

# Kukadi Education Society's Savitribai Colleg of Arts, Pimpalgaon Pisa Dist.-Ahmednagar

**GREEN AUDIT**2020-2021





"Vidya Vinayen Shobhate"

# KUKADI EDUCATION SOCIETY'S SAVITRIBAI COLLEGE OF ARTS,

PIMAPALGAON PISA, TAL-SHRIGONDA, DIST-AHMEDNAGAR (Maharashtra) Pin – 413703

# AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(ID/NO/PU/AN/A/58-1999)

# Vision

- To enable the student's to grow individually and develop their academic, social, moral and life skills.
- To empower them to face the global competition and contribute to local, national and internal development.

# Mission

- To provide education without discrimination to one and all.
- Technology transfer in rural area.
- Promotion of girl's education.
- Upliftment of economically backward class students and marginal students.

# **GREEN AUDIT REPORT: 2020-2021**

Principal's Message



I am pleased to offer my message on the occasion of the publication of Report of 'Green Audit'. It is really grateful to work in Savitribai College of Arts and to be a part of Kukadi Education Society. It is my honor and privilege to be writing to you as your Principal. This is the place where an education movement was motivated by Late Hon. Kundalikrao Ramrao Jagtap Patil which sowed the seeds of education in the soil of Pimpalgaon Pisa.

Students, I am aware that only infrastructure and impressive building do not create a desirable education. The powerful manpower with brilliant professional skills and sound knowledge of global world makes College perfect. Our teachers play an important role in creating ideal and unique students with scientific, democratic, spiritual and universal principles. Elevated moral values and positive sense of globalization should be of prime concern in our college. Our faculty have been presenting papers in nationalized and International conferences, and have published their effort in research journals of reputation. Our quality in academics and connected area has been acknowledged by NAAC committee.

Most importantly, environmental values inculcated in our students help to create environmental concern in the villages around the college. We also try to train our students to identify environmental opportunities with the activities like organic farming, fish farming, fodder development, optimal use of water for agriculture, etc.

Green Audit is useful for all of us to understand environmental resources in scientific way. The report would be useful for us for future development. Efforts made by our institution for the protection of environment and biodiversity conservation have been well appreciated in the audit. It encourages us for further strengthening environment of our campus in particular and the areas around in general. I express my heartfelt thanks to expert members of team carrying out Green Audit of our campus.

Principal
Dr. Shivaji Dhage

# Preface

Ramrao Jagtap Patil, Founder and Ex. President, Kukadi Education Society, Pimpalgaon Pisa. He was involved in tree plantation programmes for the last 40 years. Being visionary and committed to upliftment of weaker section of society he was always proactive for environmental conservation. He had demonstrated how eco-friendly campus can provide healthy and comfortable atmosphere for the school/college going students. It was his idea to carry out green audit for the campus of Savitribai College of Arts. We are happy to shoulder the responsibility.

Green audit of a college campus aims at understanding the present environmental status and to find out ways to internalize environmental issues which are well felt externally. It is also an attempt to develop initiative of all the stakeholders, viz. management, Principal, staff, students and parents to develop campus which ensures clean and green environment for learners. We also hope that such kind of exercise can develop environmental awareness among the families of students and in turn villages. With this vision in mind attempt has been made to document the green status of the campus adopting proper tools and methodology. For this, aspects like landscaping and plantation, solid waste management, recycling of waste water, conservation of energy, water conservation, rainwater harvesting and minimum usage of paper, E-Waste collection, segregation of wet and dry waste, etc. have been considered for our observations.

We are happy to note that the college exhibits almost all the aspects of "Green Campus" with participation of stakeholders in true sense of the term. It is well reflected in the activities like tree plantation with good phyto-diversity, organic farming, vermin culture, rain water harvesting, waste water management, green building, use of renewable resources etc.

Acknowlegements

We take this opportunity to express our gratitude towards the founder president of the

Institute Late Hon. Kundalikrao Ramrao Jagtap Patil, and his colleagues in the

management council. We also express sense of gratitude towards Honorable Ex. MLA Shri.

Rahuldada Kundalikrao Jagtap Patil, Secretary, Kukadi Education Society, Pimpalgaon

Pisa and College Development Committee of the college for their valuable guidance,

continuous encouragement, generous gift of time with constructive criticism and suggestion

during the composition of work of entire 'Green Audit Report-2020-2021.

We express our deep sense of gratitude to Prin. Dr. Shivaji Dhage who inspired and

encouraged us throughout the work. We gratefully acknowledge the help provided by them on

several occasions. The assistance provided by Vice Principal Dr. Shantilal Ghegade, Prof.

Babasaheb Pandarkar, Dr. Navanath Wajage, Dr. Devidas Shete and students proved to be

valuable to make the report in proper shape.

Place: Pimpalgaon Pisa

Date: 31/03/2021

Dr. Jyotiram C. More

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# **BIO-GEO CONSULTANCY**

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# Certificate

**GREEN AUDIT REPORT: 2020-2021** 

This is to certify that the GREEN AUDIT REPORT of 2020-2021 prepared by Bio-Geo Consultancy with due cooperation of the principal and staff of Kukadi Education Society's Savitribai College of Arts, Pimpalgaon Pisa, Tal.-Shriginda, District- Ahmednagar, India, is prepared by following appropriate procedures, methods, knowledge and expertise in the field of Environmental Sciences.

We were actively associated with the process of collecting data and documentation of trees, bushes, grass cover and soils causing carbon sequestration. I have also conducted workshops of students and teachers on methods of quantification of biomass and Environmental Green Audit.

I wish a great future to the college and expect that the students and staff would be enthused to reduce carbon footprint by adopting methods of conservation of soil, water, plants and energy within the college campus and in society as well.

Place: Pimpalgaon Pisa

Date: 31/03/2021

(Dr. Praveen G. Saptarshi)

Auditor

MAMMINIZ

(Dr. Jyotiram More) Coordinator

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# 1. About Pimpalgaon Pisa Village:

Pimpalgaon Pisa is a village in Shrigonda Tehsil in Ahmednagar district in the Indian state of Maharashtra. Shrigonda is located at 18.616°N 74.698°E. It has an average elevation of 561 meters (1840 feet). Per 2011 India census, The total population of Pimpalgaon Pisa is 6,700 out of which 3,550 are males and 3,150 are females thus the Average Sex Ratio of Pimpalgaon Pisa is 887. Pimpalgaon Pisa Pin Code is 413703. Pin Code is also known as Zip Code or Postal Code. Pimpalgaon Pisa is located in district Ahmednagar, Maharashtra, INDIA.

Office	Pimpalgaon Pisa		
Pin code	413703		
Taluka	Shrigonda		
Division	Ahmednagar		
District	Ahmednagar		
Region	Pune		
Circle	Maharashtra		
State	MAHARASHTRA		
Country	INDIA		
Related Sub Office	Visapur S.O. (Ahmednagar)		
Related Head Office	Ahmednagar H.O.		

Pimpalgaon Pisa is a village and a Gram Panchayat in Shrigonda tehsil of Ahmadnagar district in the Indian state of Maharashtra situated at 19.62 N, 74.66 E in western Maharashtra. Pimpalgaon Pisa is quite new as compared to other villages. The Central Railway (India) Pune-Manmad Line was being laid a railway station for the village Visapur was made which is nearly 3 km from the place where station was going to build. During this period people started living around the railway station. This area was considered as one of the major producers of sugarcane in the sugarcane belt in the state of Maharashtra. Over 03 to 04 sugarcane industries surrounded the Village make for a industrious economy. The rapid pace shown from 60s up to 80s slowed down and this Village, in spite of having tremendous merits, is far from having a much-awaited district status which was one time very much in its reach.

# 2. Location: Map

Savitribai College of Arts, Pimpalgaon Pisa, is located in Shrigonda Tahsil of Ahmednagar district. Google Map of Pimpalgaon Pisa.



# 3. Climate:

Shrigonda Tahsil has a tropical wet and dry climate with average temperatures ranging between 20 to 42 °C (68 to 108 °F). Shrigonda experiences three distinct seasons: Summer, Monsoon and Winter. Typical summer months are from March to May, with maximum temperatures ranging from 30 to 40 °C (86 to 104 °F). The warmest months in Shrigonda are April and May; the town often receives locally developed heavy thundershowers in the month of May (although humidity remains high). The town experiences rise in atmospheric pressure in mid October when temperatures range from 35 to 40 °C (95 to 104 °F).

	Climate data for Shrigonda Tahsil												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high	36.7	39.7	43,8	44.1	45.0	42.9	37.5	36.2	37.6	38.9	37.3	36.1	45.0
°C (°F)	(98.1)	(103.5)	(10.8)	(111.4)	(113)	(109.2)	(99.5)	(97.2)	(97.9)	(102.1)	(99.1)	(97)	(113)
Average	32.0	33.9	37.7	39.8	40.2	34.0	29.9	29.5	30.9	33.3	31.7	30.1	33.6
high °C (°F)	(89.6)	(93.1)	(99.9)	(103.7)	(104)	(93.2)	(85.8)	(85.1)	(87.62)	(91.9)	(89.1)	(86.2)	(92.5)
Daily mean	21.9	24.0	26.8	30.1	31.7	29.2	27.4	26.5	27.6	26,9	24.1	22.5	26.6
°C (°F)	(71.4)	(75.2)	(80.2)	(86.2)	(89.1)	(84.6)	(81.3)	(79.7)	(81.7)	(80.4)	(75.4)	(72.5)	(79.9)
Average	12.1	13.5	17.9	21.7	23.3	24.0	23.8	24.1	21.9	20.0	15.2	13.7	19.3
low °C (°F)	(53.8)	(56.3)	(64.2)	(71.1)	(73.9)	(75.2)	(74.9)	(75.4)	(71.4)	(68)	(59.4)	(56.7)	(66.7)
Record low	4.7	5.1	8.9	12.6	15.0	19.5	20.3	19.7	15.6	11.9	6.4	5.9	4.7
°C (°F)	(40.7)	(41.2)	(48)	(54.7)	(59)	(67.1)	(68.5)	(67.5)	(60.1)	(53.4)	(43.5)	(42.6)	(40.7)
Precipitation	0	0.1	1.2	9.9	20.4 (0.8)	75.8	99,4	65.7	62.1	42.6	14.8	2.1	394.1
mm (inches)	(0)	(0.004)	(0.05)	(0.39)		(2.98)	(3.91)	(2.59)	(2.44)	(1.68)	(0.58)	(0.58)	(15.52

Avg. precipitation days	0.0	0.01	0.05	0.3	1.1	5.9	9.5	7.6	- 5.3	2.1	1.0	0.2	33.06
% <u>humidity</u>	55	49	32	33	46	72	77	83	79	66	56	57	58.75
Mean monthly sunshine hours	290.0	281.1	304.8	312.5	327.7	172.0	118.1	105.8	189.7	265.6	295.1	299.3	2,961.7

Source #1: Temperature and Precipitation: IMD 1990-2015), Source #2: Sun hours and Humidity: NOAA (1991-2007)

# 4. Demographics:

Pimpalgaon Pisa is a village situated in Shrigonda taluka of Ahmadnagar district in Maharashtra. As per the Population Census 2011, there are total 1,508 families residing in the village Pimpalgaon Pisa. The total population of Pimpalgaon Pisa is 6,700 out of which 3,550 are males and 3,150 are females, thus the Average Sex Ratio of Pimpalgaon Pisa is 887.

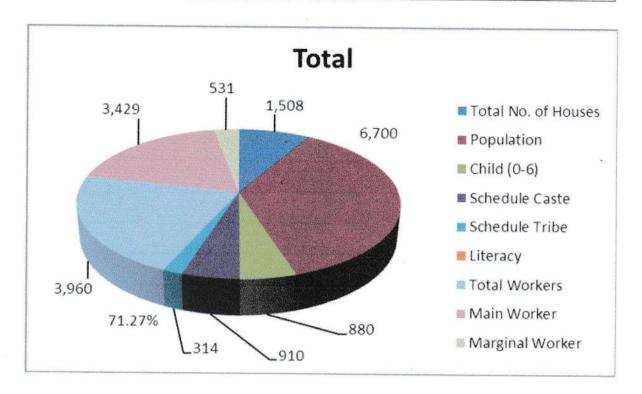
The population of Children of age 0-6 years in Pimpalgaon Pisa village is 880 which is 13% of the total population. There are 480 male children and 400 female children between the age 0-6 years. Thus, as per the Census 2011 the **Child Sex Ratio of Pimpalgaon Pisa** is 833 which is less than Average Sex Ratio (887) of Pimpalgaon Pisa village.

As per the Census 2011, the literacy rate of Pimpalgaon Pisa is 71.3%. Thus, Pimpalgaon Pisa village has higher literacy rate compared to 69.4% of Ahmadnagar district. The male literacy rate is 79.15% and the female literacy rate is 62.47% in Pimpalgaon Pisa village.

Pimpalgaon Pisa Religion Data 2011

Particulars	Total	Male	Female
Total No. of Houses	1,508	-	-
Population	6,700	3,550	3,150
Child (0-6)	880	480	400
Schedule Caste	910	481	429
Schedule Tribe	314	167	147
Literacy	71.27 %	79.15 %	62.47 %
Total Workers	3,960	2,156	1,804
Main Worker	3,429	-	_

Particulars	Total	Male	Female
Marginal Worker	531	122	409



# 5. Introduction:

Savitribai College of Arts, Pimpalgaon Pisa, established in 1999 leads 11200 sq. mts. area of campus, where with senior college there is administrative building, canteen, parking, college garden and playground. About 7000 population provided with facility of water, canteen, toilet, electricity.

Before establishment of this campus it was bare land, after construction of various building we develop greenery in surrounding area of the building, with keeping view to creates eco-friendly environment. In this campus we are aware about sustainable use of this campus, we undertake activities like landscaping and plantation, processing and reuse of solid waste of the plant debris and canteen, recycling of the waste water, rainwater harvesting, energy conservation, e-waste management keep the environment of the campus clean and fresh enhance educational environment.

Green audit is defined as it is ultimately about corporate responsibility. It is the process of assessing the environment impact of an organization, process, project, product etc. An examination of what a company is doing to prevent its business activities from harming the environment (Macmillan).

We are making green audit of campus and facilities to keep environment of college campus eco-friendly, we conduct following activities.

# 6. Objectives of the study:

The main objective of the green audit to promote the environment management and conservation in the college campus. The purpose of the audit is to identify, quantify, describe and priorities frame work of environment sustainability in compliance with the applicable regulations, policies and standards.

The main objectives of carrying out Green audit are.

- ➤ To introduce and aware students regarding importance of our surrounding environment and its protection.
- ➤ To secure the environment and minimize the threats posed to human health by analyzing the pattern and extent of resource use on the campus.
- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requires high cost.
- > To bring out a status report on environment due to the activities of the institution.
- > To find the innovative ideas to minimize the future threats to the environment.

# 7. Methodology:

In order to perform Green audit, the methodology included different tools such as survey of campus plant, physical inspections 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 summaries the present status of environment management in the campus;

- ➤ Water management
- > Energy conservation
- Waste management
- E-waste management
- Green area management

# 8. Landscape & Plantation:

Important Aim and objective of plantation are as below.

# Landscape:

#### Aim:

1) To develop campus eco-friendly.

2) To creates healthy environment for learning.

## Objectives:

- 1) Plants provides natural oxygen.
- 2) Plants keeps surrounding environment clean and cool.
- 3) Plants protect from dust which are collected on foliage.
- 4) Trapping of dust on leaves creates dust free environment in building.
- 5) Increase aesthetic view of the campus.
- 6) Plants are important as it creates natural habitat for birds and animal.

Landscaping: Landscape is an art to develop specific space of land into green with aesthetic view commonly called as 'beautification' Earlier our college campus land was a bare land. After establishment of the Savitribai College of Arts, Pimpalgaon Pisa, in year 1999 landscaping is done, 11200sq. mts. of land has various buildings such as classrooms, canteen, senior college, and toilets surrounding area of the building were bare land because of water scarcity it was very difficult to made campus green, it was disaster for us because without plants how this campus can breath after 20 years of efforts now our project developed as one of the Eco-friendly campus Whole campus is divided for specific type of plantation now in our campus green by planting of 38 species of plants. Students of Earn & Learn, N.S.S., Department of Botany and non-teaching staff take care of the campus and keep the campus green and clean.

#### Plantation:

#### Aims and Objectives:

- 1) To create healthy environment.
- 2) To develop the natural habitat in the campus.
- 3) Increase oxygen level of the campus.
- 4) Keep surrounding environment cool.
- 5) Plants give shade.
- 6) Plant gives natural habitat for birds and animals including micro-organism.

Plantation of plant sapling had been implemented as per location, different variety of plans are planted in various places with keeping aesthetic view and type of soil texture.

# 9. Location wise Survey of College Campus plants:

		Front Side of th	e C- Building	
Sr.No.	Marathi name	English Name	Botanical Name	Total No
1	Ashoka	Asoca	Saraca Asoca	6
2	Morpankhi	Thuja	Thuja Orientalis	3
3	Chikko	Sapodilla	Manikaru Zapota	1
			Total	10
		Front Side of th	e A- Building	
Sr.No.	Marathi name	English Name	Botanical Name	Total No
1	Ficus	Ficus	Ficus Benjamina	5
2	Ashoka	Asoca	Saraca Asoca	7
3	Jaswand	Hibiscus	Hibiscus Rosa	1
4	Morpankhi	Thuja	Thuja Orientalis	1
5	Kaneri	Kaner	Cascabela Thevetia	1
6	Jambhul	Jamun	Syzygium Cumin L	1
7	Sapatparni	Blackboard Tree	Alstonia Scholaris	2
8	Areca Palm	Areca Palm	Dypsis Lutescens	2
9	Fox Tail Palm	Fox Tail Palm	Wodyetia bifurcata	4
10	Palm Tree	Palm Tree	Encyclopedia Britannica	1
			Total	26
		Front Side of the	e B-Building	
Sr.No.	Marathi name	English Name	<b>Botanical Name</b>	Total No
1	Peru	Guava	Psidiun Guajava	2
2	Bottle Palm	Bottle Palm	Hyophorbe Lagenicaulis	3
3	Saptparni	Blackboard Tree	Alstonia Scholaris	2
4	Christmas Tree	X-mas Tree	Araucaria Columnaris	2
5	Areca Palm	Areca Palm	Dypsis Lutescens	2
6	Spari	Areca Palm	Areca Catechu	2
7			Terminalia	1
			Total	14
		Back Side of the l	Parking Area	
Sr.No.	Marathi name	<b>English Name</b>	<b>Botanical Name</b>	Total No
1	Naral	Coconut	Cocos Nucifera	5
2	Badam	Almond	Prunus Dulcis	1
3	Ficus	Ficus	Ficus Benjamina	1
			Total	07
		Front Side of the	Parking Area	

Sr.No.	Marathi name	English Name	Botanical Name	Total No
1	Ficus	Ficus	Ficus Benjamina	5
			Total	05
		Left Side of the Pa	arking Area	
Sr.No.	Marathi name	English Name	<b>Botanical Name</b>	Total No
1	Naral	Coconut	Cocos Nucifera	3
2	Ficus	Ficus	Ficus Benjamina	4
3	Peru	Guava	Psidiun Guajava	1
4	Badam	Almond	Prunus Dulcis	4
5	Fanus	Fackfruit	Artocarpus Heterophyllus	1
6	Awala	Indian Gooseberry	Phyllanthus Emblica	1
7	Ramfal	Wild Sweetsop	Annona Reticulata	1
8	Gulmohar	Delonix	Delonix Regia	1
9	Bottle Palm	Bottle Palm	Hyophorbe Lagenicaulis	1
10	Sontarwad	Sontarwad	Zingiber Officinale	1
			Total	18
		Right Side of B-	Building	
Sr. No.	Marathi name	English Name	Botanical Name	Total No
1	Vad	Banyan Tree	Ficus Benghalensis L	1
2	Ficus	Ficus	Ficus Benjamina	4
3	Peru	Guava	Psidiun Guajava	1
4	Suru	Whistling Pine Tree	Casuarina Equisetifolia	1
5	Ashoka	Asoca	Saraca Asoca	3
6	jaswand	Hibiscus	Hibiscus Rosa	1
7	Badam	Almond	Prunus Dulcis	4
8	Naral	Coconut	Cocos Nucifera	2
9	Bottle Palm	Bottle Palm	Hyophorbe Lagenicaulis	1
10	Amba	Mango	Mangifera Indica	2
11	Bakul	Spanish Cherry	Mimusops Elengi	2
12	Chinch	Tamarind	tamarindus Indica	1
			Total	23
		Right Side of the	Main Gate	
Sr. No.	Marathi name	English Name	<b>Botanical Name</b>	Total No
1	Nimb	Neam	Azadirachta indica	4
2	Sag	Teak	Tecona Grandis	1
3	Subabhul	River Tamarind	Leucanea Leucocephala	i
4	Gulmohar	Delonix	Delonixregia	2
5	Chinch	Tamarind	tamarindus Indica	1
6	Saptparni	Blackboard Tree	Alstonia Scholaris	3
7	Jaswand	Hibiscus	Hibiscus Rosa	2
8	Shevari	Nishinda	Sesbania Sesban	1
9	Ran Bhendi	Ran Bhendi	Abelnoschus Ficulneus	1

10	Kaneri	Kaner	Cascabela Thevetia	3
			Total	19
C	RANGE BUWE STRUMBER	Left Side of th		
Sr. No.	Marathi name	English Name	Botanical Name	Total No
1	Ashoka	Asoca	Saraca Asoca	1
2	Nimb	Neam	Azadirachta indica	3
3	Chinch	Tamarind	tamarindus Indica	6
4	Ran Bhendi	Ran Bhendi	Abelnoschus Ficulneus	2
5	Sag	Teak	Tecona Grandis	3
6	Nandrukh	Nandrukhi	Ficus Micro carpa	1 //
7	Areca Palm	Areca Palm	Dypsis Lutescens	1
			Total	17
		Right Side of the		
Sr. No.	Marathi name	English Name	Botanical Name	Total No
1	Vad	Banyan Tree	Ficus Benghalensis L	4
2	Nimb	Neam	Azadirachta indica	32
3	Kashid	Kashid	Senna Siamea	1
4	Shisam	Shisam	Dalbergia Sissoo	17
5	Karanja	Karanja	Nillettia Pinnata	1
6	Kaneri	Kaner	Cascabela Thevetia	1
7	Sontarwad	Sontarwad	Vachellia Niloeica	19
			Total	75
		Left Side of the C		
Sr.No.	Marathi name	English Name	Botanical Name	Total No
1	Sontarwad	Sontarwad	Vachellia Niloeica	35
2	Kashid	Kashid	Senna Siamea	17
3	Vad	Banyan Tree	Ficus Benghalensis L	6
4	Nimb	Neam	Azadirachta indica	42
5	Karanja	Karanja	Nillettia Pinnata	4
6	Subabhul	River Tamarind	Leucanea Leucocephala	2
			Total	106
		Left Side of the C		
Sr.No.	Marathi name	<b>English Name</b>	Botanical Name	Total No
1	Vad	Banyan Tree	Ficus Benghalensis L	2
2	Karanja	Karanja	Nillettia Pinnata	8
3	Nimb	Neam	Azadirachta indica	5
4	Shisam	Shisam	Dalbergia Sissoo	6
5	Sontarwad	Sontarwad	Vachellia Niloeica	2
6	Kashid	Kashid	Senna Siamea	25
			Total	48

			Right Side of the College Ground						
Sr. No.	Marathi name		<b>English Name</b>	<b>Botanical Name</b>		Total No			
	1	Nandrukh	Nandrukhi	Ficus micro carpa		1			
	2	Shisam	Shisam	Dalbergia Sissoo		7			
					Total	08			

10. Theme Localities

Sr. No.	Theme	Location	Plants
1	Oxygen rich	Throughout the Campus	Banyan tree, Neem
2	Beauty	Front of College Gate	Ficus, Hibiscus,.
3	Medicinal Plants	Campus	Neem, Jambul, Awala etc.
4	Climbers	Compound Wall	Gulvel, Gokarn.
5	Shade	Avenue in the Campus	Teak, Neem,Badam,Bakul,Chinch,Subabul,Saptparni,Ran Bhendi etc.
6	Avenue	College road	Ashoka, Sapatparni, Gulmohar, Nishinda, Karanja, Kaneri
7	Palms	Campus	Areca palm, fox-tail palm, Bottle palm, Coconut.
8	Gymnosperms	Campus	Thuja, X-mas tree, Morpankhi
9	Pteridophytes	Campus	Nephrolepis.

# \* RESULT AND CONCLUSIONS:

Savitribai College of Arts, Pimpalgaon Pisa, college campus is very rich in plant diversity creates healthy environment for day to day activity of the college.

There are 378 total number of the plants in college campus categorized into 38 species among them herb plants are dominant and next to it trees are dominant which is followed by shrub, climber, lianas.

#### Recommendations:

- 1) Select maximum indigenous species for plantation.
- 2) Maximize the watering system through the drip irrigation.
- 3) Find the new area for plantation in the college area or nearby campus of the college.

## 11. SOLID WASTE MANAGEMENT:

## Aim and objective:

- 1) Air pollution control.
- 2) Disposal of solid organic waste.
- 3) To control air, water, soil pollution.
- 4) Production of green manure and vermin compost.

#### Activity:

Solid Waste is the organic waste obtain from canting, fallen Leaves etc. produce in this campus If it is not disposed properly it creates air pollution, to avoid this we have implemented solid waste management activity, we run it at two level. **One** is decomposition of solid waste through the composting in pit, vermin-compost form solid organic waste and **Second** is training to the students about production of organic manure like vermin compost from the solid organic agricultural waste which ultimately conversion of 'Best from Waste', Further, the best biofertilizer is used for plants of college campus which enhances greenery leads environment clean and fresh.

#### Recommendations:

- 1) Use plant litter such as dry leaves for mulching around the planted pits.
- Encourage all student and staff member to minimize the of paper.
- 3) Reuse the one side waste paper for notes or rough draft or notice etc.

#### 12. WATER CONSERVATION:

Water conservation is very key activity. Water availability effects on the development of the campus as well as on all area of development such as farming, industries; etc With keeping this view water conservation activity is carried out. In college campus water conservation is done by Rain Water Harvesting

#### 13. RAIN WATER HARVESTING

Rain water harvesting (RWH) is a technique of collection and storage of rainwater into natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers (before it is lost as surface runoff). One method of rainwater harvesting is rooftop harvesting. With rooftop harvesting, most any surface — tiles, metal sheets, plastics, but not grass or palm leaf — can be used to intercept the flow of rainwater and provide a household with high-quality drinking water and year-round storage. Other uses include water for gardens, livestock, and irrigation, etc. The tanks also served as natural aquifers and helped recharge groundwater.

We are harvesting rain water by following method.

# Rain water harvesting for ground water recharge.

#### Aim and Objectives:

- 1) Conservation of rain water for future use.
- 2) To use rain water for gardening.

Activity: Conservation of rain water in soil or in a container is known as rain-water harvesting.

The rain water from entire college campus and roof top of building is flowing according to slope of ground in college campus is accumulates in different places. These natural sites are selected for rain water harvesting, ground water recharge, and bore well recharge.

#### RECYCLING OF LABORATORY AND DOMESTIC WASTE WATER

#### Aim and Objective:

- 1) Minimization of air and water pollution.
- To fulfill the requirement of water for gardening.
- 3) To minimize expenses on water for gardening.

#### Activity:

There is a lot of work done by the college for water conservation through the National Service Scheme. Therefore, water can be percolated and made available there in summer. Our research shows that wells and tube-wells that do not have water are increased.

#### Recomondation:

- 1) Maximise the activity of rain water harvesting on large scale.
- 2) Encourage and aware the student and staff for minimal use of water.

# 14. ENERGY CONSERVATION:

#### Aim and objective:

- 1) To save conventionally produce electric energy.
- 2) Use of non- conventional source of energy.
- 3) Use carbon neutral electricity.
- 4) Minimization of electric expenses.

# Activity:

Continuous power supply is the burning problem of the country, there is demand for electricity from agriculture, industrial and household sectors. We have implemented energy conservation programmes as below.

- 1) Use of CFL/LED Bulb, tube in the college building.
- Eco Friendly construction of College Building. No need of light on the day time and minimal use of fans.
- 3) We ensure that all electrical and electronic equipment such as computer are switched off when not in use and are generally confirmed in power saving mode and standby.
- Encourage and aware the student and staff regarding to switch off the electric button when not necessary.

In college building daily about 7 unit electricity is required, there is scarcity of electricity which is produce hydro power mechanism requires **fresh water** to generate it, and beside this it is cost ear, with keeping view to reduce use of fresh water for electricity and minimization of cost.

College has done energy audit report: With keeping view to conservation of the energy / electricity.

#### Recommendations: -

- Purchase the instrument/devices run with minimum consumption of energy i.e. environmentally sound appliances.
- 2) Still increase the solar panel.

# 15. E-WASTE MANAGEMENT:

# Aim and objective:

E-waste is the future coming environmental problem will create hazards to our environment, it is non-degradable waste can pollute water, soil and air.

With keeping this view, we are aware students and all staff about hazards effect of the e-waste on the health of man and ecosystem destruction, Waste material mainly metal, insulating materials present in the e-waste like CD, scrap mobile like devices, computer waste like monitor, CPU, mouse, Key board, cabel and unused pen drive etc. are collected and disposed in scientific method.

## Activity:

With keeping view to minimize the pollution created through the e-waste, we have carried out the scientific disposal of e-waste by two ways

- 1) Collection of e- waste in e- waste box and sale it to concerned firm for its disposal.
- 2) Reuse of the component of unused electronic devices in laboratory viz. Physics.

# Recommendation: -

 Encourage and aware the student staff and stakeholder regarding hazards effect of ewaste by notice, workshop organization etc.

# 16. Environment awareness program:

# Aim and objective:

- To plan, organize and implement programmes like landscape and plantation, water management & conservation, and rain water harvesting.
- To provide education that prepares students for leadership and social responsibility teaching them to think and communicate effectively and develop a global awareness.
- To introduce environmental education programmes for strengthen the existing ecological and environment related training infrastructure.
- 4) To provide consultancy to other institutions and organizations in for the establishment of similar institutions with a view to bringing sustainability.
- 5) To organize training programmes for vocationalisation of environmental careers.
- 6) To strengthen Global Environmental Education Programmes for standardization of greening activities.
- 7) To introduce environmental education programmes in strengthen the existing ecological and environment related training infrastructure.

- 8) To make special plans for the studies vermin culture, plantation, nursery development, water & energy conservation and management, rain water harvesting and other related fields.
- 9) To provide environmental education that prepares students for leadership and social responsibility by teaching them to think and communicate effectively and develop global environmental awareness and sensitivity. With keeping view to achieve aim and objective of the environmental program, we had implemented following activities.

# National Service Scheme (NSS):

# Aim and objective-

- 1) To create awareness about environment.
- 2) Activity: Tree plantation.
- 3) Swachh Bharat campaign
- 4) Slogan competition

#### Activity: -

Every Year our college organizes NSS camp in nearby village of college. During the camp various activities related to the environment are implemented such as plantation, cleaning drive etc.

# Paperless Technology:

#### Aim and objective:

- 1) Transaction without hard money.
- 2) Mobile Transactions
- 3) Easy and safe transactions.
- Paperless functioning leads to forest conservation.

#### Activity:

All the staff having Adhar Card, Debit or Credit Card, the same may be used for purchasing anything. Every department in our college having computer facility, we all mostly communicate with the student, staff members and stakeholders through the e-mail, messages, WhatsApp etc. in keeping the view of paperless technology

#### Recommendations: -

 Aware student and staff for minimum use of the paper with notice and monitoring the same. 2) Make scientific arrangement for the event organized in college campus such as cultural event, workshop, seminar, conferences, NSS camp etc. where significant recyclable waste is likely to be produced

## **Educational tours:**

# Aim and objective:

Making the students aware of about the nature and cultural heritage.

# Activity:

Every year we organized educational tour at different places for science as well as Geography for the study of various phenomenon, factor of surrounding environment and aware them regarding its importance in particular ecosystem.

## Recommendation: -

1) Involve maximum student in environment-based project and activities.

# Photo-Gallery College Campus View

































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