

### Vasanti Engineer's and Consultant's Laboratory Services



ISO 9001:2015

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9373421225

Saudamini Building, Behind Hotel Ambassador , Vishrambag Sangli ,416415

Date: 08/03/22

No. VECL / GAC/ 1 /2021-22

### Certificate

#### **Green Audit**

This is to certify that "Vasanti Engineer's And Consultant's Laboratory Services" has conducted Green audit "Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College Of Pharmacy, Waranagar " in academic year 2021-22. The green audit involves initiatives planning efforts activities implemented in college campus like environmental friendly, environmental promotional activities, water and waste water management, rain water harvesting, tree plantation, energy conservation, paper less technology and various environmental awareness activities. This Green audit is also aimed to assess impact of green initiatives for maintenance of the campus ecofriendly.

The college has submitted necessary data and credential of scrutiny. The activities and measures carried out by the college have been verified on the basis of previous recommendations and were found to be satisfactory. The efforts taken by the management, faculty and students towards environment are highly appreciated.

Green/Env Audit In charge

(S.S.Patil)



(V.S. Sadamate)

(CEO)/Auditor



Disouza Reason: NAAC Location: Warananagar, India Date: 02-Jun-2023 (04:48



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(S.S.Patil)



Authorized Sign (V.S. Sadamate) (CEO)/Auditor

### GREEN AUDIT REPORT

(A.Y 2021-22)



Shree Warana Vibhag Shikshan Mandal's

TATYASAHEB KORE COLLEGE OF PHARMACY, WARNANAGAR



Prepared by

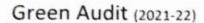
Vasanti Engineer's and Consultant's Labor Services

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#### 1. ACKNOWLEDGEMENT

Vasanti Engineer's and Consultant's Laboratory Services Green Audit Team thanks the management "Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College Of B-Pharmacy, Waranagar" for assigning this important work of Green Audit .We appreciate the co-operation to our team for completion of study.

Our special thanks are due to:

Principal of the college - Dr. John Disouza

IQAC Member- Mr. Kiran Patil

Environment Expert at the campus - Mrs. Kimaya Patil

Green Audit coordinator - Prof. Pritesh Lole

Teaching & Supporting Staff of College- Prof. Popat Kumbhar, Mr. Vishwanath Pharne

For giving us necessary inputs to carry out this very vital exercise of Green Audit. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.



#### 2. DISCLAIMER:

Vasanti Engineer's and Consultant's Laboratory Services green Audit Team has prepared this report for "Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College Of B-Pharmacy, Waranagar" based on input data submitted by the representatives of College complemented with the best judgment capacity of the expert team.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by audit team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

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Supriya S Patil Sul

#### 3. CONCEPT

The green audit process was began in the 1970s with an intention of identifying the activities carried out in a given institution or company. Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyse environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. The audit also seeks to identify possible means and methods to save investments, enhance work quality, improve health and safety of their employees, reduce liabilities and reduce the rate of environmental pollution. A continuous process of such audit might result in maintaining the quality of these aspects within the premises of any organisation.

#### 3.1 About Criteria 7 of NAAC

Universities are playing a key role in the development of human resources worldwide. Higher education institutes campus run various activities with the aim to percolate the knowledge along with practical dimension among the society. Likewise, different technological solutions related to the environment are also provided by the higher education institutes. Different types of evolutionary methods are used to assess the problem concerning the environment. It includes Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Carbon Footprint Mapping, Green audit, etc. National Assessment and Accreditation Council (NAAC) is a self-governing organization that rated the institutions according to the scores assigned at the time of accreditation of the institution. Green Audit has become a mandatory procedure for educational institutes under Criterion VII of NAAC. The intention of the green audits is to upgrade the environmental condition inside and around the institution. It is performed by considering environmental parameters like water and wastewater accounting, energy conservation, waste management, air, noise monitoring, etc. for making the institution eco-friendlier. Students are the major strength of any academic institution. Practicing green action in any educational institution will inculcate the good habit of caring for natural resources in students. Many environmental activities like plantation and nurturing sandings and trees, Cleanliness drives, Bird watching camps, no vehicle day, Rainwater has estin

etc. will make the students good citizens of the country. Through Green Audit, higher educational institutions can ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.



#### 4.INTRODUCTION

- "Shree Warana Vibhag Shikshan Mandal, Warananagar" Warana is a name that distinctively stands ahead in Co-operative Movement and field of Education. It is the name associated to sugar, milk, malted food, paper, and banking & consumer stores. Just 50 years ago Warananagar was an area deprived of all advancements, especially, in the field of education. Today one is astonished to see how this barren land is converted into an excruciating industrial & educational complex. It is still a green valley that smilingly welcomes all.
- The man who had brought about this metamorphosis is late Hon. Shri V. A. alias Tatyasaheb Kore. He sacrificed his personal joys and stood determined to do the best and turned this land, which was once full of dacoits, into a prosperous township, a paradise in true sense. He was born on 17th Oct.1914 as a son of a farmer, in small village Kodoli. Being the eldest in the family, he had to shoulder the family esponsibilities. He actively participated in the Quit India Movement of 1942. He was closely associated to late Shri Yashwantrao Chavan, the former Deputy Prime Minister of India. Late Hon. Shri Tatyasaheb Kore rightly realized the need of providing education to the kit and kin of the farmers in rural area. He established Shree Warana Vibhag Shikshan Mandal, in 1964, since then the Shikshan Mandal took upon itself the need based endeavor of making education accessible to the poor and deserving.
- With sprawling campus of 100 acres, the Mandal houses Marathi and English Kindergartens, residential High-school, English Academy, Military Academy, Pharmacy College for Degree & Diploma, Jr. and Sr. Colleges of Arts, Commerce and Science, Institute of Engineering and Technology, Industrial Training Institute and well furnished hostels for boys and girls, quarters for teachers and non teaching staff.



#### > Vision

Advancing contemporary educational approaches to student learning. Integrating traditional knowledge and modern sciences with professional disciplines by continually enhancing the campus environment.

#### > Mission

To excel in professional pharmacy education, through student centered learning, scholarly research and service to society.



### 4.1 GREEN AUDIT EXECUTIVE SUMMERY REPORT

#### 1. BRIEF ABOUT COLLEGE:

Courses offered by the College:

SR No	Courses UG/PG	About College
1	Name of the Institution:	"Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College Of B-Pharmacy, Waranagar"
2	Courses UG	1
3	No of students	Male-128 Female-166
4	No of teachers	Male-18 Female-08
5	No of Non-teaching staffs	Male-15 Female-05
6	Total campus area	2.5 acres
7	Girls common room	1
8	Garbage collection bins	20
9	Labs	15
10	Class rooms	06

#### 4.2. ENVIRONMENTAL POLICY OF THE COLLEGE:

"Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College Of B-Pharmacy, Waranagar" is committed to develop its campuses and to promote Sustainable Development by creating awareness with the need for maintaining greenery in the campus for sustainable ambience. The faculty, staff and students are encouraged to contribute collectively to develop an eco-friendly sustainable campus and disseminate the concept of eco friendly culture to the nearby community and wherever possible.



### 4.3 ENVIRONMENTAL POLICY:

College teaching and Non-teaching staff of "Shree Warana Vibhag Shikshan Mandal's TatyaSaheb Kore College of B-Pharmacy, Waranagar"is committed for carrying out its activity for sustainable development. This we will achieve through the following:-

- ✓ To protect and nurture the Flora and Fauna on the campus
- ✓ To maintain green campus.
- To reuse of plastics bottles and tiers for plantation.
- ✓ Eco-friendly campus
- ✓ Green environment and clean campus
- ✓ Solid Waste Management
- ✓ Renewable Energy





### 5. OBJECTIVES AND SCOPE

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

#### GOALS OF GREEN AUDIT

- To assess environmental performance.
- · To improve environmental standard
- To sustainable use of natural resources
- · To develop responsibility about environment
- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of environment.
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost
- · To suggest the best protocols for adding to sustainable development

#### BENEFITS OF GREEN AUDIT

- Would help to prepare plan to project the environment.
- Recognize the cost saving methods through waste minimization and management.
- Point out the prevailing and fourth coming impacts on environment.
- Ensures conformity with the applicable laws.
- Empower the organizations to frame a better environmental performance.
- It portrays a good image of an institution which helps building better relationships
  with the group of interested parties. Promotes the alertness for environmental
  guidelines and duties.

### 6. CONSTITUTION FOR GREEN AUDIT

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarise the present status of environment management in the campus:

- Water conservation and management
- Waste Management
- Air Pollution Management
- Noise Pollution And Illumination Management
- Energy Use And Conservation
- Green Belt Area & Bio-Diversity

#### GOOD POINTS OBSERVED

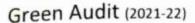
- College celebrated Swacha Bharat Abiyan clean and green campus premises through NSS.
- College has waste water treatment process and reuse water for gardening purpose.
- College has formed the team of faculty and student which works to maintain biodiversity on the campus and also participates in preventing pollution in society through various drives
- > College has prepared Green environmental policy and has taken efforts for sustainable development on the college campus. .
- College has formed the team of faculty and student which works to maintain biodiversity on the campus and also participates in preventing pollution in society through various drives.
- Environment awareness trainings and workshop for faculty and students.
- College cleaning activity twice in day.
- Various tree plantation programs are being organized at college campus and all Engineer's and surrounding villages through NSS unit.
- College has to install drip and sprinkling irrigation system to save water.

- College has conduct tree plantation programme twice in year.
- College faculty and students participated in different environmental awareness programme.

#### MAJOR RECOMMENDATIONS

- To establish and implement the Water Conservation and Management Plan as per Environment Protection Act 1986.
- PUC certificate for all the vehicles entering the campus to be made mandatory and to be checked by security.
- Display boards for switching off the taps to be put on at appropriate place.
- Display boards for switching off the switch boards to be put on at appropriate place.
- Automatic Leak detection systems for conservation of water.
- To provide incineration system for sanitary napkins.
- To provide dustbin facility for solid waste at appropriate place.
- Display boards for environmental awareness to be put on at appropriate place.
- Display the name of plants.
- Display boards in the library and other places for awareness to maintain silence in the college.
- To provide rain water harvesting system at institute.
- To use maximum no of LED tubes and bulbs.
- To provide solar street light
- To provide Composting pit at institute.





### 7. ANALYSIS OF GREEN PRACTICES

#### 7.1 WATER CONSERVATION AND MANAGEMENT:

Water is a valuable natural resource for all living organisms. It is freely available depending on the climate and topographic features of a region. Although water is natural freely available but portable (drinkable) water is not available freely for human consumption. In our planet 70% area is covered by water but only 3% of it is fresh water. Around 1.1 billion people of the word face water crisis. Water pollution and wastage plays a vital role in water crisis. Water contaminations are taking place at an alarming rate. Drinking or using contaminated water leads to many diseases or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and disease. It is also important to conserve protect and manage the water resources availability and usage so that it is sustainably used. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. A water audit is an on-site survey and assessment to determine the water quality, use and hence improving the efficiency of its use.

#### USES AND MANAGEMENT

#### SOURCE OF WATER:

SR. NO.	PARAMETERS	RESPONSE
1	Source of water	River
2	Water reserve /Storage tank	04
3	Capacity of tank	5000lit

#### WATER USERS IN CAMPUS:

SR No.	Person in different section	Strength (No. of person )
1	Staff	31
2	Non teaching Staff	30
3	Visitors	25



The visitors of the College vary with respect to different activities conducted in the College campus. During admission and different competitive exam conducted in the college campus.

# QUANTITY OF WATER USED IN DIFFERENT SECTIONS OF THE CAMPUS

Sr. No.	Sections	Water Use (Litter/day)
1	Academic building	39654
3	Canteen	4000
4	Urinals and Toilets	13680
6	Laboratories	1500
7	Garden	2000
8	Drinking	684
9	Hostel	9690
11	Leakage	2000



### WATER CONSUMPTION IN DIFFERENT ACTIVITY IN COLLEGE CAMPUS

Activity	Water used per activity (in Litter)	No. of times Activity performed in a day	Average water used Person/Day	No. of people using water	Total water consumption per Day (L)
Hand and face wash	4-6 L	4	16-24L	380	7600
Drinking Water	0.2-0.4L	6	1.2-2.4L	380	684
Toilet Flush	8-10L	4	32-40L	380	13680
Bath	30-40 L	1	30-40 L	34	1190
Cooking & Washing In canteen	150-250L	2	300-500L	10	4000
Cooking & Washing Hostel	350-450L	2	700-900L	10	8000
Cloth Washing	100-200L	1	100-200L	30	4500
				Total	39654



#### MAJOR OBSERVATIONS IN REGARD OF WATER USAGES AND CONSERVATION PLAN

- Drip irrigation and sprinklers are used for watering the garden. The garden is also watered with water pipe, two times a day for 1.5 hours each time.
- 2. Hazardous liquid waste disposed by authorised agency.

#### RECOMMENDATIONS

College administration may consider theses on top priority:-

- ✓ To establish and implement the Water Conservation and Management Plan as per Environment Protection Act 1986
- ✓ The water Conservation Awareness Program to be conducted on World Water Day on 22nd March every year
- ✓ Display boards for switching off the taps to be put on at appropriate place
- ✓ Automatic Leak detection systems for conservation of water.
- √ 80 % of total quantum of ground water extracted shall be recharged to ground either by Artificial Recharge Structures within the college premises
- ✓ Special Internal Water Audit to be conducted quarterly.
- To install Rain water harvesting system to use for gardening and agricultural purpose.



### 7.2 WASTE MANAGEMENT:

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, glass, dust etc. reuse and recycling. Furthermore, solid waste often includes wasted material resources that could be channelled into better service through recycling, repair, and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus.

#### DIFFERENT TYPES OF WASTE GENERATED IN THE COLLEGE AND THEIR DISPOSAL.

Types of waste	Particulars	Disposal method
E-Waste	Computers, electrical and electronic parts	Authorized disposal agency
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc	Municipal
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes	Municipal
Chemical wastes	Education, mark	Neutralize with water and treatment
Glass waste	Broken glass wares from the labs	Municipal
Sanitary Napkin	Napkin	•
Bio medical waste	catheters, syringes, IV bottles, Blood sample, medicines, infectious waste, cotton, bandages	



- MAJOR OBSERVATIONS IN REGARD OF WATER USAGES AND CONSERVATION PLAN:
- At present total solid waste collected in the campus is 20 Kg/day, Waste generation from tree droppings, canteen and lawn management is a major solid waste generated in the campus.
- 2. Other solid waste directly disposal to municipal corporation.
- 3. Organized special camp, rally under NSS activity for solid waste management.
- 4. College spread the message of recycling waste in the community.

#### RECOMMENDATIONS:

- ✓ Dustbins should be providing at classrooms and campus premises.
- ✓ Incineration provide for disposal sanitary napkins.
- ✓ Vermin-compost pit should be provide at institute for Vegetable waste and other leaf were used to feed and the resulting vermin-cast is used as manure in the garden.



### 7.3 AIR POLLUTION MANAGEMENT:

#### PERIODIC AWARENESS PROGRAMME FOR STAFF, STUDENTS AND SOCIETY

Every day there are 38 Two wheelers and 10 four wheelers are coming in college premises but there is no system observed to check for PUC certificate, Vehicle Exhaust Gas Analysis and Vehicular movement noise and vibration pollution. The air pollution at the time of ignition off and on is more than it is in riding mode.

#### RECOMMENDATIONS

The college may consider these on top priority:-

- ✓ World environment day to be celebrated in college premises every year on 5th june and whole college students and staff shall get involved and take oath for environment conservation not only in college but also in every span of life.
- ✓ College shall monitor the Ambient Air Quality as per the guidelines of "Air (Prevention and Control of Pollution) Act 1981
- ✓ Use of bicycle in campus to be promoted.
- √ Vehicular exhausts shall be examined regularly in the collage as per Central Motor Vehicle Act 1988
- ✓ Vehicular movement shall be restricted by putting boundary limit and beyond that limit bicycles usage shall be promoted to all students and staff.



### 7.4 NOISE POLLUTION AND ILLUMINATION MANAGEMENT:

 MAJOR OBSERVATIONS IN REGARD OF NOISE POLLUTION AND ILLUMINATION MANAGEMENT

#### 1. SILENCE ZONES IN THE COLLEGE

Various display boards have been not placed in the library and other places for awareness to maintain silence in the college.

#### NOISE STUDY:

Noise level monitoring was carried out using Noise Level Meter. The noise level survey was carried out two locations, at outside as well as inside.

#### Noise Monitoring.

Locatio	o <b>n</b>	Time (pm)	1	2	3	4	5	Noise Level Readings dB(A)
Outside  Class  Laboratory Library		12.30	55.2	57.1	60	55.6	63.5	58
		1.35	50.4	55.6	60.2	52.8	57.6	55.32
	Class		57.2	54.2	63.1	63.4	59.00	59
Inside	Laboratory	12.35	57.3	62.2	65.2	58.1	59.54	59.54
	Library		50.9	62.4	55.4	60.4	58.10	58.10
	Class	1.35	51.3	50.7	49.4	51.1	50.59	50.59
	Laboratory		49.2	50.2	52.4	50.4	51.30	51.30
	Library	1.36	50.2	50.3	50.4	50.7	50.78	50.78
As per	The Noise Pol	lution (R	egulatio	on & Cor	trol)Rule	es, 2000(R	ules 3(1 a	nd 4(1))
Area C	Area Code				Limits	Limits in dB (A) weighted scale		
					Day 10pm)		Night(10	Opm to 6am)
В			Comn	nercial	65		55	

It is observed that noise level of the campus is within limit as per the noise pollution regulations and control rules 2000.



### ILLUMINATION STUDY

The illumination study was carried out using Lux Meter. The illumination study was carried out at two locations, in Classroom and Laboratory.

Sr.	Location	Time	)	Average				
No.		(pm)	1	2	3	4	5	Lux
1.	Classroom	12.30	98	103	109	127	139	115.2
2	Classroom	12.30	182	120	298	299	116	203
3.	Laboratory	12.35	151	379	405	407	400	348.4
	Laboratory	12.35	159	349	347	412	409	335.2
4.		12.40	105	115	120	98	87	105
5.	Library	12.40	105					

All results of Illumination Study (Classroom and Laboratory) found within limits as per MF Rules- Section-35, Schedule B.

### RECOMMENDATIONS

The College administration may consider on top priority

✓ The College adopts no honking policy and prevents use of any honk and noise in campus. Certain areas like library, classrooms are declared as silence zone and noise pollution is kept to minimum on college campus.



### 7.5 ENERGY USE AND CONSERVATION

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

#### MAJOR OBSERVATIONS IN REGARD OF ENERGY USE AND CONSERVATION:

Table shows the energy consumption pattern of the college for a month. The college has consumed an average of 38674 kW/hr electricity in a month the one year electricity bill amount was 657458/-

Sr.No.	Instrument Name	Quantity
1	Environmental Test Chamber	1
2	Disintegration Test Apparatus	2
3	Dissolution Test Apparatus	2
4	Friability Test Apparatus	3
5	Digital Balance	5
6	Rotary Shaker	1
7	Over Head Stirrer (Lab Stirrer)	4
8	Shaker Incubator	1
9	Multistage Magnetic Stirrer	1
10	Ball mill	2
11	High Pressure Homogenizer	1
12	Cooling Centrifuge	2
13	Centrifuge	1
14	CO2 Extractor	1
15	Refrigerator (Remi)	2
16	Laboratory Spray Drier	1
17	Ultrasonic Probe Sonicator	1
18	Over Head Stirrer (Lab Stirrer)	1
19	Centrifuge	3
20	Magnetic Stirrer	19
21	Laboratory Oven	5
22	Refrigerator (LG)	1
23	Hot plate	3
24	Deep Freezer	2
25	Ultra Turrex	1

26	Vacuum Oven	1
27	PH Meter	5
28	HPLC	2
29	F.T.I.R.	1
30	Ampoule clarity apparatus	2
31	Rheometer Brook field	1
32	UV- Visible Spectrophotometer	3
33	Auto Analyzer	1
34	Digital Microscope	2
35	Sonicator	1
36	Digital Tablet Tester	1
37	PH/Iron Meter	1
38	Lyophilizer (Freeze Drier)	1
39	Sieve shaker	2
40	Bulk density apparatus	2
41	Distillation Apparatus	1
42	Rotary Evaporator	1
43	Polarimeter	2
44	Autoclave	2
45	Vacuum pump	4
46	Flourimeter	2
47	Turbidity meter	3
48	Fumming hood	1
49	Conductivity meter	3
50	Digital Potentiometer meter	3
51	Karl-Fisher Apparatus	2
52	Spectrophotometer	1
53	Bath Sonicator	1
54	Flame Photometer	2 2 is an
55	Projection Microscope	2 1 Grander 5 an

56	Water bath	1	
57	Heating metal	9	
58	Mixture	1	
59	Lab Incubator	1	
60	B.O.D. Incubator	1	
61	Colony Counter	1	
62	Student organ bath	11	
63	Rotating drum	5	
64	Colorimetry	2	
65	C.B.C. counter	1	
66	Analgesiometer	1	
67	Actophotometer	1	
68	Plythesmometer	1	
69	Rota rod	1	
70	Convelsiometer	1	
71	Pole climbing Apparatus	1	
72	Elisa plate reader	1	
73	Co <sub>2</sub> Incubator	1	
74	Laminar air flow	3	
75	All purpose instrument	1	
76	Tablet polishing & coating pan	1	
77	tablet punching machine (8th Station)	1	
78	Tray dryer	1	
79	Melting point apparatus	1	
80	Muffel furnace	1	
81	Exhaust fan	1	
82	Tube light	67	
83	Fan	61	
84	A.C.	6	
85	Computer	57	
86	Printer	6	
87	Projector	5	
88	Led bulb/tube	30	
89	Led tv	1	
90	Xerox Machine	2	ti Engine
91	UPS	2	1
92	CCtv	37	"Bu

#### 7.6 GREEN BELT AREA & BIO-DIVERSITY:

The Green Belt Area is meant for conservation of nature and aesthetic value of the College premises. The Green Area in the College includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programmes.

### MAJOR OBSERVATIONS IN REGARD OF GREEN BELT AREA & BIO-DIVERSITY

Campus is located in the vicinity of approximately 50 types (species) flora and fauna. Various tree plantation programs are being organized during the month of June and October at College campus and surrounding villages through NSS unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various types of indigenous species of ornamental and medicinal.

### No. of trees planted in campus:

#### Garden plant

Sr. no	Plant type/name	Quantity	Tree	shrubs
1	Plembago	3		S
2	Godrej Akilepa	2		S
3	Golden Duranda	11		S
4	NudaAkilepa	7		S
5	Hemikonia (kardal)	2		S
6	Tikoma	2	T	
7	Golden Akilepa	1		S
8	Sankeshwar	1	T	
9	Chafa	3	T	
10	FycusBlakina	11	T	
11	Cycus palm	2	T	Granee
12	SitaAshoka	I	T	dives
13	Sonchafa	2	T	1

14	Bakul	1	T	
15	Christina	2	Т	
16	Brasia	1	T	
17	Petra	2	T	
18	Extura	1		S
19	Brasia	1	T	
20	Areca Palm	43	T	
21	Minicher Palm	1	T	
22	Parijat	1	T	
23	Kaneri	3		S
24	Amlamor	1	Т	
25	Ratra rani	1		S
26	Tagar	2	T	
27	Jatropa	2	Т	
28	Mogra	1		S
29	Jaswand	1		S
_	Neem	6	T	
30	Pimpal	4	T	
-	Total	122	20	11

### Herbal garden Plant

C- no	Plant type/name	Quantity	Tree	shrubs	
Sr. no	Neem	2	T		
1	Bale	1	T		
2	Amla	2	T		
3	Jai	1		S	
4		3	T		
5	Coconut (Niloisi)	2	T		
6	Eucalyptus (Nilgiri)	2	T		
7	Bitter Almond (Badam)	1 1	1	S	
8	Insulin	1		S	
9	LasunWel		-	3	
10	Sandal wood (Chandan)	3	T		
11	Mango	2	T		
12	Coffe	2	T		
13	Vasaka (Adulsa)	1	T		
14	Arjuna	1	T		
15	Custerd Apple (Sitafal)	2	T		
16	Bor	2	T		
17	Apta	1	T		
18	Guava (Peru)	2	T		
19	Jatropa	2	T		
20	Chikoo (Khirani)	1	T	S trouneer's an	
21	Ratrani	1		S ngineer san	a C
22	Dalchini	1	T	The second	1
23	Saptparni	1	T	Jan 1980	

24	Hibiscus (Jaswand)	4		S
25	Jambol (jaman)	1	T	
26	Kapur (Camphor tree)	1	T	
27	Kadhamb	1	T	
28	Ritta	I	T	
29	Ashoka	1	T	
30	Palas	1	T	
31	Mahu	1	T	
32	Vad	1	Т	
33	Kannhera	1	T	
34	Vinca (sadafuli)	1		S
35	Humbur	1	T	7.5
36	Taman	1	T	
.37	Parijatak	1	T	
38	Ramphal	1	T	
39	Indian gajberi	1	T	
Sr. no	Plant type/name	Quantity	Tree	shrubs
40	Bitti	2	T	
41	Surangi	1	Т	
42	Austrelianbabhal	1	T	
43	Bakul	1	T	
44	Chinch (Tamarind)	1	Т	
45	Sagvan	1	T	
46	Fanas (Jackfruit)	1	T	
47	Bhehda	1	T	
48	Pimphal (peepal)	1	T	
	Karanji	1	T	
49		1		S
50	Cartencrepar			
	Papaya Papaya	1	T	
50		3	T T 45	7

#### RECOMMENDATIONS

The Management of College may consider on top priority that

- ✓ The Biodiversity is to be maintained while considering the plantation in future
- ✓ The selection of trees species to be based on environmental conservation and carbon sequestration value
- ✓ Artificial nests and water ponds are recommended to attract different birds in their migrating and breeding season
- ✓ Watering schedule to be planned according the season.

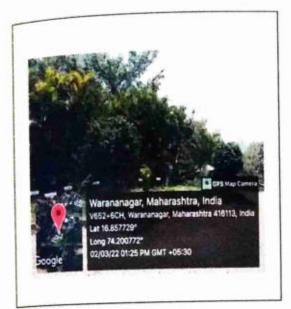
Display the name of plants.

#### • Animal Welfare

More than 20 Squirrels are found in the campus, Approx. 6 dogs, 2 owl, 9green beeeater, 10 Black sparrow, 1 crow pheasants, 20 pigeon, 1 Crow pheasant and others including butterflies, insects, bees, earthworms, etc. are there in campus.



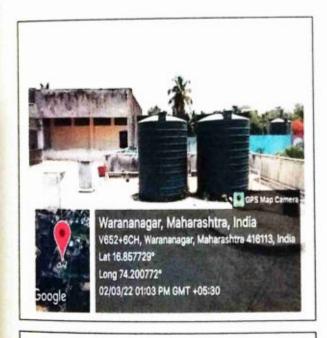
## 8.ANNEXURE PHOTOGRAPHS OF ENVIRONMENT CONSCIOUSNESS



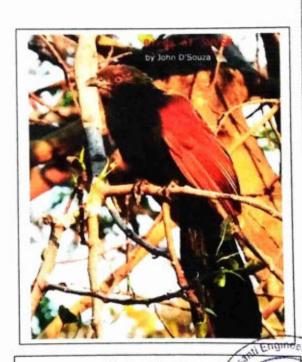
Green Campus



**Botanical Garden** 



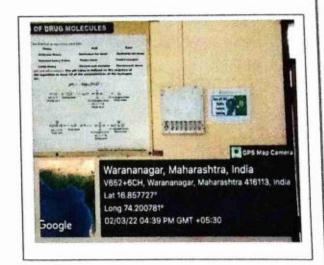
Water Storage Tank



Bird at institute



**Solar Panels at campus** 



Switch of drill at Institute



### 9. CONCLUSION

Considering the fact that the institution is the installation of solar panels, paperless work system and waste water treatment. Besides, environmental awareness programmes initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of waste management using eco friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development. As part of green audit of campus, we carried out the environmental monitoring of campus includes Illumination, Noise level, Ventilation and Indoor Air quality of the class room. It was observed that Illumination and Ventilation is adequate considering natural light present. Noise level in the campus well within the limit. College authority forms a committee for the plantation program and environmental awareness; this committee continuously work throughout the year with the help of NSS students. College appointed NSS students for the awareness of tree plantation.

