Shri Sarda Education Society's
(A Linguistic Minority Educational Institute)

SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE ANJANGAON SURJI

Daryapur Road,Anjangaon Surji Dist – Amravati 444705 (MS) India

NAAC Accredited 'A' with CGPA 3.21

Affiliated to Sant Gadge Baba Amravati University, Amravati

GREEN AUDIT REPORT

2023-2024

Prepared by
Green Audit Committee

GREEN AUDIT COMMITTEE

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ANJANGAON SURJI
Daryapur Road, Anjangaon Surji Dist Amravati Maharashtra 444705
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Surji

CERTIFICATE

This is to certify that Green Audit Committee has conducted the 'Green Audit 'of Smt Radhabai Sarda Arts, Commerce and Science College, Anjangaon Surji Dist Amravati (Maharashtra) campus for the academic session 2023-2024.The audit is conducted sincerely by applying requisite parameter and the report is prepared scientifically.

30th August 2024

Dr Mangesh Dagawal
Associate Professor & Head
Department of Botany
Smt Radhabai Sarda Arts, Commerce & Science College
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Forwarded through

SMT.R.S.COLLEGE Dist. Amravati ANJANGAON SURJI

PRINCIPAL
Smt.Radhabai Sarda Arts,
Commerce & Science College
Anjangaon Surji

GREEN AUDIT REPORT

INDEX

Introduction

Green audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. Green auditing is a means of assessing environmental performance (Welford, 2002). It is a systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements (EPA, 2003). This includes all water, Solid waste, energy status of examination.

It aims to analyze environmental practices within and outside of concerned sites, which will have an impact on the eco-friendly ambience. Green audit can be useful tool for a college to determine how and where they are using the most energy or water resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for recycling project or to improve minimization plan. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. It is imperative that the college evaluates its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background, it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time to reduce a sizable amount of atmospheric carbon dioxide from the environment. In recent time, the Green Audit of an institution has been becoming a paramount important for self assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

Objectives

The green audit committee focused on Material issues pertaining to college which have the highest influence on the Green Attributes of the College.

1. To conduct the baseline survey to know the reality status of green practices.
2. To develop a green policy (vision document) and framework for the college.
3. To examine the current practices which can have impact on environment such as of resource utilization, waste management and energy conservations.
4. To analyze the Floral and Faunal diversity in college campus.
5. To increase environmental consciousness throughout the campus among all the stakeholders.
6. To analyze and suggest solution for problems identified in audit.
7. To give the direction to work on some local environmental issues.
8. To motivate staff as well as students to optimize sustainable use of available natural resources.
9. To identify strengths and weaknesses in green practices conducted in college premises.

About the College

Smt Radhabai Sarda Arts, Comerce and Science College, a multi-faculty, grant-in-aid institution, offering UG, PG and PhD programmes, affiliated to Sant Gadge Baba Amravati University, Amravati was started by Shri Sarda Education Society with a vision to make higher education available to the underprivileged sections of society in the vicinity of Anjangaon Surji. It has three major streams- Arts, Commerce & Science with a distance mode centre of YCMO University, Nasik and HSC (Voc.). The competent, efficient, dedicated and well-qualified staff with the highest academic degree, a farsighted visionary management and good infrastructure have contributed to making it an excellent centre of higher education. Keeping in mind the contemporary global and national context, the college strives continuously to make success a way of life not only in academics but also in extra-curricular activities. It has always been the prime focus of the college to provide students the best possible ambience for learning and personality development. Since its inception, the college has been instrumental in catering to a variety of educational interests and aspirations of the people of the area. Today, the college is recognized as one of the well-known centers of higher education in this rural area of Amravati district in Maharashtra.

The Science Faculty saw the light of the day in the college in 2006 with Physics, Chemistry, Mathematics, Botany, Zoology, Computer Science and Electronics as Physical Sciences incorporated therein. The college has a rich infrastructure developed on the premises admeasuring 15.5 acres. Besides, it has a Botanical garden exhibiting nearly 100 well-groomed medicinal & ornamental plants. Obviously, it serves as a Health Hub for nearly thousand people.

Photograph of the College

Aerial view of campus

Main building

Science building

Library

Library

Topography of Anjangaon Surji

Geographically Anjangaon Surji , District Amravati is located at 21.163 N 77.3094 E and has an average elevation of 374 meters which occupies an area of 3,169.22 km². The taluka comprises of 128 villages, some of the villages are situated at the foot hills of Melghat. Korku, Bhill, Nihal, Govari etc. are the tribals inhabiting these villages. It is technically made up of two main zones, Anjangaon and Surji, on either side of Shahanur River, and is called Anjangaon-Surji in combination. It is called a Banana Hub of Vidarbha as it is famous & largest banana producer of bananas and Hub of medicinal plants - *Piper longum* and Safed musali. Anjangaon Surji is an ancient town having religious and historical importance The Devnath Math in Surji was established in 1754 AD. In Surji area Dwarkeshwar Yatra is a major event which is held every year on the second day of Pola festival. Among the Various religious functions Kathichi Jatra is a fair cum festival of the town. The fair is organised on every Monday from Nagapanchami to Pola Festival. As of 2011 India census, Anjangaon had a population of 56,380. It is the third most populous city in Amravati District after Amravati and

Achalpur(Paratwada). Shahanur dam is built using soil and has a hydroelectricity generation project and water supply project for nearly 156 villages and 2 cities based on gravitation without using electricity. The dam is located in the north of the city in the ranges of Satpuda.

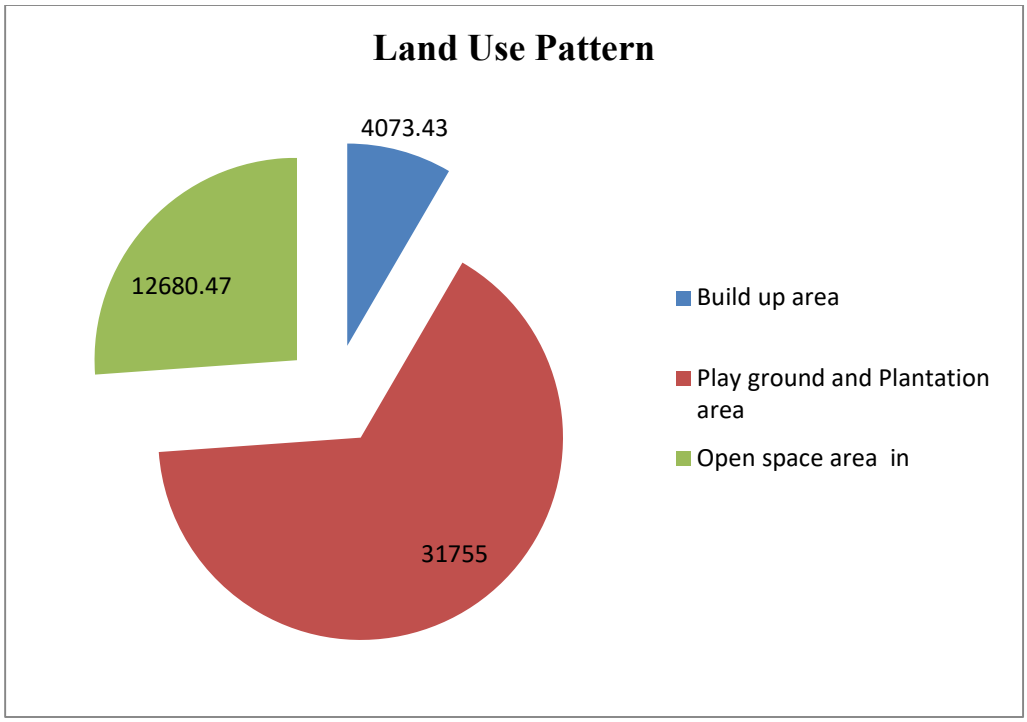
The soil of Anjangaon Surji region can be classified as sandy, brown and black soil.

Land Use Data

Smt Radhabai Sarda Arts, Commerce & Science College is situated at Anjangaon Surji, within the geo-position Latitude 21.1670988 longitude 77.3152116 a rural Tehsil place of Amravati district in Maharashtra, India. It encompasses area about 48528.47 sqmeter. The college has following land use pattern.

Categories Land Use	**Area in Sq.m**
Build up area	4073.43
Play ground and Plantation area	31755
Open space area in	12680.47
Total area	48528.47

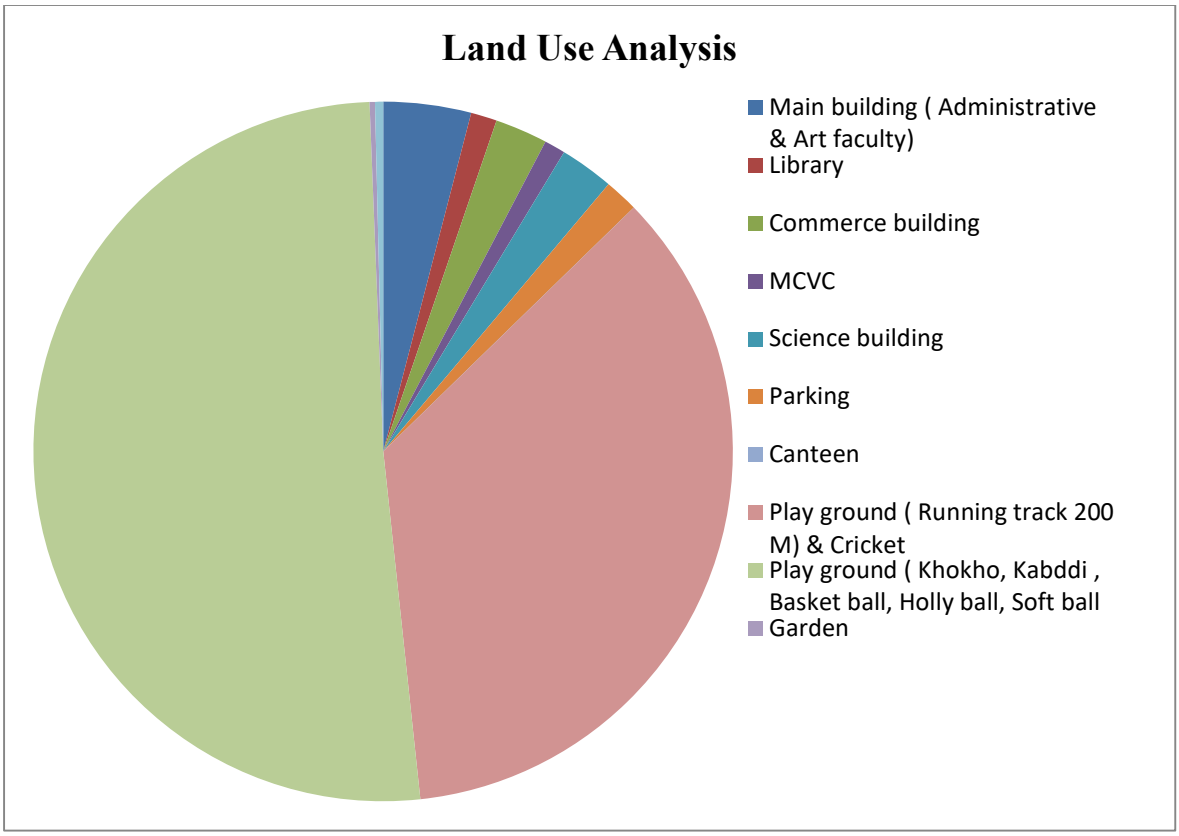
The total area of Smt Radhabai Sarda Arts, Commerce & Science College is 48528.47 sqm out of which the build up area is 4073 sqm and open space area is12680.47 sqm.



Land Use Analysis

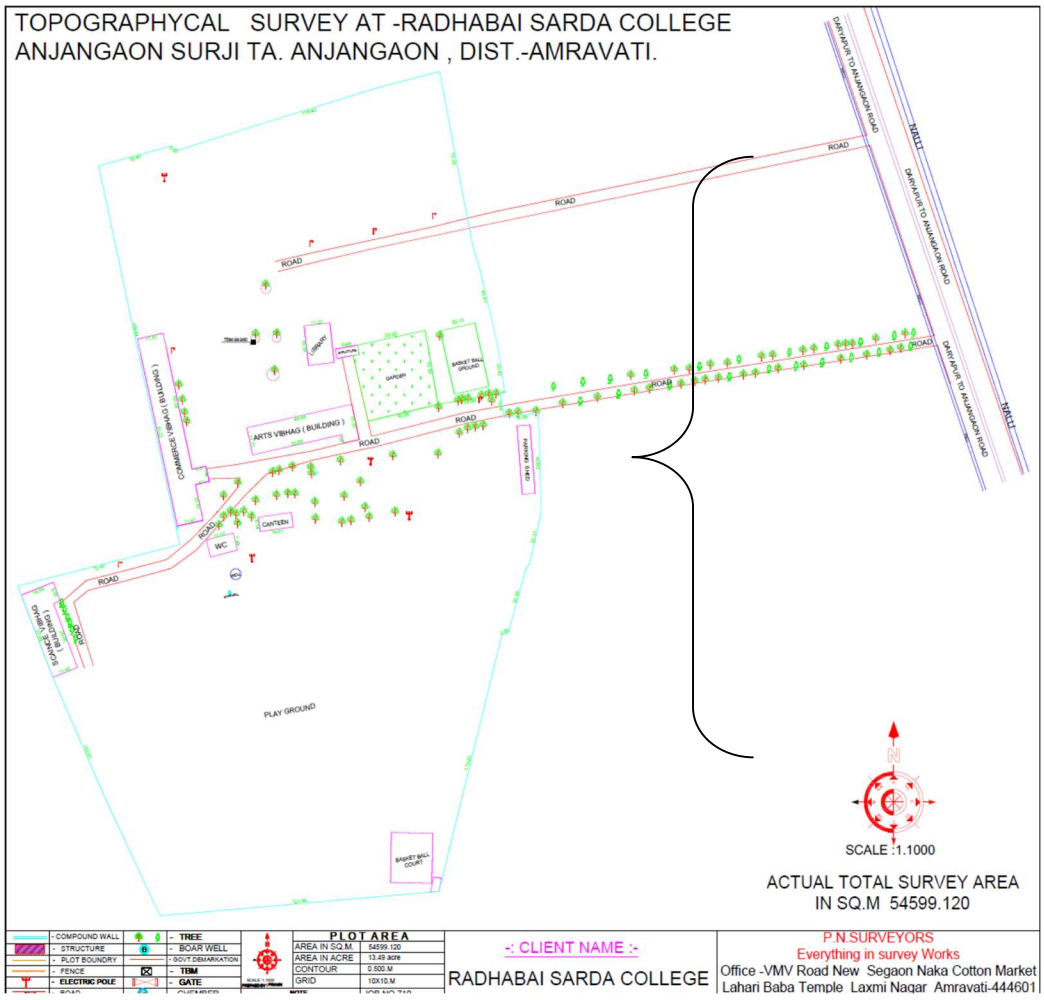
Following are the land use analysis of Smt Radhabai Sarda Arts, Commerce & Science College :

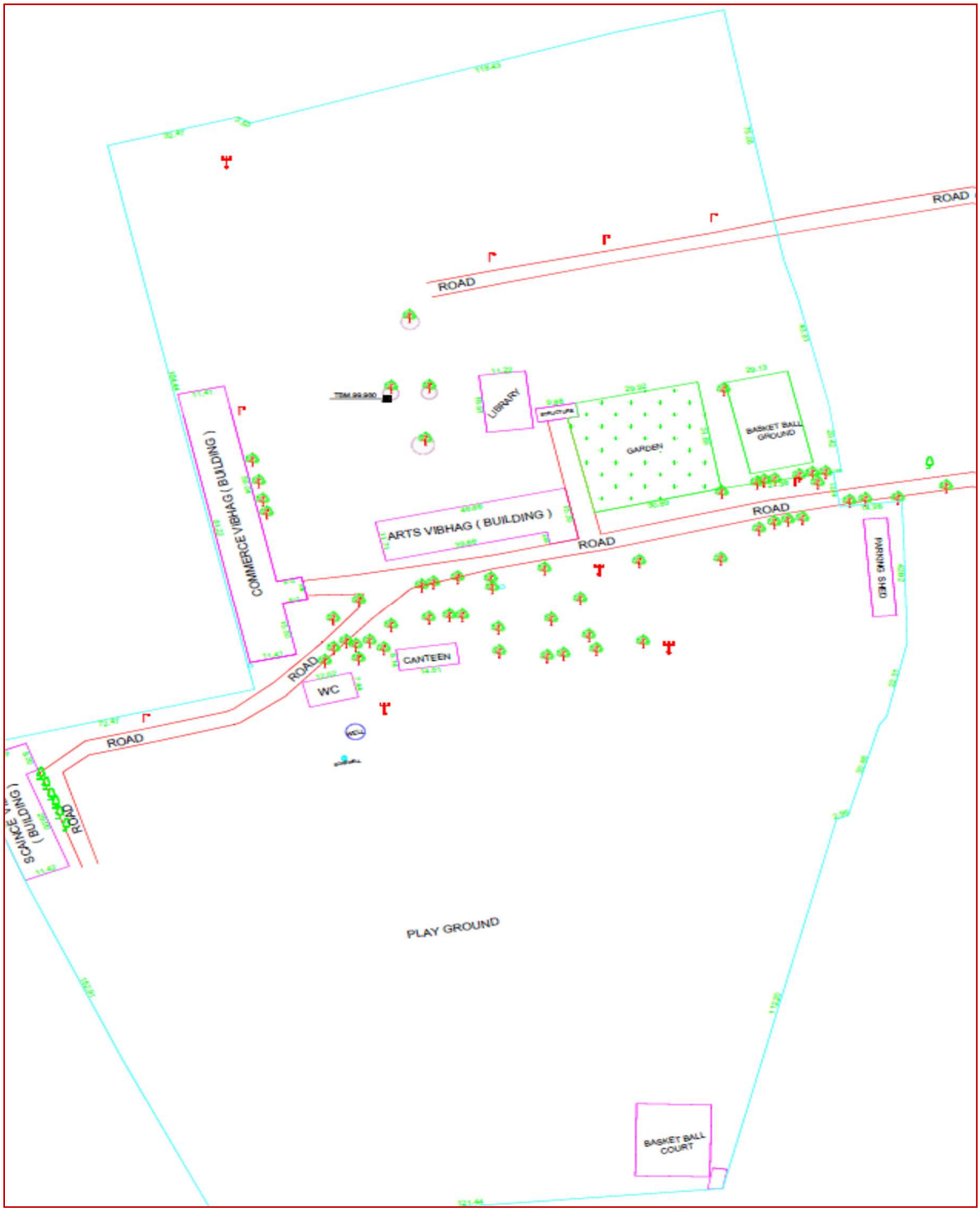
S.N.	Category of Land Use (Name of building)	Area in Sq.m
1	Main building (Administrative & Art faculty)	1620.42
2	Library	481.06
3	Commerce building	971.96
4	MCVC	388.33
5	Science building	999.99
6.	Parking	625
7	Canteen	07.43
8	Play ground (Running track 200 M) & Cricket	14240
9.	Play ground (Khokho, Kabddi , Basket ball, Holly ball, Soft ball	20440
10	Garden	100
11	Plantation area	150
12	Rest rooms	99.0



For performing green audit of college campus is divided in to following pattern i.e. Main building, Library, Commerce building, Science building, MCVC building, Botanical garden, play ground, canteen and parking etc. All building and classrooms are equipped with furniture and have all adequate facilities on each floor. The spacious classrooms, administrative office, well equipped laboratories, parking facilities are the main feature of this campus.

College Layout Plan


TOPOGRAPHYCAL SURVEY AT -RADHABAI SARDA COLLEGE
ANJANGAON SURJI TA. ANJANGAON , DIST.-AMRAVATI.
ROAD
ARTS VIBHAG (BUILDING)
CANTEEN
WC
PLAY GROUND
BASKET BALL COURT
SCALE :1.1000
ACTUAL TOTAL SURVEY AREA
IN SQ.M 54599.120
PLOT AREA
AREA IN SQ.M 54599.120
AREA IN ACRE 13.49 acre
CONTOUR 0.500 M
GRID 10X10 M
-: CLIENT NAME :-
RADHABAI SARDA COLLEGE
P.N.SURVEYORS
Everything in survey Works
Office -VMV Road New Segaon Naka Cotton Market
Lahari Baba Temple Laxmi Nagar Amravati-444601


ROAD
ROAD
LIBRARY
GARDEN
BASKET BALL GROUND
COMMERCE VIBHAG (BULDING)
ARTS VIBHAG (BUILDING)
ROAD
ROAD
CANTEEN
WC
ROAD
ROAD
SCIENCE (BUILDING)
PLAY GROUND
BASKET BALL COURT

METHODOLOGY:

Following methodology was adapted for conducting the audit of the college for the academic session 2023- 2024.

Steps:

1. Systematic and comprehensive data collection required for green audit.
2. Collection and reading of documents with physical evidences.
3. **Pre-audit activities –**
    - The site and area that are to be audited need to be determined and selected.
    - The green audit scope and objectives were identified.
    - The audit team collects the entire document which is essential for performing green audit.
    - Audit team and assignment for responsibility were established.
    - The background information on the facility including the facility organization, layout and processes, and the relevant regulations and standards were collected.
4. **Onsite audit activities-**
    - Collect information about land use pattern and use analysis of the college campus.
    - Gathering audit evidence
    - Evaluation of audit evidence against the objectives of the audit.
    - Monitor the water parameter is performed.
    - Collection of site inspection of data regarding the solid waste, liquid waste, e-waste.
    - An exit meeting to explain the audit findings

Observations and Recommendations

Floral Diversity of the College :

Smt Radhabai Sarda College, which was established in the year 1966, has eco-friendly environment. It has long legacy of healthy environmental practices periodic plantation, their preservation and maintenance. Its land use is about 30 % of total area is occupied by open land and plantation that generate better campus environment. Every year various department like Botany, NSS, NCC and Environmental Awareness committee organize the plantation programme with the help of faculty and students. College has well maintained botanical garden enriched with Medicinal Plants. The campus maintains the biodiversity of plants.

In total, based on data collected by Botany department there are 135 plants in the college campus including tree, shrubs and herbs during the academic session 2023-2024. There are more than 150 plants present in the college Botanical Garden representing different family.

Vegetative propagation :

To learn how to propagate the garden vegetation , garden visit and garden work is organized for botany students and students learn various propagation techniques like cutting and grafting.

Use of medicinal plants:

There are many Medicinal Plants planted in college Botanical garden. Students don't have knowledge how to use and identify the particular plants therefore faculty members of the botany department help them to identify and use these plants. Every year botany department organizes Medicinal Plant Exhibition for local people, students and faculty members.

List of plants in college campus

Sr. No	Botanical Name	Common name marathi	Family	Number
1	***Pongamia pinnata*** (L.) Pierre	Karnj	Leguminosae	60
2	***Azadirachta indica*** A.Juss.	Kadunim	Meliaceae	6
3	***Bougainvillea spectabilis*** Willd.	Boganvel	Nyctaginaceae	6
4	***Senna siamea*** (Lam.) H.S.Irwin & Barneby	Kashid	Leguminosae	6
5	***Dalbergia sissoo*** Roxb. ex DC.	Shisav	Leguminosae	2
6	***Eucalyptus globulus*** Labill.	Nilgiri	Myrtaceae	2
7	***Polyalthia longifolia*** (Sonn.) Benth. & Hook.f. ex Thwaites	Ashok	Annonaceae	9

8	***Tectona grandis*** L.f.	Sag	Verbenaceae	3
9	***Acacia nilotica*** (L.) Willd. ex Delile	Babhul	Leguminosae	1
10	***Senegalia polyacantha*** (Willd.) Seigler & Ebinger	Babhul	Leguminosae	1
11	***Roystonea regia*** (Kunth) O.F.Cook	Palm tree	Arecaceae	28
12	***Peltophorum pterocarpum*** (DC.) Backer ex K.Heyne	Sonmohar	Leguminosae	6
		Total		**130**

List of plant in Botanical Garden

Sr. No	Botanical Name	Family	Common Name	Habit
1	*Adenanthera pavonina* L.	Leguminosae	Ratangunj	Tree
2	*Acmella oleracea* (L.) R.K.Jansen	Asteraceae	Akkalkara	Herb
3	*Aegle mormelos* (L.) Corr.	Rutaceae	Bel	Tree
4	*Allamanda cathartica* L.	Apocynaceae	Allamanda	Shrub
5	*Aloe vera* (L.)Burm.f.	Asphodelaceae	Korfal	Shrub
6	*Alpinia galangal* (L.) Willd.	Zingiberaceae	Kulinjan	Herb
7	*Amorphophallus paeoniifolius* (Dennst.) Nicolson	Araceae	Surankand	Herb
8	*Andrographis paniculata* (Burm.f.) Nees	Acanthaceae	Kalmegh	Herb
9	*Andropogon citrates* DC.	Poaceae	Gavatichaha	Herb
10	*Argyreia nervosa* (Burm.f.) Bojer	Convolvulaceae	Samudrashok	Climber
11	*Asparagus racemosus* Willd.	Asparagaceae	Shatavari	Climber
12	*Azadirachta indica* A.Juss.	Meliaceae	Neem	Tree
13	*Bacopa monnieri* (L.) Wettst.	Plantaginaceae	Bramhi	Herb
14	*Barleria cristata* L.	Acanthaceae	Blue Koranti	Shrub
15	*Barleria prionitis* L.	Acanthaceae	Yellow Koranti	Shrub
16	*Bignonia capreolata* L.	Bignoniaceae	Bignonia	Vine
17	*Bixa orellana* L.	Bixaceae	Shendri	Tree
18	*Boerhavia diffusa* L.	Nyctaginaceae	Punarnava	Climber
19	*Boerhavia repens* L.	Nyctaginaceae,	Punarnava	Herb
20	*Boswellia serrata* Roxb.	Burseraceae	Salai	Tree
21	*Bougainvillea spectabilis* Willd.	Nyctaginaceae	Bougainvillea	Vine
22	*Calotropis procera* (Aiton) W.T.Aiton	Apocyanaceae	Rui	Tree
23	*Canna indica*L.	Cannaceae	Canna	Herb
24	*Cascabela thevetia*(L.) Lippold	Apocynaceae	Thevetia	Tree
25	*Capparis zeylanica* L.	Capparaceae	Waghanti	
26	*Chlorophytum borivilianum* Santapau&R.R.Fern.	Asparagaceae	Safedmusali	Shrub

27	*Chrysanthemum indicum* L.	Asteraceae	Ashtak	Herb
28	*Chamaecostus cuspidatus* (Nees & Mart.) C.D. Specht & D.W. Stev.	Costaceae	Insulin plant	
29	*Cissus quandrangularis* L.	Vitaceae	Kandwel	Climber
30	*Coleus ambionicus* Lour.	Lamiaceae	Panacha ova	Herb
31	*Coleus barbatus* (Andrews) Benth. ex G.Don	Lamiaceae	Mainmula	Herb
32	*Cordia dichotoma* G.Forst.	Boraginaceae	Bhokar	Tree
33	*Croton tiglium*L.	Euphorbiaceae	Jamalgotha	Shrub
34	*Cupressus sp.*	Cupressaceae	Cupressus	Shrub
35	*Curcuma longa* L.	Zingiberaceae	Halad	Herb
36	*Curcuma caesia* Roxb.	Zingiberaceae	Kali Halad	Herb
37	*Cycas revolute* Thunb.	Cycadaceae	Cycus	Shrub
38	*Cymbopogon citratus* (DC.) Stapf	Poaceae	Gavtichaha Lemmon grass	Herb
39	*Datura stramonium* L.	Solanaceae	Datura	Herb
40	*Dendrocalamus strictus* (Roxb.) Nees	Poaceae	Bamboo	Tree
41	*Dianthus chinensis* L.	Caryophyllaceae	Dianthus	Herb
42	*Dioscorea alata* L.	Dioscoreaceae	Garajfal	Herb
43	*Dioscorea bulbifera* L.	Dioscoreaceae	Gathalu	Herb
44	*Dioscorea pentaphylla* L.	Dioscoreaceae		Herb
45	*Eucalyptus globules* Labill.	Myrtaceae	Nilgiri	Tree
46	*Euphorbia neriifolia* L.	Euphorbiaceae	Shund	Shrub
47	*Euphorbia pulcherrima* Willd. ex Klotzsch	Euphorbiaceae	Lalpatti	Shrub
48	*Euphorbia tirucalli* L.	Euphorbiaceae	Satala	Tree
49	*Hamelia patens* Jacq.	Rubiaceae	Hamelia	Shrub
50	*Hellenia speciosa* (J.Koenig) S.R.Dutta	Costaceae	Kewkand	Herb
51	*Hemidesmus indicus* (L.) R. Br.	Apoynaceae	Anatmul	Climber
52	*Hibiscus cannabinus* L.	Malvaceae	Lalambari	Shrub
53	*Hibiscus rosa-sinensis* L.	Malvaceae	Jaswand	Shrub
54	*Hymenocallis littoralis* (Jacq.) Salisb.	Amaryllidaceae	Spider liy	Shrub
55	*Iphigenia stellata* Blatt.	Colchicaceae	Jangalilasan	Herb
56	*Ipomoea alba* L.	Convolvulaceae	Sakankali	Climber
57	*Ixora coccinea* L.	Rubiaceae	Rukhmini	Shrub
58	*Jasminum auriculatum* Vahl	Oleaceae	Jui	Climber
59	*Jasminum calophyllum* Wall. ex G.Don	Oleaceae	Jai	Climber
60	*Jasminum officinale* L.	Oleaceae	Chameli	Climber

61	*Jasminum sambac* (L.) Aiton	Oleaceae	Mogara	Climber
62	*Jatropha curcas* L.	Euphorbiaceae	Chandrajyot	Shrub
63	*Justicia adhatoda* L.	Acanthaceae	Adulsa	Shrub
64	*Kalanchoe pinnata* (Lam.) Pers.	Crassulaceae	Panfuti	Shrub
65	*Lagerstroemia indica* L.	Lythraceae	Jarul	Tree
66	*Lagerstroemia speciosa* (L.) Pers.	Lythraceae	Tanhan	Tree
67	*Lawsonia inermis* L.	Lythraceae	Mehandi	Tree
68	*Mirabilis jalapa* L.	Nyctaginaceae	- Four 'O' clock plant	Herb
69	*Murraya koenigii* (L.)Spreng.	Rutaceae	Godnimbh	Tree
70	*Nephrolepis biserrata* (Sw.) Schott.	Nephrolepidaceae	Fern	Shrub
71	*Nerium oleander* L.	Apocynaceae	Kanher	Shrub
72	*Nyctanthes arbor-tristis* L.	Oleaceae	Parijatak	Tree
73	*Ocimum americanum* L.	Lamiaceae	Rantulas	Herb
74	*Ocimum tenuiflorum* L.	Lamiaceae	Tulas	Herb
75	*Ocimum basilicum* L.	Lamiaceae	Great basil	
76	*Passiflora caerulea* L.	Passifloraceae	Krishnakaml	Climber
77	*Passiflora edulis* Sims	Passifloraceae	Krishnakaml	Climber
78	*Penta arvensis* Hiern.	Rubiaceae	Pentas	Shrub
79	*Penta slanceolata* (Forssk.) Deflers	Rubiaceae	Pentas	Shrub
80	*Pentas lanceolata*(Forssk.) Deflers	Rubiaceae	Pentas	Shrub
81	*Phyllanthus emblica* L.	Phyllanthaceae	Awala	Tree
82	*Phyllanthus amarus* Schum. &Thonn.	Phyllanthaceae	BhuiAmla	
83	*Piper longum* L.	Piperaceae	Pimpari	Climber
84	*Plumbago zeylanica* L.	Plumbaginaceae	Chitrak	Shrub
85	*Polianthes tuberose* L.	Asparagaceae	Nishigandha	Shrub
86	*Pongamia pinnata* (L.) Pierre	Leguminosae	Karanj	Tree
87	*Psidium guajava* L.	Myrtaceae	Jambh	Tree
88	*Putranjiva roxburghii* Wall.	Putranjivaceae	Putranjiva	Tree
89	*Rauwolfia vomitoria* Afzel.	Apocynaceae	Sarpagandha	Shrub
90	*Ricinus communis* L.	Euphorbiaceae	Castor plant	Tree
91	*Santalum album* L.	Santalaceae	Sandwood	Tree
92	*Syzygium aromaticum (L.)* Merr. &L.M.Perry	Myrtaceae	Lawang	Tree
93	*Syzygium cumini* (L.) Skeels	Myrtaceae	Jambhul	Tree
93	*Tabernaemontana divaricata* (L.) R.Br. ex Roem. &Schult.	Apocynaceae	Tagari	Shrub
95	*Tagetes erecta* L.	Asteraceae	Marigold	Herb
96	*Tecoma stans*(L.) Juss. ex Kunth	Bignoniaceae	Sonpatti	Tree
97	*Terminalia arjuna* (Roxb. ex DC.) Wight & Arn.	Combretaceae	Arjun	Tree
98	*Thuja sp.*	Cupressaceae	Thuja	Shrub
99	*Thespesia populnea* (L.) Sol. ex	Malvaceae	ParasPimpal	Tree

	Corrêa			
100	*Tinospora cordifolia* (Willd.) Hook.f. & Thomson	Menispermaceae	Gulwel	Climber
101	*Tridax procumbens* L.	Asteraceae	Kambarmodi	Herb
102	*Vitex negundo* L.	Lamiaceae	Nirgudi	Shrub
103	*Withania somnifera* (L.) Dunal	Solanaceae	Ashwagandha	Shrub
104	*Zamia furfuracea* L.f. ex Aiton	Zamiaceae	Zamia	Shrub
105	*Zinnia elegans* Jacq.	Asteraceae	Zenia	Herb

List of Medicinal Plants provided and distributed in college programmes

Sr. No	Botanical Name	Family	Common Name	Habit
1	*Aloe vera* L.	Asphodelaceae	Korfal	Shrub
2	*Cissus quandrangularis* L.	Vitaceae	Kandwel	Climber
3	*Argyreia nervosa* L.	Convolvulaceae	Samudrashok	Climber
4	*Adhatoda vasica* N.	Acanthaceae	Adulsa	Shrub
5	*Withania sominifera* L.	Solanaceae	Ashwagandha	Shrub
6	*Andropogon citratus* L.	Poaceae	Gavatichaha	Herb
7	*Andropogon citratus* L.	Poaceae	Gavatichaha	Herb
8	*Bixa orellana* L.	Bixaceae	Shendri	Tree
9	*Ocimum sanctum* L.	Lamiaceae	Tulas	Herb
10	*Coleus ambionicus* Lour.	Lamiaceae	Panacha ova	Herb
11	*Andrographis paniculata* Wall.	Acanthaceae	Kalmegh	Herb
12	*Bryophyllum pinnatum* Lam.	Crassulaceae	Panfuti	Shrub
13	*Adenanthera pavonnia* L.	Fabaceae	Ratangunj	Tree
14	*Tinospora cordifolia* Miers.	Menispermaceae	Gulwel	Climber
15	*Asparagus recemosus* Will.	Asparagaceae	Shatavari	Climber
16	*Hemidesmus indicus* L.	Apoynaceae	Anatmul	Climber

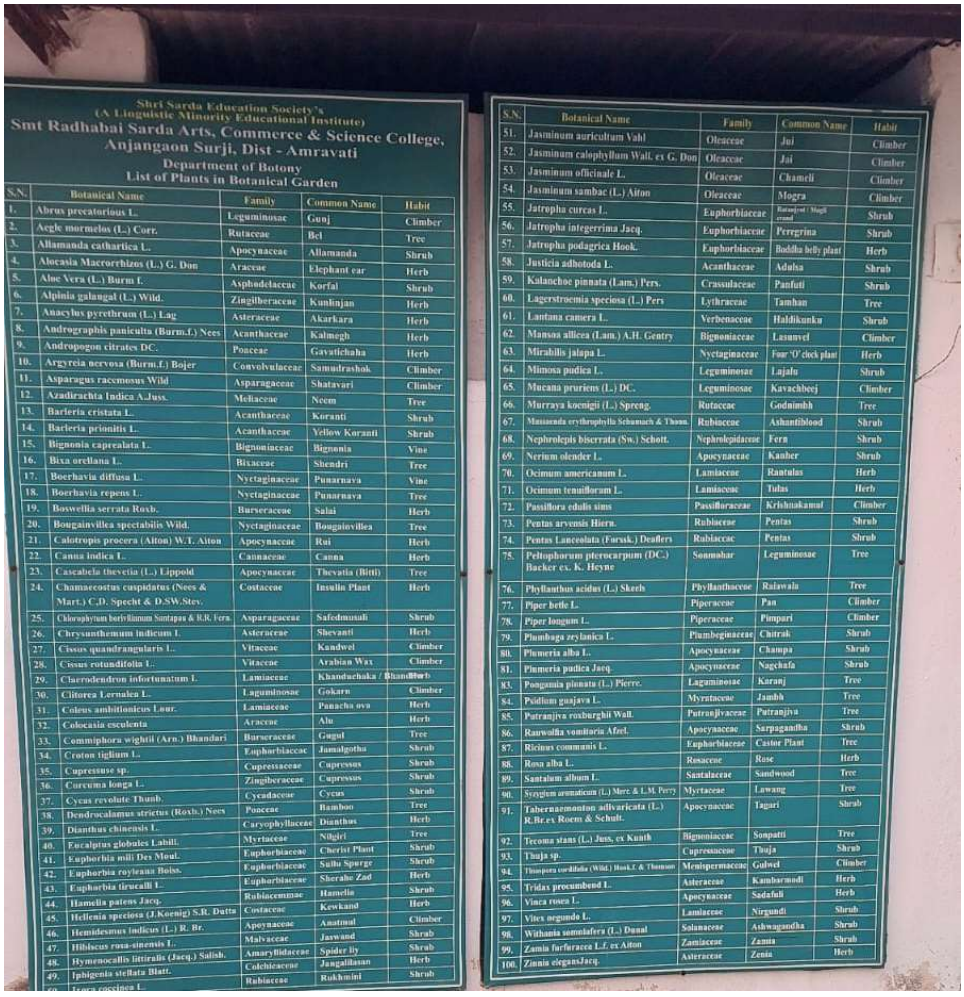
Recommendations:

To maintain green and eco-friendly college campus, more trees need to be planted. A thick green belt development along the fence is strongly recommended. The plant diversity shall be maintained. The plant species that are found suitable are suggested for plantation and greenbelt development. In addition to above, some flowering plants, shrubs, herbs and climber plant species suggested for beautification in the college campus.

Garden of the college

Botanical garden view

Medicinal Plants in Botanical Garden



Shri Sarda Education Society's
(A Linguistic Minority Educational Institute)
Smt Radhabai Sarda Arts, Commerce & Science College,
Anjangaon Surji, Dist - Amravati
Department of Botony
List of Plants in Botanical Garden

S.N.	Botanical Name	Family	Common Name	Habit
1.	Abrus precatorious L.	Leguminosae	Gunj	Climber
2.	Aegle mormelos (L.) Corr.	Rutaceae	Bel	Tree
3.	Allamanda cathartica L.	Apocynaceae	Allamanda	Shrub
4.	Alocasia Macrorhizos (L.) G. Don	Araceae	Elephant ear	Herb
5.	Aloe Vera (L.) Burm f.	Asphodelaceae	Korfal	Shrub
6.	Alpinia galangal (L.) Wild.	Zingiberaceae	Kunlinjan	Herb
7.	Anacylus pyrethrum (L.) Lag	Asteraceae	Akarkara	Herb
8.	Andrographis paniculta (Burm.f.) Nees	Acanthaceae	Kalmegh	Herb
9.	Andropogon citrates DC.	Poaceae	Gavatichaha	Herb
10.	Argyreia nervosa (Burm.f.) Bojer	Convolvulaceae	Samudrashok	Climber
11.	Asparagus racemosus Wild	Asparagaceae	Shatavari	Climber
12.	Azadirachta Indica A.Juss.	Meliaceae	Neem	Tree
13.	Barleria cristata L.	Acanthaceae	Koranti	Shrub
14.	Barleria prionitis L.	Acanthaceae	Yellow Koranti	Shrub
15.	Bignonia caprealata L.	Bignoniaceae	Bignonia	Vine
16.	Bixa orellana L.	Bixaceae	Shendri	Tree
17.	Boerhavia diffusa L.	Nyctaginaceae	Punarnava	Vine
18.	Boerhavia repens L.	Nyctaginaceae	Punarnava	Tree
19.	Boswellia serrata Roxb.	Burseraceae	Salai	Herb
20.	Bougainvillea spectabilis Wild.	Nyctaginaceae	Bougainvillea	Tree
21.	Calotropis procera (Aiton) W.T. Aiton	Apocynaceae	Rui	Herb
22.	Canna indica L.	Cannaceae	Canna	Herb
23.	Cascabela thevetia (L.) Lippold	Apocynaceae	Thevatia (Bitti)	Tree
24.	Chamaecostus cuspidatus (Nees & Mart.) C.D. Specht & D.SW.Stev.	Costaceae	Insulin Plant	Herb
25.	Chlorophytum borivilianum Santapau & R.R. Fern.	Asparagaceae	Safedmusali	Shrub
26.	Chrysanthemum indicum L.	Asteraceae	Shevanti	Herb
27.	Cissus quandrangularis L.	Vitaceae	Kandvel	Climber
28.	Cissus rotundifolia L.	Vitaceae	Arabian Wax	Climber
29.	Claerodendron infortunatum L.	Lamiaceae	Khandubaha / Bhandi	Herb
30.	Clitorea Lernalea L.	Leguminosae	Gokarn	Climber
31.	Coleus ambitionicus Lour.	Lamiaceae	Panacha ova	Herb
32.	Colocasia esculenta	Araceae	Alu	Herb
33.	Commiphora wightii (Arn.) Bhandari	Burseraceae	Gugul	Tree
34.	Croton tiglium L.	Euphorbiaceae	Jamalgotha	Shrub
35.	Cupressuse sp.	Cupressaceae	Cupressus	Shrub
36.	Curcuma longa L.	Zingiberaceae	Cupressus	Shrub
37.	Cycus revolute Thunb.	Cycadaceae	Cycus	Shrub
38.	Dendrocalamus strictus (Roxb.) Nees	Poaceae	Bamboo	Tree
39.	Dianthus chinensis L.	Caryophyllaceae	Dianthus	Herb
40.	Eucalptus globules Labill.	Myrtaceae	Nilgiri	Tree
41.	Euphorbia mili Des Moul.	Euphorbiaceae	Cherist Plant	Shrub
42.	Euphorbia royleana Boiss.	Euphorbiaceae	Sulbi Spurge	Shrub
43.	Euphorbia tirucalli L.	Euphorbiaceae	Sheralbe Zad	Herb
44.	Hamelia patens Jacq.	Rubiacemmae	Hamelia	Shrub
45.	Hellenia speciosa (J.Koenig) S.R. Dutta	Costaceae	Kewkand	Herb
46.	Hemidesmus indicus (L.) R. Br.	Apocynaceae	Anatmul	Climber
47.	Hibiscus rosa-sinensis L.	Malvaceae	Jaswand	Shrub
48.	Hymenocallis littiralis (Jacq.) Salisb.	Amaryllidaceae	Spider lily	Shrub
49.	Iphigenia stellata Blatt.	Colchicaceae	Jangalilasan	Herb
50.	Ixora coccinea L.	Rubiaceae	Rukhmini	Shrub

S.N.	Botanical Name	Family	Common Name	Habit
51.	Jasminum auriculum Vahl	Oleaceae	Jui	Climber
52.	Jasminum calophyllum Wall. ex G. Don	Oleaceae	Jai	Climber
53.	Jasminum officinale L.	Oleaceae	Chameli	Climber
54.	Jasminum sambac (L.) Aiton	Oleaceae	Mogra	Climber
55.	Jatropha curcas L.	Euphorbiaceae	Ratanjyot / Mogli erand	Shrub
56.	Jatropha integerrima Jacq.	Euphorbiaceae	Peregrina	Shrub
57.	Jatropha podagrica Hook.	Euphorbiaceae	Buddha belly plant	Herb
58.	Justicia adhotoda L.	Acanthaceae	Adulsa	Shrub
59.	Kalanchoe pinnata (Lam.) Pers.	Crassulaceae	Panfuti	Shrub
60.	Lagerstroemia speciosa (L.) Pers	Lythraceae	Tamhan	Tree
61.	Lantana camera L.	Verbenaceae	Haldikunku	Shrub
62.	Mansoa allicea (Lam.) A.H. Gentry	Bignoniaceae	Lasunvel	Climber
63.	Mirabilis jalapa L.	Nyctaginaceae	Four 'O' clock plant	Herb
64.	Mimosa pudica L.	Leguminosae	Lajalu	Shrub
65.	Mucuna pruriens (L.) DC.	Leguminosae	Kavachbeej	Climber
66.	Murraya koenigii (L.) Spreng.	Rutaceae	Godnimbh	Tree
67.	Mussaenda erythrophylla Schumach & Thonn.	Rubiaceae	Ashantiblood	Shrub
68.	Nephrolepis biserrata (Sw.) Schott.	Nephrolepidaceae	Fern	Shrub
69.	Nerium oleander L.	Apocynaceae	Kanher	Shrub
70.	Ocimum americanum L.	Lamiaceae	Rantulas	Herb
71.	Ocimum tenuiflorum L.	Lamiaceae	Tulas	Herb
72.	Passiflora edulis sims	Passifloraceae	Krishnakamal	Climber
73.	Pentas arvensis Hiern.	Rubiaceae	Pentas	Shrub
74.	Pentas Lanceolata (Forsk.) Deaflers	Rubiaceae	Pentas	Shrub
75.	Peltophorum pterocarpum (DC.) Backer ex. K. Heyne	Sonmohar	Leguminosae	Tree
76.	Phyllanthus acidus (L.) Skeels	Phyllanthaceae	Ralavala	Tree
77.	Piper betle L.	Piperaceae	Pan	Climber
78.	Piper longum L.	Piperaceae	Pimpari	Climber
79.	Plumbago zeylanica L.	Plumbaginaceae	Chitrak	Shrub
80.	Plumeria alba L.	Apocynaceae	Champa	Shrub
81.	Plumeria pudica Jacq.	Apocynaceae	Nagchafa	Shrub
83.	Pongamia pinnata (L.) Pierre.	Leguminosae	Karanj	Tree
84.	Psidium guajava L.	Myrtaceae	Jambh	Tree
85.	Putranjiva roxburghii Wall.	Putranjivaceae	Putranjiva	Tree
86.	Rauwolfia vomitoria Afzel.	Apocynaceae	Sarpagandha	Shrub
87.	Ricinus communis L.	Euphorbiaceae	Castor Plant	Tree
88.	Rosa alba L.	Rosaceae	Rose	Herb
89.	Santalum album L.	Santalaceae	Sandwood	Tree
90.	Syzygium aromaticum (L.) Merr. & L.M. Perry	Myrtaceae	Lawang	Tree
91.	Tabernaemontana adlvaricata (L.) R.Br.ex Roem & Schult.	Apocynaceae	Tagari	Shrub
92.	Tecoma stans (L.) Juss. ex Kunth	Bignoniaceae	Sonpatti	Tree
93.	Thuja sp.	Cupressaceae	Thuja	Shrub
94.	Tinospora cordifolia (Willd.) Hook.f. & Thomson	Menispermaceae	Gulwel	Climber
95.	Tridax procumbend L.	Asteraceae	Kambarmodi	Herb
96.	Vinca rosea L.	Apocynaceae	Sadafuli	Herb
97.	Vitex negundo L.	Lamiaceae	Nirgundi	Shrub
98.	Withania somnifera (L.) Dunal	Solanaceae	Ashwagandha	Shrub
99.	Zamia furfuracea L.f. ex Aiton	Zamiaceae	Zamia	Shrub
100.	Zinnia elegansJacq.	Asteraceae	Zenia	Herb

List of Plants displayed in front of Botanical Garden

Ashoka plants in front of science wing

Karanj tree plantation near the cycle stand

Green practices

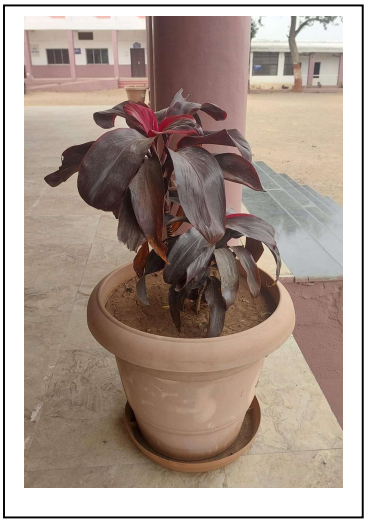
Preparation of Medicinal Plants Saplings

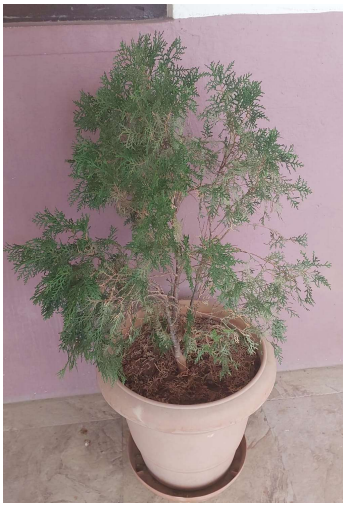
Students Participation in sapling preparation

Saplings prepared by the students

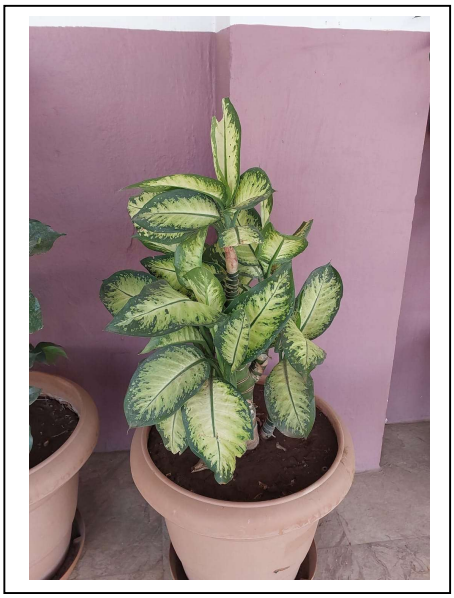
Saplings prepared by the students

Medicinal plant exhibitions organized by Botany department





Indoor plant kundi prepared by Botany department



Indoor plant kundi prepared by Botany department

Indoor plant kundi prepared by Botany department

Quality planting material prepared by Botany department

Plantation Programme (Photo collected from Botany department)

Medicinal Plant Saplings distribution

Faunal Diversity of the College :

A total 81 animal species were observed in the college campus including invertebrates and vertebrates (different groups like Beetle, Moth, Bug, Bird, Ant, Spider, Wasp, Millipede, Slug, Louse, Earthworm, Snail, Butterfly, Dragonfly, Grasshopper etc.). The floral diversity in the campus serves as a roosting place for the different species of the bird, it also acts as a habitat for a variety of insects, variety of flowering plants in the botanical garden supports a wide variety of butterflies and birds. The window shades of college building serve as a resting place for the birds like rock pigeon. The college environment has rich and abundant faunal diversity enlisted as below.

SN	Scientific Name	Common Name	Family
BEETLE			
1	*Aspidimorpha sanctaecrucis*	Golden tortoise beetel	Chrysomelidae
2	*Carpophilus freemani*	Freeman sap beetle	Nitidulidae
3	*Acritus*	Clown beetle	Histeridae
4	*Zygogramma bicolarata*	Mexican beetle	Chrysomelidae
5	*Tropisternus lateralis*	Scavenger beetle	Hydrophilidae
6	*Copelatus haemorrhoidalis*	Diving beetle	Dytiscidae
7	*Chrysolina herbacea*	Mint beetle	Chrysomelidae
8	Oulema melanopa	Ceral leaf beetle (lema)	Chrysomelidae
9	Chrysomela scripta	Cotton wood leaf beetle	Chrysomelidae
10	*Harmonia axyridis*	Ladybird	Coccinellidae
MOTH			
1	*Spodoptera exigua*	Beet armyworm	Noctuidae
2	*Spodoptera frugiperda*	Fall armyworm	Noctuidae
3	*Achyra rantalis*	Garden webworm	Crambidae
4	*Spodoptera eridania*	Southern armyworm	Noctuidae
5	*Orvasca subnotata*	Tussock moth	Erebidae

		caterpillar	
6	*Hypena scabra*	Green cloverworm	Erebidae
BUG			
1	*Halyomorpha halys*	Brown marmorated stink bug	Pentatomidae
2	*Artipus floridanus*	Little leaf notcher	Curculionidae
3	*Dysdercus cingulatus*	Red cotton bug	Pyrrhocoridae
4	*Halyomorpha halys*	Brown marmorated stink bug	Pentatomidae
5	*Armadillidium vulgare*	Roly poly	Armadillidiidae
6	*Coridius janus*	Red pumpkin bug	Dinidoridae
7	*Chinavia hilaris*	Green shink bug	Pentatomidae
BIRD			
1	*Bulbulcus ibis*	Cattle Egret	Aedeidae
2	*Columba livia*	Rock pigeon	Columidae
3	*Streptopelia senegalensis*	Laughing Dove	Columidae
4	*Streptopelia orientalis*	Oriental Turtle Dove	Columbidae
5	*Pycnonotus cafer*	Red vented bulbul	Pycnonotidae
6	*Passer domesticus*	House sparrow	Passeridae
7	*Turdoides striatus*	Jungle Babbler	Leiothrichidae
8	*Sturnia pagodarum*	*Pagodarum*(Brahminy Starling)	Sturnidae
9	*Acridotheres tristis*	Common myna	Sturnidae
10	*Halcyon smymensis*	White Throated Kingfisher	Alcedinidae
11	*Eudynamys scolopaceus*	Asian Koel	Cuculidae
12	*Cuculus canorus*	Common cuckoo	Cuculidae
13	*Corvus splendens*	Crow	Corvidae
14	*Centropus sinensis*	Greater coucal	Cuculidae
15	*Phaethontidae*	Parrot	

	psittaciformes		
16	*Dicruves macrocercus*	Black Drongo	Dicruridae
17	*Merops orientalis*	Green bee-eater	Meropidae
ANT			
1	*Camponotus consobrinus*	Banded sugar ant	Formicidae
2	*Solenopsis geminata*	fire ant	Formicidae
3	*Camponotus pennsylvanicus*	Black carpenter ant	Formicidae
4	*Camponotus ocreatus*		Formicidae
5	*Camponotus floridanus*	Florida carpenter ant	Formicidae
SPIDER			
1	*Steatoda grossa*	False widow	Theridiidae
2	*Eratigena atrica*	Giant house spider	Theridiidae
3	*Pholcus phalangioides*	Longbodied cellar spider	Theridiidae
4	*Pardosa amentata*	Wolf spider	Lycosidae
5	*Hasarius adansoni*	Jumping spider	Salticidae
6	*Plexippus paykulli*	Jumping spider	Salticidae
7	*Heteropoda venatoria*	Hunt's man spider	Sparassidae
WASP			
1	*Apidae apis*	Honey bee	Formicidae
2	*Mischocyttarus Mexicanus*	New world paper wasp	Formicidae
MILLIPADE			
1	*Anoplodesmus tanjoricus*	Yellow-spotted millipede	Polydesmidae
2	*Orthoporus ornatus*	Desert millipede	Spirosdtreptidae
SLUG			
1	*Laevicaulis alte*	tropical land slug	Veronicelloidae
LOUSE			

1	*Oniscus*	Common woodlouse	Oniscidae
EARTHWORM			
1	*Pheretima posthuman*	Earthworm	Neooligochaeta
2	*Aporrectodea calignosa*	Earthworm	Lumbricidae
INSCET			
1	*Acheta domesticus*	House cricket	Gryllidae
SNAIL			
1	*Planorbarius corneus*	Great ramshorn	Planorbidae
DRAGONFLY			
1	*Sympetrum flaveolum*	Yellow winged darter	Libellulidae
2	*Diplacodes trivialis*	Blue percher	Libellulidae
3	*Trithemis festiva*	English–Indigo dropwing	Libellulidae
4	*Trithemis aurora*	Crimson marsh skimmer	Libellulidae
5	*Crocothemis servilia*	Scarlet skimmer	Libellulidae
BUTTERFLY			
1	*Graphium agamemnon*	Green spotted triangle	Pailoinidae
2	*Byblia ilithyia*	Jokers	Nymphalidae
3	*Papilio demoleus*	Lime butterfly	Pailoinidae
4	*Junonia lemonias*	Lemon pansy	Nymphalida
5	*Cynthia cardui*	Painted lady	Nymphalida
GRASSHOPPER			
1	*Pterophylla camellifolia*	Comman katydid	Tettigoniidae
2	*Scudderia furcata*	fork-tailed bush katydid	Tettigoniidae
3	*Melanoplus packardii*	Packard's grasshopper	Acrididae
4	*Acrida conica*	Giant green slantface	Acrididae

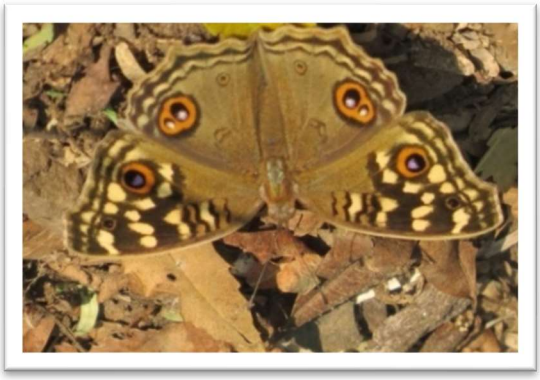
5	*Hieroglyphus banian*	Rice grasshoppers	Acrididae
AMPHIBIANS			
1	*Duttaphrynus melanostictus*	*Asian Common toad*	Bufonidae
REPTILES			
1	*Calotes versicolor*	Indian garden lizard	Agamidae
MAMMALS			
1	*Herpestide*	Mangoose	Herpestide
2	*Ratus ratus*	Rat	Muridae
3	*Funambulus palmarum*	Indian palm squirrel	Sciuridae

PHOTOPLATE

Bulbulcus ibis

Passer domesticus

Acridotheres tristis	*Halcyon smymensis*
 *Streptopelia orientalis*	 *Corvus splendens*
 *Camponotus consobrinus*	 *Eratigena atrica*

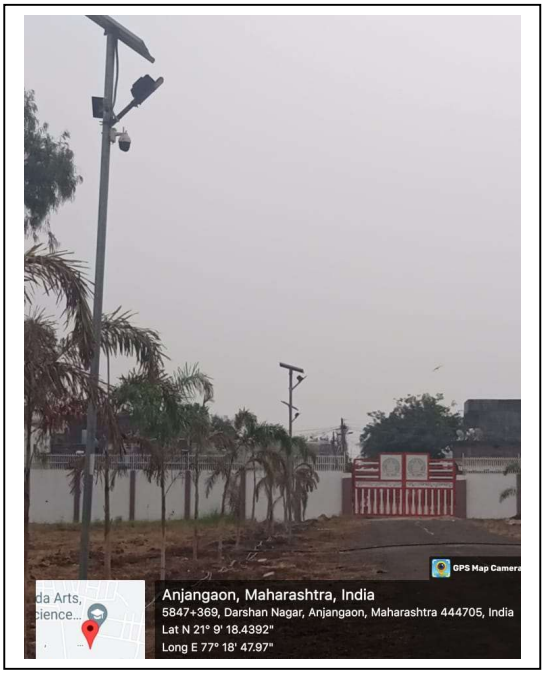
 *Anoplodesmus tanjoricus*	 *Plexippus paykulli*
 ***Hasarius adansoni***	 ***Pardosa birmanicus***
 ***Junonia lemonias***	 *Chrysolina herbacea*

	
Harmonia axiridius	*Acritus*
	
Diplocodes trivialis	*Trithemis aurora*
	
Scudderia Furcata	*Acrida conica*

Data and photographs collected from Zoology department

Use of renewable energy sources:

In college campus there are five solar lights each of 18 W. They reduce approximately 16.2 KW electricity per month or in other words they decrease units in bill by 16.



1) Percentage of lighting power requirement met through LED bulbs:

Annual total lighting power requirement of college $= \mathbf{5126.43\ KW}$

Annual lighting power requirement met through LED $= \mathbf{5126.43\ KW}$

Therefore, Annual Percentage of lighting power requirement met through LED bulbs

$$= \frac{Annual\ lighting\ power\ requirement\ met\ through\ LED\ bulb}{Annual\ total\ lighting\ power\ requirement} \times 100$$

$$= \frac{5126.43}{5126.43} \times 100$$

$$= \mathbf{100}\ \%$$

2) Alternative Energy Initiative:

Total power requirement of college per month $= \mathbf{427.203\ KW}$

Power requirement met by renewable energy sources $= \mathbf{16.2\ KW}$

Therefore, Percentage of power requirement met by renewable energy sources

$$= \frac{Power\ requirement\ met\ by\ renewable\ energy\ sources}{Total\ power\ requirement} \times 100$$

$$= \frac{16.2}{427.203} \times 100$$

$$= \mathbf{3.80}$$

Information collected from physics department

Water Audit

In an educational institute's water is used for laboratory, bathroom, urinals, hostel, canteen, etc. This should need to measure balance of input water to output water. This water proportion is low at the end of the water distribution networks because of the leakages, overflow, and losses through valve. So it is need to water audit of this entire water distribution system. This should save the money to unaccounted water flow and this conserve water used in to lesser extent period. An educational institutes need to care about water distribution from start to end. And need to attention at minimum water losses through distribution network.

Table: Water Storage Profile

Location	**No. and capacity of tanks**	**Total capacity (Lit.)**
Arts Wing	**1x2000**	**2000L**
Commerce Wing	**2x500**	**1000L**
Science wing	**2x500**	**1000L**
Toilet Building	**2x500**	**1000L**
Canteen	**1x500**	**500L**
	Total	**5500L**

Note: Approximate per capita average consumption and usage per day is 3.5 L of water.

Table: Source of water supply

Source of water supply:	
Bore well	**1 Number**
Municipal Water supply	**1 Number**

Rain Water Harvesting:

Due to rapid increase in day-to-day demand for water among fast growing human population, there lies a great opportunity of harvesting rainwater to meet the scarcity of water and avoid destruction of the normal groundwater level. The boon of rainwater harvesting is that the unused or extra water can be sent down the aquifer to charge the groundwater level.

Due to scarcity of water in summer it is need to save and conserve the water in monsoon season. So some intervals of time update the quantity and quality of water use. And take the major action to save the water. The best option to measure use and loss of water is take an audit of water. Water audit for distribution networks in college campus. A water audit determines the amount of water lost from a water supply system and the cost of this loss to the utility.

College has installed rain water harvesting system to increase the ground water level in college campus. The run-down rain water from Arts building roof-tops is gathered through a network of pipes and which is then directed into well.

Rain water harvesting structure on Arts building

Water collected on terrace is carried through pipes and sunk into Well thus increasing ground water level

Liquid Waste Management: The liquid wastes generated in the campus include Sewage, Laboratory and canteen effluent waste. Waste drinking water is drained to the different plants in the garden.

Waste drinking water is drained to the different plants in the garden

Hazardous Liquid Waste: Different hazardous and toxic chemicals which are used in a Chemistry Laboratory are drained in to a soak pit.

Soak pit for Chemistry laboratory hazardous waste water

Recommendation

1. Responsibility of monitoring the overflow of water tank is fixed on peon/non-teaching staff in the concerned section.
2. Pipes, overhead tank and plumping system should be maintained properly to reduced leakage and wastage.
3. Garden should be watered by using drip/sprinkler irrigation system to minimize water use.
4. Conduct awareness program for efficient use of water.

HEAD
Department of Chemistry
Smt. Radhabai Sarda Arts, Commerce & Science College Anjangaon Surji

PRINCIPAL
Smt.Radhabai Sarda Arts,
Commerce & Science College
Anjangaon Surji

Report submitted by Chemistry Department

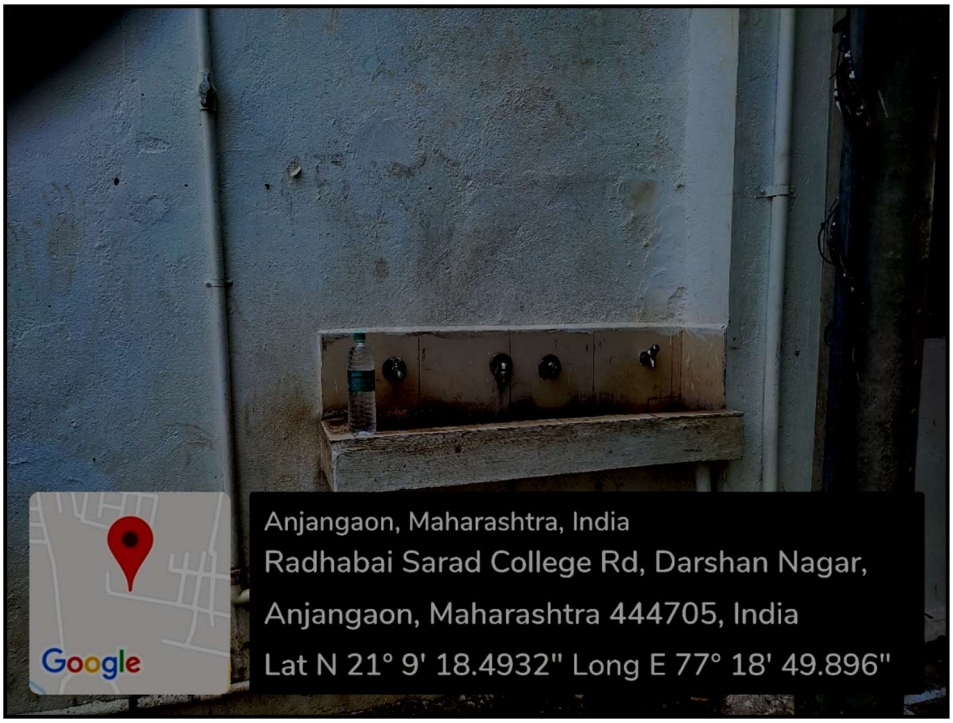
Drinking Water Analysis :

The purpose of this study is to assess the drinking water characteristics at different location of college campus. For analysis of drinking water sample collected. Necessary drinking water parameters are periodically analyzed for detection of possible hazardous and microbial contents with the help of expert faculty of our college from department of Chemistry by following the standard procedure. The analyzed parameter included Temperature, pH, Turbidity, Smell, Total hardness, Fluoride, Chloride, Nitrate, Iron and Total Coliforms.

Drinking water analysis report

Source of sample: Water Tank
Location /area: Smt. R S College, Anjangaon Surji
Received on: 23 June 2024
Completed on: 26 June 204

Location:



Physico-chemical and microbiological analysis				
Parameters	Unit	Sample ID	NDWQS	Test method
		WT 01		
Temperature	˚C	22	–	Thermometer
pH	-	6.0	6.5 – 8.5	Electromeric method
Turbidity	NTU	10	5 (10)	Nephlometric method
Taste	-	Non-objectional	Non-objectional	Organoleptic method
Smell	-	Non-objectional	Non-objectional	Organoleptic method
Total hardness as $CaCO_3$	mg/L	18	500	EDTA Titrimetric method
Chloride	mg/L	ND (< 1)	250	Argentrometric method
Fluoride	mg/L	ND (< 0.5)	0.5 - 1.5	SPADNS method
Ammonia	mg/L	0.1	1.5	Phenate method
Nitrate	mg/L	5.0	50	UV Spectrophotometric screening method
Phosphate	mg/L	ND (< 0.05)	-	Ascorbic acid reducing method
Iron (Fe)	mg/L	1.0	0.3 (3)	Direct air-acetylene flame method (AAS)
Manganese (Mn)	mg/L	ND (< 0.05)	0.2	Direct air-acetylene flame method (AAS)
Total Coliform	CFU/100mL	TNTC	0	Membbrane filteration
E. Coli	CFU/100mL	47	0	Membbrane filteration

NDWQS: National drinking water quality standard (2062)

References: Standard method for the examination of water and wastewater (APHA, AWWA & WEF) 22nd Edition (2012)
ND : Not detected ( ): Maxmimum concentration limit TNTC – Too Numerous to count (> 200)

Remarks:
Among the tested physico-chemical parameters, pH, turbidity and iron content do not meet the NDWQS value at the time of analysis.
Bacteriologically, the provided water sample is found to be free from contamination of Total coliform and E. Coli.

Dr. Satish P. Mardikar
Assistant Professor
Department of Chemistry
Smt. Radhabai Sarda Arts, Commerce & Science College, Anjangaon Surji

Authorized Signature

Solid Waste Management :

The average solid waste generated in the college campus is about 5 kg/day. The major solid waste generated from college includes waste from Botanical garden, Tree droppings, Paper waste and laboratory waste. Single sided used papers are reused for writing or printing in all departments. Old Newspaper are sell to the scrap dealer for recycling. There are separate dustbins placed at a proper place for collection of bio-degradable and non-degradable waste. The bio-degradable waste from garden, food waste from canteen, Home economics department is recycled in the vermicomposting unit located behind the botanical garden. Manure produce from vermicomposting unit is use in garden and also distributed among the faculty members. Non-degradable waste like metal waste, glass, wooden waste, e-waste is stored and given to the authorized scrap dealer for recycling for further processing. To minimize the waste generation in college campus students as well as staff members are educated for proper waste management practice through NSS programs, displaying slogans, advertisement on notice board etc and our institution encourages less paperwork by using online mode of correspondence.

Department of Home-Economics emphasizes on practical training of students by providing them first hand training in food processing, preserving, packaging and various steps of food processing. The biodegradable wastage in the form of vegetable waste which remains after the practical training of students not thrown away, rather it is sent to Vermicompost Unit of the college where it is dumped for production of manure. The organic manure that is produced by the vermicompost unit is then used in college garden and other premises for nourishing plants and trees.

Recommendations:

- Sufficient big dustbins need to be placed where essential and monitor periodically.
- Segregate solid waste in to wet, dry, glass and constructional at source and biodegradable should be sent for composting while other solid waste must be sent to recycle or proper disposal.
- Plastic carry bags should be banned and awareness regarding plastic free campus should be created by displaying proper slogans, posters etc.
- If possible Home economics department can organize training for bag making from cotton material and news papers for students

E-Waste Management :

The disposal of E-Waste is a rapidly growing problem because electronic equipment frequently contains hazardous substances which affect the environment and human health. E-waste such as, discarded computers, office electronic equipment, monitors, Hard Disks are disposed off as per their conditions. These wastes are sold to local scrap. Efforts are made to reduce e-waste by making optimum use of electronic devices.

Observations

The condemned batteries and damaged computers are disposed as per University and guidelines of Maharashtra Pollution Control Board. All the miscellaneous e-waste such as CDs, batteries, fluorescent bulbs, PCBs and electronic items are delivered for safe disposal to the third party as approved by Maharashtra Pollution Control Board or sold to local scrap condition.

Efforts are made to reduce e-waste by optimum use of electronic devices.

The college conscientiously works towards generating minimal e-waste, for which the following strategies adopted:

- Regular maintenance of electronic equipment and computers by the in-house technician and AMC, ensures longer life.
- Weeded out computers from the computer science laboratories due to up gradation are transferred to departments, the administration within the college campus.
- Outdated Computers, servers, monitors, compact discs (CDs), DVD's, printers, scanners, copiers, motherboard, battery cells and other electronic equipment, weeded out from the computer laboratory are used for demonstration of internal parts of the equipment.
- Some electronic equipment's are replaced with newer models due to the rapid technology advancements and production of newer electronic equipment.

Unwanted electronic equipment must therefore either be donated for reuse or sent for recycling.

E-waste management (Year: 2023)

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H O D
Computer Science
Smt.R.S.College,Anjangaon

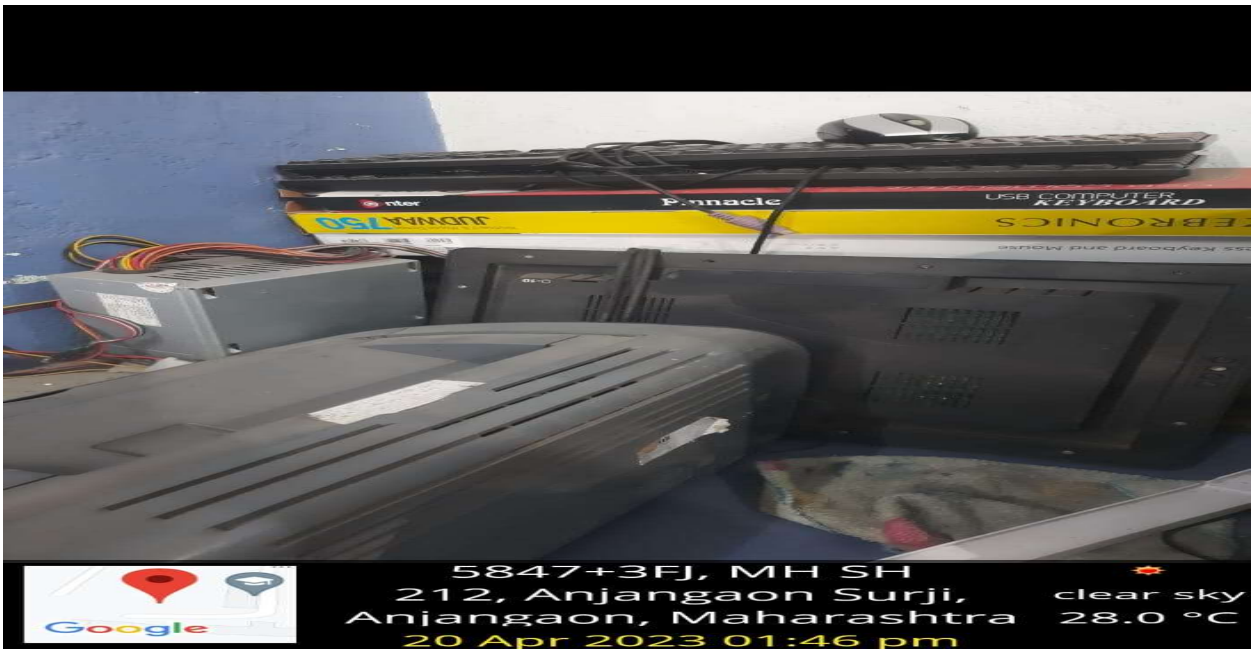
PRINCIPAL
Smt.Radhabai Sarda Arts,
Commerce & Science College
Anjangaon Surji

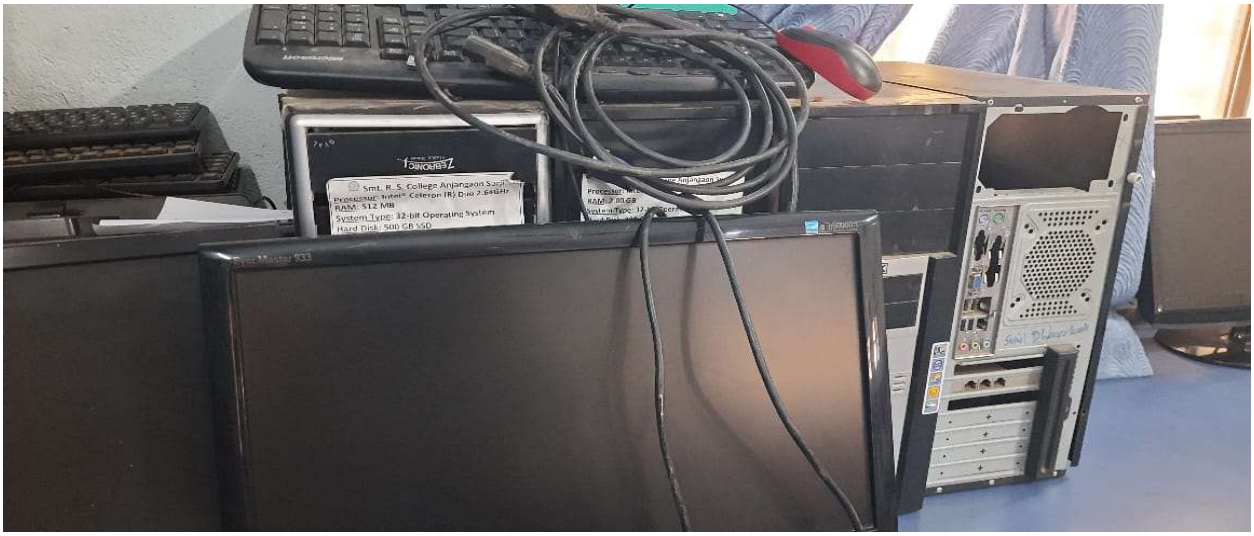
Recommendations:

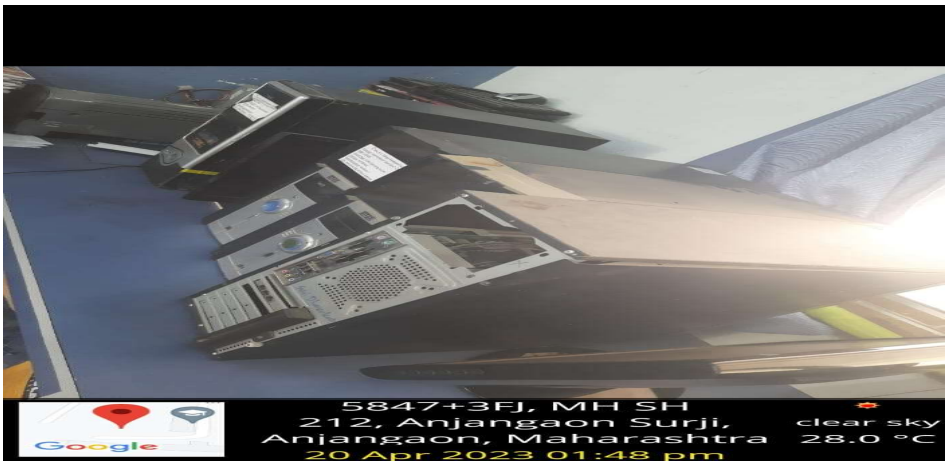
Electronic equipment may contain heavy metals and other materials.

Unwanted electronic equipment must therefore either be donated for reuse or sent for recycling.

E-Waste materials







E-Waste separated

Sarda Education Society (Trust)'s

(A Linguistic Minority Educational Institute)

SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE

ANJANGAON SURJI- 444705, DIST- AMRAVATI (Maharashtra)

(Affiliated to Sant Gadge Baba Amravati University, Amravati)

NAAC Accredited 'A' with CGPA 3.21

Date: 20/04/23

To whomsoever it may concern

The administration Department confirms that

The administrative rights of computer setting are with the Computer Department of the college.

As part of the sustainable and eco-friendly setting, the system department has initiated below setting in the computer of all the users:

1. We have disabled all the computer screen savers.
2. When the computers are idle for 5 minutes, they are turned to sleep mode.
3. The computer setting cannot change as the administrative rights are with the computer department.
4. With regards to the usage policy of photo copies, fax machines and other equipment's users "POWER ON" when in use and "POWER OFF" when not in use.
5. The statement is issued in response to the query raised during Green audit

HOD
Computer Science
Smt.R.S.College,Anjangaon

PRINCIPAL
Smt.Radhabai Sarda Arts,
Commerce & Science College
Anjangaon Surji

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Eco friendly activity conducted

Data and report collected from Computer Science department exper

Conclusions

Green audit of Smt. Radhabai Sarda Arts, Commerce and Science College is conducted by Green Audit committee of the college for the academic session 2023-2024. Through the academic session all data, information, monitoring reading etc are collected, analyzed and following conclusions given by expert team.

1. All the rooms in Arts, Commerce and Science buildings of the college are airy and sunny and don't need electricity during the day time for lightening.
2. LED bulbs are used in all sections, buildings and department.
3. Sensor based solar light installed in the college campus.
4. LPG is handled in science building section for Chemistry and by Home Economics department for practical purpose.
5. Overall one well located near the running track, one tube well near the well and one corporation tap near the botanical garden in campus ful fill the overall need of water in college.
6. Rain water harvesting unit is installed on all the buildings in the college campus.
7. All the parameters of drinking water were within standard desirable limits of drinking water quality.
8. Small vermi composting unit is installed in college campus for the management of the biodegradable waste.
9. College arranged the events such as Cleanliness drive, Environmental awareness programme, plantation, Medicinal plant exhibitions Sapling preparation training to literate the students to minimize the waste production and maximize what is recycled or reused.
10. Waste bins are not placed at solid waste collection spots in different sections.
11. Loss of water through the leakage of tap, pipeline and overflow is observed at some places.
12. Green practices are seen in the college campus and are also confirmed from the reports of the programme organized.
13. Ecofriendly activity conducted in to save energy and confirmed by the report of Computer Science department.

Suggestions :

- As per the area of the campus there is need to initiate plantation programme in the college campus.
- Suggested to use solid waste of the campus specially dried leaves use for vermicomposting
- Ultimately, it is advised to make the use of Solar energy instead of the existing energy sources