College of Engineering, Nagpur,** for maintaining clean and green environment in the campus.

We recognize the efforts of the college authorities.

Date: 26-Jan-21
Place: Wanadongri

नगरपरिषद वानाडोंगरी • ता. हिंगणा, जि. नागपूर

for **Chief Officer**
Municipal Council Wanadongri

Beyond Campus Environmental Promotion Activities 2020-21

Club Project Report - RID 3030

Zone: Nagpur Zone

Club Name: Rotaract Club Of YCCE

Project Name: Tree Plantation Drive

Project Mode (Online/Ground): Ground

Start Date: 6 July 2020

End Date: 31 July 2020

Venue: Participant's respective home

Reporting Date: 8 July 2020

Project In-charge: Rtr.Vedant Shrikhande (President Rotaract Club Of YCCE)

No. of People Benefitted From The Project: Everyone

Description of Project in Detail

Tree plantation drive had been organized from 06 july 2020 to 31 july 2020 under Mangal Bela , members of that club has planted almost 15 plants till date and many more in coming days on the different locations near there home or in there houses.

As it purifies the air and make our environment clean hence it has benefited almost everyone there.

Office in the Incharge Students' Activities YCCE NAGPUR

A. P. MUNSHI
Faculty In-Charge
Students' Activities,
YCCE, Nagpur.

President Name: Rtr.Vedant Shrikhande
Contact No.: 9423450450

Secretary Name: Rtr.Kshitij Dabre
Contact No.: 98232117348

YCCE NAGPUR

A. P. MUNSHI
Faculty In-Charge
Students' Activities,
YCCE, Nagpur.

List of Student:-

1	GULHANE SHREYASH RAJESH
2	MOTWANI SHUBHAM MAHESH
3	GAJBHIYE SNEHAL NARENDRA
4	PURANIK SRUJAN ANIL
5	PADOLE TIKESH PRASHANT
6	GULHANE YASH PRABHAKAR
7	KHADE SANKET NARAYAN
8	YERPUDE PRANAY NARENDRA
9	YELKE KISHOR ARUNRAO
10	KHANDEKAR BHUSHAN RAJKUMAR
11	DEO SUSHANT MANISH
12	TELRANDHE AKASH PRAKASH
13	PETKAR AISHWARYA KAMALAKAR
14	KANCHANWAR CHINMAI MOHAN
15	YELNE DNYANESHWARI MOHAN
16	TEKADE HIMANSHI SHIVAJI
17	BORGAONKAR KHUSHBOO DEEPAK
18	YELNE KHUSHBOO DNYANESHWAR
19	MHAISKAR PALLAVI SUBODH
20	MAGAR PRANALI PRAKASH
21	JAWANJAL PRATIKSHA RAJENDRA
22	MESHRAM RADHIKA ANIL
23	TATEWAR RUTUJA NIKHIL
24	WANKHADE RUTUJA RAMDAS
25	JAMBHULKAR RUTUJA SUNIL
26	MORGHADE SAKSHI PRAVIN
27	PAUNIKAR SALONI VIJAY
28	KALAMKAR SAMIKSHA PUNDLIK
29	AINCHWAR SAMIKSHA SHYAM
30	SHEORAN SANGEETA DILBAG
31	ATKARE SAYLI RAVI
32	SONARKAR SHIVALI SURENDRA
33	SHAMBHARKAR SHWETA VIJAY
34	BAILMARE SURBHI SANTOSH
35	SONKUSARE TRUSHITA NANDULAL
36	UGLE UNNATI DASHARATH
37	DHOBLE UTTARA UTTAM
38	LANJEWAR VAISHNAVI UMESHCHANDRA
39	KHADE VANITA ARUN
40	POTDUKHE YASHSVI NITIN
41	SONEKAR CHHAYANGI KESHAV
42	LINGE ABHISHEK ABHAY
43	MAKODE AGAM SHRIKANT
44	AMLAN JYOTI
45	AYANGAR ANVESH VIJAY
46	YESKAR CHIRAG NIRANJAN
47	MESHRAM HARSHAD JAYPRAKASH

48	RAO K SIDDHARTH PRADEEP
49	GURAV KUNAL WAMAN
50	SHIVARKAR LALITKUMAR RAJU
51	MADAN MANISH RAJENDRA
52	GHAROTE MOHIT MAKARAND
53	LALWANI NEERAJ RAKESH
54	BUTE NIKHIL NARENDRA
55	BORKAR PIYUSH NILESH
56	JAKHI PRATISAD PRASHANT
57	PANTAWANE RINKESH RAJESH
58	SHRIVASTAV RISHABH RAJESH
59	WANKHEDE RITIK KISHOR
60	RAMTEKE ROHIT DIWAKAR
61	BHUDE SAHIL RAMCHANDRA
62	RAO SANDESH HEMANT
63	SHARMA SHANKAR SUSHIL
64	ZADE SHASHANK MAROTI
65	JOSHI SHRIRANG SHIRISH
66	VISHWAKARMA SOMESH SANJAY
67	NITNAWARE SUJIT SUNIL
68	YADAV SURAJ CHHEDI
69	VIKRAM SINGH KAILASH SINGH CHAVAN
70	UIKEY YOGESHWAR RAMPRALHAD
71	ANKIT SANTOSH MINDEWAR
72	DAMKONDWAR PRASHUL SHYAMSUNDAR
73	MOHTA SHIVAM KRISHANKANT
74	YELNE PRAJWAL PRAKASH
75	KATRE SHUBHAM MANOHAR

Prof. A P Munshi
I/C student Activity
YCCE, Nagpur

THE CLEANLINESS DRIVE

NSS | YCCE

21 st Feb 2021

THE CLEANLINESS DRIVE was successfully organised by NSS Unit of YCCE on 21 st Feb 2021 at Shivaji Krida Mandal Ground, Gandhi Nagar, Nagpur. The main purpose of the drive was to introduce people about the embel purity and importance of cleanliness and to awake them about their responsibilities towards nature.

The event was held with the collaboration of **NISHI TRUST** under which many clubs were joined. Mask, sanitizer, gloves, etc were provided to each member. The Cleanliness Drive initiated with Four groups of each 12 - 15 members . All the four groups followed their route for cleanliness. After the one and half hour of cleanliness, all groups gathered at the ground. Refreshment were provided to each member. The drive was accomplished with great efforts, perfect management and full safety precautions. Best moments of the drive were uploaded on the official Instagram and Twitter handle of the club.

At the end, core committe of NSS YCCE thanked Nishi Trust for such a successful collaboration. Also thanked all the members of NSS YCCE who joined and supported to make this drive successful.

Office of the In-Charge Students' Activities YCCE NAGPUR

A. P. MUNSHI
Faculty In-Charge
Students' Activities,
YCCE, Nagpur.

List of Student:-

Sr.No	Name Of Student
101	MESHRAM SHRUTI BHARAT
102	UKEY SNEHAL PRADEEP
103	NEMA SOUMYA ARUN NEMA
104	ANJANKAR TANAYA VIJAY
105	WATH TRUSHA NITIN
106	RAMBHAD ADITYA SANJAY
107	KALE AKHILESH DINESH
108	DUBEY AMAN NANDRAM
109	AGRAWAL AMAN RAJESH
110	MASRAM ANIKET JAGDISH
111	PATHAK ANIKET ARUN
112	SURANKAR ARJUN ANIL
113	THAKER ATHARVA BHAVIN
114	DESHMUKH ATHARVA PRAVIN
115	SONMANE DHIRAJ VINODRAO
116	DIVYAM GANDHI
117	BANKAR GAURAV SUNIL
118	DESHMUKH JAYRAJ MANOJ
119	KAMBLE KETAN PRAKASH
120	VISHWAKARMA KSHITIJ SHIV PRASAD
121	SHIDURKAR KUNAL KASHIRAO
122	CHAVHAN LAKESH KHUSHAL
123	DHAKITE MAYUR MORESHWAR
124	DHABE MIHIR RAJENDRA
125	RODE MOHIT ANIL
126	URKUDE MOHIT DINESH
127	VAIRAGADE OM SANTOSH
128	JOSHI OMKAR SAMEER
129	BAWANE PAWAN KUMARKALLYAN
130	TEMBHURNE PIYUSH SHANKAR
131	DOLHARE PIYUSH UTTAMRAO
132	DARNE PRANAY VISHNU
133	WANJARI PRANAY VASANTA
134	ZADE PRANAY SUBHASH
135	PATRIKAR PRATHAMESH JAYANT
136	SATHAWANE RAKESH PRAVIN
137	AKARTE RUPAL YOGESHRAO
138	MANE SAHIL DILIP
139	LEPSE SANKET MAHENDRA
140	JHA SHANTANU MIHIR
141	SHOAIB SHAMIM ANSARI
142	BELE SHREYASH VILAS
143	DHODRE SHYREYASH PRASKSH
144	SANTAPE SUMIT WASUDEO
145	BARAPATRE TANMAY RAMESH
146	KHAN TAWFEEK PARWEZ MO. AZZIZUDDIN

147	SHENDE TUSHAR NILKAMAL
148	CHAUDHARI UJJWAL CHANDRAKANT
149	SHINDE VEDANT VISHNU
150	DALAL YASH HARISH
151	GORLE SHRUTIKA SURENDRA
152	VAIDYA ADITI ATUL
153	GAIKI AISHWARYA NARESH

Prof. A P Munshi
I/C student Activity
YCCE, Nagpur

3. वृक्षारोपण (regional event 1)

Date of event : 4 July 2021 - 30 July 2021
Mode : Online and Offline
Description : A tree plantation event
Aim : To express gratitude towards nature and a sense of environmental awareness among the masses.
Participants :
Offline -
Dr.A.P.Munshi , Dr.S.S.Choudhary , Dr.V.G.Meshram , Prof.A.K.Edlabadkar, Prof.S.R.Khandeshwar, Prof.A.R.Gajbhiye, Prof.K.S.Ansari, Prof.G.M.Dhote , Rotaract Club of Dharampeth Science , Rotaract Club of NFSC
online-
Rotaract Club of GNIET & students from YCCE

YCCE NAGPUR

A. P. MUNSHI
Faculty In-Charge
Students' Activities,
YCCE, Nagpur.

List of Student:-

Sr. No.	Student Name
1	GUNDE SAINATH KISHAN
2	HARALE ANKIT DHANRAJJI
3	HUZAIF SAMEER KHAN
4	KALI VEDANG PRASHANT
5	KHARTOL TARANJYOT SINGH CHAMAN SINGH
6	KHOBRAGADE ARYAN MAHESH
7	KUTHE ANIKET SANJAY
8	KADAM SHIVAM BALAJIRAO
9	LENDE VISHAL SANJAY
10	MANU MATHEW VARGHESE
11	KHAN MD ABDUL MD KHALIL
12	MEDPALLIWAR ALANKAR ASHOK
13	NIHAL SUBHASH NIMBALKAR
14	NIMJE NITESH NARESH
15	PATIL SHREYAS KISHAN
16	RAUT KAUSTUBH ANIL
17	SENDRE MANGESH DILIP
18	SHUBHANKAR GUHA
19	SINGH ANIKET RANJAY
20	SURYAWANSHI RAHUL DASHRATH
21	URKUDE PRADYUMNA GURUDEO
22	WANKHEDE SAHISHNU BANDUJI
23	WAGH HARDIK SUNIL
24	JAY VILAS DANGORE
25	KRISHAN KUMAR
26	BARBATE ANCHAL NARESH
27	PATTEWAR ASMITA MADHUKAR
28	YEDE AVANTIKA KISHOR
29	TURKAR JAHANVI CHHATRAPAL
30	THAWKAR JANHVI NITYANAND
31	PALANDURKAR JANVI KISHOR
32	SONKUSARE KALYANI PRASHANT
33	DHOMNE KHUSHI LOMESH
34	BARODIYA KHYATI YOGENDRA
35	CHITRIV MANSI NANDKISHOR
36	MANSI GAIKWAD
37	MANSI INGLE
38	RATHOD NUTAN NAMDEO
39	BHAGAT PALAK ONKAR
40	BODKHE POOJA GUNWANTRAO
41	PRABHJOT KAUR YOGRAJ SINGH KALSI
42	KOLHE PRADNYA PURUSHOTTAM
43	BHANUSE RESHMA GANESH
44	WARHADE RUDRANI ASHOKRAO
45	MESHRAM RUTUJA SUMEDH
46	VAIDYA RUTUJA SANJAY

47	KUMARI SAKSHI NAVIN
48	HATEWAR SANIKA DILIP
49	YADAV SHIVANI ASHISH
50	DESHPANDE SHRAVANI DEEPAK
51	MESHRAM SHRUTI BHARAT
52	UKEY SNEHAL PRADEEP
53	NEMA SOUMYA ARUN NEMA
54	ANJANKAR TANAYA VIJAY
55	WATH TRUSHA NITIN
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96	KHAN TAWFEEK PARWEZ MO. AZZIZUDDIN
97	SHENDE TUSHAR NILKAMAL

Prof. A P Munshi
I/C student Activity
YCCE, Nagpur

Nagar Yuvak Shikshan Santha's

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Hingna Road, **Wanadongri**, Nagpur – 441110. Ph. :

07104-242919, 242623. Website: www.ycce.edu

YCCE ORGANIZES NIRMALYA COLLECTION DRIVE

September 19 : The "NIRMALYA COLLECTION DRIVE" was successfully organized and conducted by The social Club of YCCE in collaboration with Rotaract Club of Ycce on the occasion of Anant Chaturdashi on 19th September 2021, that is Ganesh Visarjan. The Drive began from 4.00 PM in the evening and came to an end at 10.00 PM in the night. The Drive was successful under the able guidance of Prof. A. P. Munshi, Dean, Students Activity, YCCE. Around 32 members of the club worked remarkably well to take the event to a grand success. The Drive covered the Visarjan points at **Ambazari Lake, Futala Lake and Hingna River.**

Prof. A. P. Munshi
Faculty Incharge
Students Activities

A. P. MUNSHI
Faculty In-Charge
Students' Activities,
YCCE, Nagpur.

List of Student:-

Sr. No.	Student Name
1	Prasanna Rajendra Anjankar
2	Yash Yogesh Mandpe
3	Mansi Mandar Kirloskar
4	Dhanshree Sawarkar
5	Pranay Jitendra Kathote
6	Vishwabhushan Vinod Patil
7	Kshitij Sunil Bhadke
8	Vishwajeet Kishor Lakshne
9	Piyush.Khushal.Hande
10	Savinay Surbhik
11	Kanishka Nishant Bele
12	Hiranmayi Satyanarayana Toutam
13	Sarvesh Shingane
15	Awantika Raju Thakare
16	Kartik Vinod Kinhekar
17	mamta vilas rathod
18	Kinshuk Moreshwar Karmarkar
19	Priyanka Jitendra Bhargava
20	Anjali Bhalchandra Gaykwad
21	Rohit Devidas Nagrale
22	Kalpak Manohar PImpale
23	Darshana Thameshwar Nagpure
24	Kamlesh Pundlikrao Bhond
25	Ritesh Vasnat Ashtankar
26	Jay Biharilal Mane
27	Ashay Anil Datey
28	Nehal Anil Hande
29	Kartik Shantaram Bhugaonkar
30	Aman Ashok Asati
30	Atharv Vishwanath Kevalram
31	Swati Madhusudan Mondhe
32	Vaidehi Subhash Bhagat

Prof. A P Munshi
I/C student Activity
YCCE, Nagpur

Nagar Yuwak Shikshan Sanstha's
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
Hingna Road, Wanadongri, Nagpur - 441 110
NAAC Accredited with 'A' Grade
Ph.: 07104-242919, 242623, 242588
Website : www.ycce.edu E-mail : principal@ycce.edu

Declaration by Head of Institute

I hereby declared that the data, information and support documents attached herewith are genuine and correct to my knowledge.

Y.C. COLLEGE OF ENGINEERING AN AUTONOMOUS INSTITUTION NAGPUR SEAL

Dr. U. P. Waghe
(Principal)

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR - 441110