

SRIVASAVIENGINEERINGCOLLEGE(AUTONOMOUS)

(Sponsored by Sri Vasavi Educational Society)

(Approved by **AICTE**, New Delhi & Recognized by **UGC** under section **2(f) & 12(B)**) (Permanently affiliated to JNTUK, Kakinada, Accredited by **NBA** and **NAAC** with 'A' Grade) Pedatadepalli, **TADEPALLIGUDEM** – **534 101.** W.G.Dist. **(A.P)**

7.1.6 GREEN AUDIT REPORTS

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GREEN & ENVIRONMENT AUDIT REPORT



SRI VASAVI ENGINEERING COLLEGE, TADEPALLIGUDEM, 534101.



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1. INTRODUCTION:

The green audit aims to analyze environmental practices within and outside the university campuses, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. Itwas initiated with the motive of inspecting the effort within the institutions whose exercises can cause threatto the health of inhabitants and the environment. Through the green audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the green audit.

1.1 NEED FOR GREEN AUDITING

Green auditing is the process of identifying and determining whether institutions practices are eco-friendlyand sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in commonareas. Now, it is necessary to check whether our processes are consuming more than required resources? Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it into green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

1.2 GOALS OF GREEN AUDIT

University has conducted a green audit with specific goals as:

- 1. Identification and documentation of green practices followed by university.
- 2. Identify strength and weakness in green practices.
- 3. Analyze and suggest solution for problems identified.
- 4. Assess facility of different types of waste management.
- 5. Increase environmental awareness throughout campus
- 6. Identify and assess environmental risk.
- 7. Motivates staff for optimized sustainable use of available resources.

8. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

1.3 OBJECTIVES OF GREEN AUDIT

- 1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
- 2. To identify and analyze significant environmental issues.
- 3. Setup goal, vision, and mission for Green practices in campus.
- 4. Establish and implement Environment Management in various departments.
- 5. Continuous assessment for betterment in performance in green

1.4 BENEFITS OF GREEN AUDIT TO EDUCATIONAL INSTITUTIONS

There are many advantages of green audit to an Educational Institute:

- 1. It would help to protect the environment in and around the campus.
- 2. Recognize the cost saving methods through waste minimization and energy conservation.
- 3. Empower the organization to frame a better environmental performance.
- 4. It portrays good image of institution through its clean and green campus.

2. OBJECTIVE AND SCOPE

Sri Vasavi Engineering College is committed to environmental sustainability and responsible resource management. This Green & Environmental Practices Policy outlines our dedication to reducing our environmental impact, conserving resources, and fostering a culture of sustainability within our institution.

The key objectives of this policy are as follows:

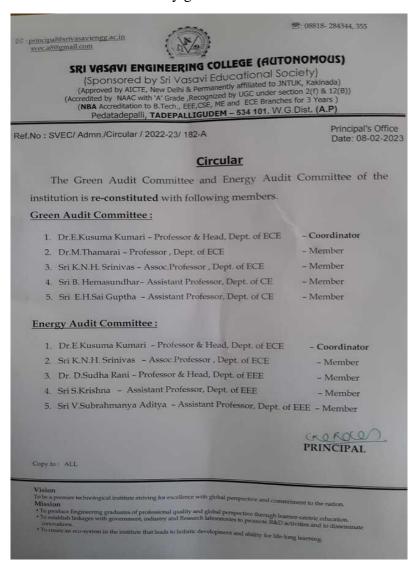
- 1. To reduce the college's ecological footprint and environmental impact.
- 2. To promote environmentally responsible practices among students, faculty, staff, and the entire college community.
- 3. To create a green campus that supports biodiversity, conservation, and environmental education.
- 4. To comply with relevant environmental laws and regulations.

Environmental Practices:

- 1. Students and faculty members are encouraged to adopt environmentally responsible practices in classrooms, offices, and laboratories.
- 2. The Institute will promote waste reduction, recycling, and responsible disposal practices.
- 3. Recycling bins will be available throughout the campus, and recycling programs will be established.

- 4. The college will implement water-saving measures, Awareness campaigns on water conservation will be conducted.
- 5. The college will maintain green spaces, promote biodiversity, and support tree planting and landscaping efforts. Protection of natural habitats will be a priority.
- 6. The college will conduct awareness campaigns, seminars, and workshops to educate the college community about green and environmental practices.
- 7. Environmental audits will be conducted to identify areas for improvement.
- 8. All members of the college community are responsible for adhering to this policy.
- 9. This policy will be periodically reviewed to assess its effectiveness and relevance.
- 10. Adjustments and revisions will be made as necessary to align with evolving environmental best practices and technologies.

Sri Vasavi Engineering College is dedicated to green and environmental practices. This Green & Environmental Practices Policy reflects our commitment to reducing our environmental footprint and promoting a culture of sustainability. We will work collaboratively to achieve our sustainability goals.



3. EXECUTIVE SUMMARY

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. This audit report contains observations and recommendations for improvement of environmental consciousness.

4. SVEC INFRASTRUCTURE

Details of trees and plants in campus

Table1: Large trees and small trees recorded from the campus (bounded)

Tree species recorded as a part of Bio diversity Survey				
S.No.	Common Name	Vernacular Name	Scientific Name	
1.	Edakula tree	ఏడాకులచెట్ుు	Alstoniascholarsis	
2.	Turaired	తురాయి	Luffaacutangular	
3.	Turaiyellow	తురాయి	Turmeric	
4.	Sitaphal	సీతాఫలం	Annonasquamosa	
5.	Neem	పేప	Azadirachtaindica	
6.	Fabaceae	ఫాబేసీ	Albiziachinensis	
7.	GoldenShower	ර් භ <u></u>	Cassiafistula	
8.	Papaya	బొప్పాయి	Caricapapaya	
9.	Coconut	కొబ్బరి చెట్టు	Cocosnucifera	
10.	Palmtree	తాట్ిచెట్ుబ	Arecaceae	
11.	Flameofforest	గుల్మొహర్	Delonixregia	
12.	Eucalyptus	జామాయిల్	Eucalyptusglobulus	
13.	Crapemyrtle	సొగస ులచ ెట్ుు	Lagerstroemia	
14.	Goldenbamboo	వెదురు	Phyllosstachysaurea	
15.	Bulletwood	బొగడ	Mimusopselengi	
16.	Foxtailpalm	ఫా్స్ట్ ్రె`లసా	Wodyetia	

		మ్	
17.	Drumstick	మ ునగచ ెట్ుట	Moringaoleifera
18.	Mango	మామిడి	Mangiferaindica
19.	Fishtailpalm	చేపతోకతాట్ి	Caryota
20.	FalseAsoka	అశోక	Polyalthialongifolia
21.	Rkpalmtree	తాటిచ ెట్ట	Chrysalidocarpus
22.	IndianGooseberry	ఉసిరి	Phyllanthusemblica
23.	IndianBeech	కానుగ	Pongamiapinnata
24.	Guava	జామ	Psidiumguajava
25.	Pomegranate	దానిమ్మ	Punicagranatum
26.	Nerium	గన్నేరుచెట్ుు	Neriumoleander
27.	JungleBadam	అడవి బాదాం	Sterculiafoetida
28.	Senna	సీమ తంగేడు	Sennasiamea
29.	Ficusprestige	ఫ_ెకస్	Ficusbenjaminareginald
30.	Jamun	న్నరేడు	Syzygiumcumini
31.	CrapeJasmine	నందివరనం	Tabernaemontanadivaricata
32.	IndianAlmond	బాదం	Terminaliacatappa
33.	Arjuna	తెలలమద్ిద	Terminaliaarjuna
34.	Teak	టేకు	Tectonagrandis
35.	YellowBells	సువర్ణ గస్పేరు	Tecomastans
36.	RoyalPalm	రాయల్ పామ్	Roystonearegia
37.	Duranthagold	దురంతఎరెక్ుా	Duranthaerecta
38.	Akalipabig	మురిపండి	Acalyphawikesiana
39.	Akalipharing	మురిపండి	Acalyphaindica
40.	Cycas	స్త్రిక్	Cycas

41.	Sitaasokatree	అశోకవృక్షం	Saracaasoca
42.	Neolamararckiacadamba	కదంబ	Antocephaluscadamba

Table2: Shrubs, climbers and Herbs recorded from the campus

Shrubs and Herbs species recorded			
S.I.	CommonName	VernacularName	ScientificName
1	CountryMallow	దుప్పెన బెండ	Abutilonindicum
2	Latjeera	ය త్తరేణి	Achyranthesaspera
3	Peacockflower	రత్నగంధి	Caesalpiniapulcherrima
4	Gourd(wild)	అడవి దొండ	Cocciniaindica
5	Spiderwort	లమృతకాడ	Commelinabenghalensis
6	Hibiscus	మందారం	Hlbiscusrosasinensis
7	Tulasi	తులసి	Ocimumtenuiflorum
8	Indigo	నీలిచెటు	Indigoferatinctoria
9	Lantana	తలంబ్రాల చెట్టు	Lantanacamara
10	Coatbuttons	గడి చామంతి	Tridaxprocumbens
11	Moon seed	తిప్పతీగ	Tinosporacordifolia

 $\label{thm:conditional} \textbf{Table 3: Grasses recorded from the campus} \\$

Grass species from the campus				
S.NO.	Common Name	Scientific Name		
1	Purplefalsebrome	Brachypodiumdistachyon		
2	BermudaGrass	Cynodonbarberi		
3	Stargrass	Cynodondactylon		
4	Basketgrass	Oplismenusburmannii		

Table 4: Medicinal Plants

S.No.	Common Name	Vernacular Name	Family
1.	Ficus racemose	బ్రహ్మమామిడి	Moraceae
2.	Pterocarpus santalinus	ఎర్రచందనం	Caesalpinaceae
3.	Pimenta diocia	మిరియం	Myrtaceae
4.	Trachyspermumammi	వాము	Apiaceae
5.	Eugenia jambolana	నేరేడు	Myrtaceae
6.	Emblica officinalis	ఉసిరి	Phyllanthaceae
7.	Gloriosa superaba	ఫ్లేమ్లిల్లి	Colchicaceae
8.	Pongamia pinnata	కానుగు	Leguminosae
9.	Aeglemarmelos correa	చికివెలగ	Rutaceae
10.	Cinnamomum zeylanicum	దాల్చినాచెక్క	Lauraceae
11.	Azadirachta indica	వేప	Myrtaceae
12.	Madhuca indica	ఇప్ప	Sapotaceae
13.	Eugenia caryophyllus	లవంగ	Myrtaceae
14.	Calotropis gigantea	జిల్లేడుపువ్వు	Asclepiadaceae
15.	Elaeocarpus sphaericus	రుదాక్ష	Elaeocarpaceae
16.	Citrus medica	నిమ్మ	Rutaceae
17.	Androgaphis paniculate	నిలవేము	Acanthaceae
18.	Tinospora cordifolia	మనపాల	Menispermaceae
19.	Piper longum	పిప్పళ్ళు	Piperaceae
20.	Limoniaacidissima	<u>ವ</u> ಲಗ	Rutaceae
21.	Carculogoorchioidis	గోలైన్ eyelగాస్	Hypoxidaceae
22.	Psoralea corylifolia	భావాంఛలు	Papilionaceae
23.	Rauwolfia serpentina	సర్పగంధ	Apocynaceae
24.	Prosopsis cineraria	జమ్మి	Fabaceae
25.	Gymnemasylvestre	పొడపత్రి	Asclepiadaceae

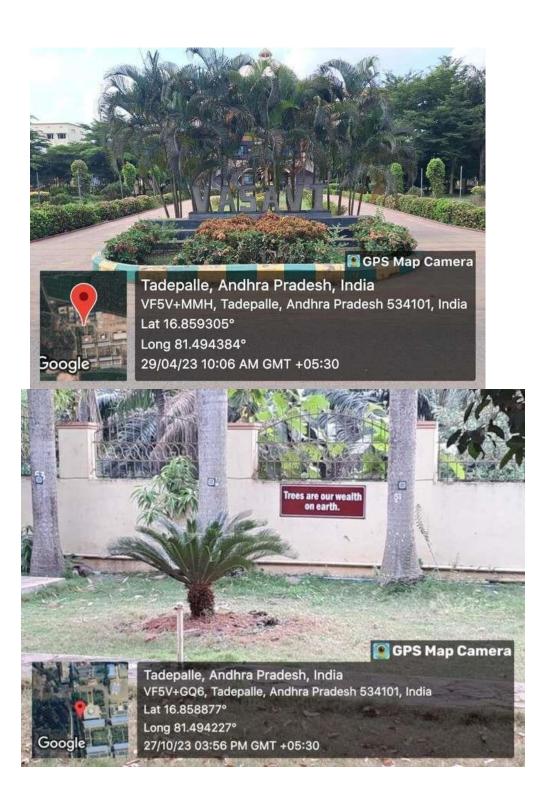
26.	Couroupitaguianensis	నాగమల్లి	Lecythidaceae
27.	Asparagus racemosus	శతావరి	Asparagaceae
28.	Butea monosperma	మోదుగు	<u>Fabaceae</u>
29.	Madhucaincica	ఇప్ప	Sapotaceae
30.	Aristolachia indica	(గాడిదగడప)తెల్లఈశ్వ రి	Aristolachiaceae
31.	Phyllanthus emblica	ఆమలకము	Phyllanthaceae
32.	Emblica Officinalis	ఉసిరి	Euphorbiaceae
33.	Centella asiatica	సరస్వతి	Mackinlayaceae
34.	Terminalia arjuna	ఎ(రమధ్ధి	Combretaceae
35.	Niolamarciacadamba	రుద్రాక్షకంబ	Rubiaceae
36.	Cedrus deodara	దేవదారు	Pinaceae
37.	Aegicerascorniculatum	గుగ్గిలం	Myrsinaceae
38.	Carissa spinarum	<i>§</i> විධ	Apocynaceae
39.	Carica papaya	బొప్పాయి	Caricaceae
40.	Psidium guajava	జామ	Myrtaceae
41.	Annona reticulata	సీతాఫలము	Annonaceae
42.	Strychnusnuxvomica	ముపిణి	Leguminaceae
43.	Piper nigram	మిరియాలు	Piperaceae

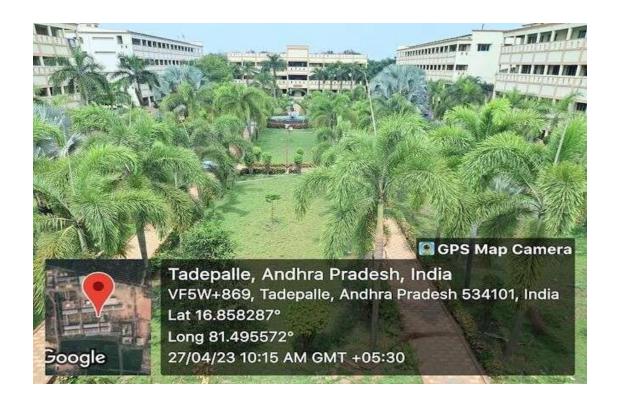
Medicinal Plants



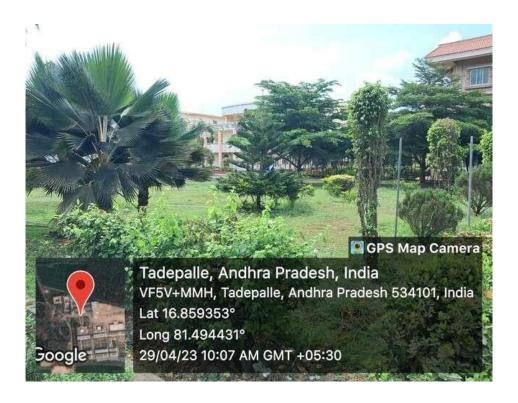


Greenery View





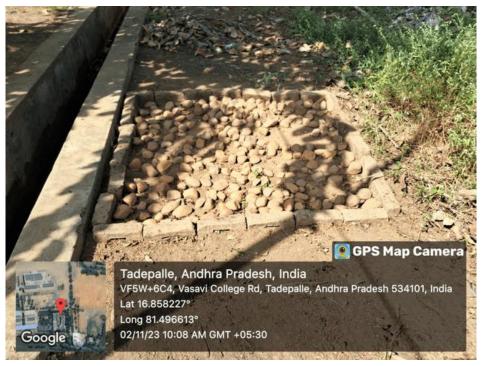




5. Rain water harvesting

The rain water harvesting strengthens the water supply to the campus lakes as well as enhance water level of wells in the campus through ground water recharging process.







RO PLANT



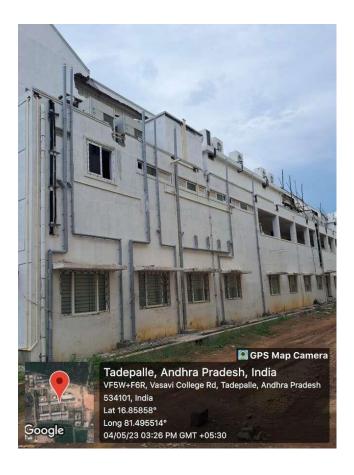




Drinking Water Point:

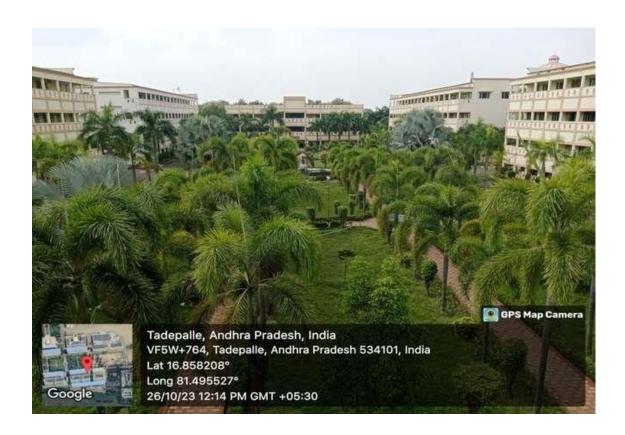


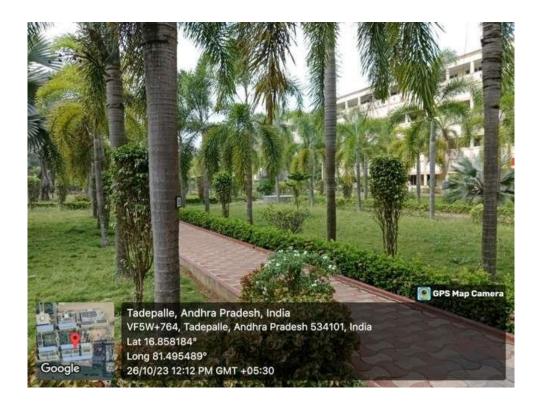
Water Distribution at Auditorium Block



Views of Greenery:



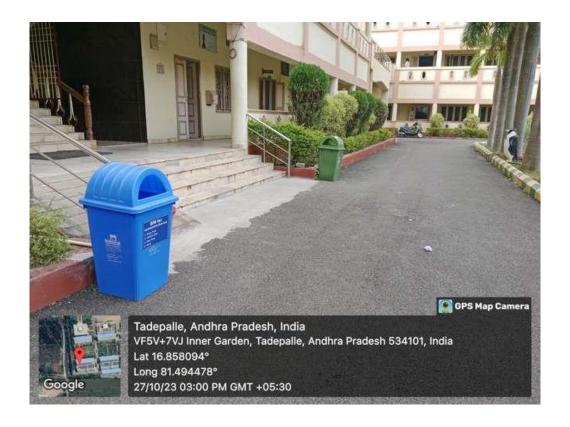




6. Waste Management:

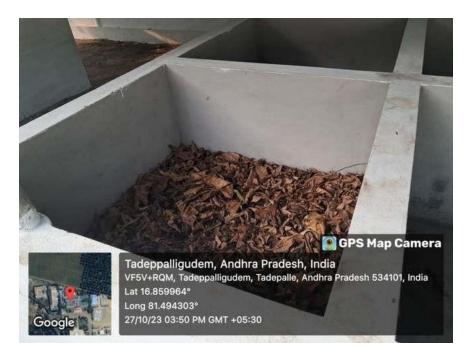
Solid Waste Management





Bio Degradable and non bio degradable wastes are collected using two separate Dustbins



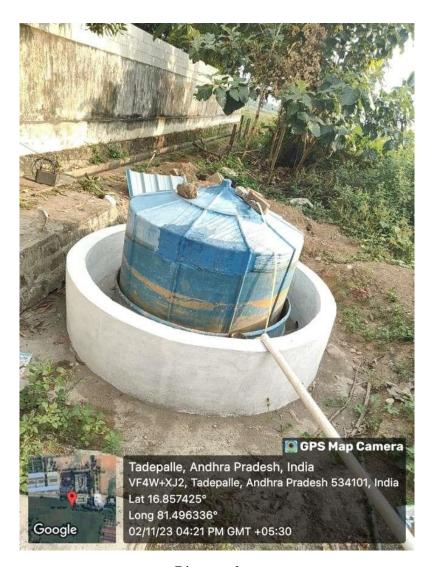


Vermicompost plant for solid waste management



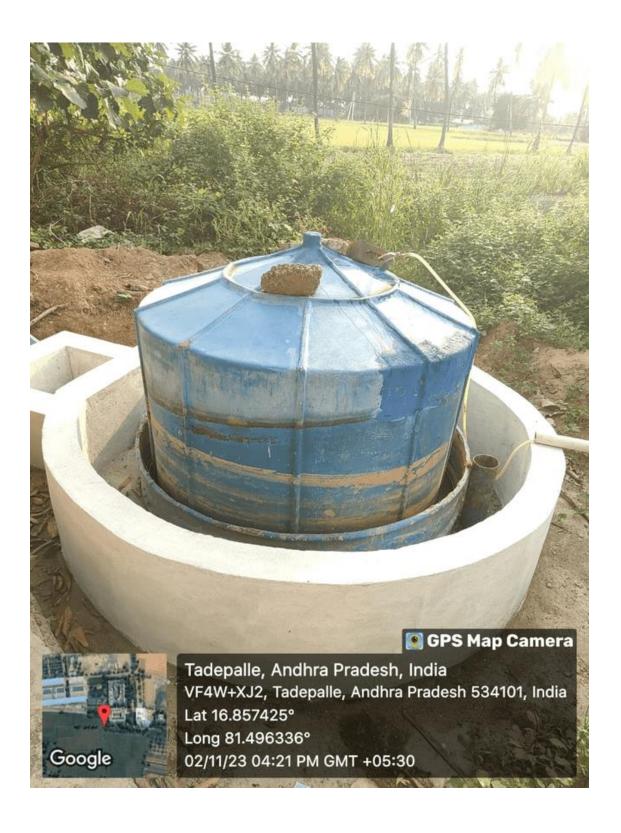


Organic waste collection process



Bio gas plant

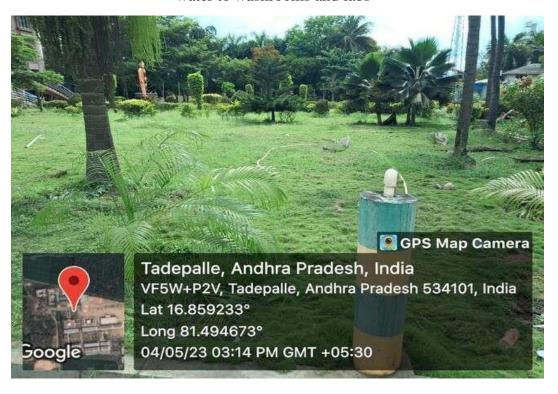
The bio gas plant at SVEC produces 35 to 40kg of biogas per day. The Bio degradable waste (food waste) of 10 to 15kg per day is required for the plant. The wastes are collected from college canteen and mess. The bio gas is utilized for canteen purpose.



Liquid Waste Management:



RO waste water to saved in tank for supplying water to washrooms and labs



RO Waste water supplied to Gardening



AC waste water supplied to plant

E-waste management:



Electropro E-Waste Refurbishing club at college premises



Training conducted by Electro Pro for selected students



E-Waste Segregation process



E-Waste Segregation process

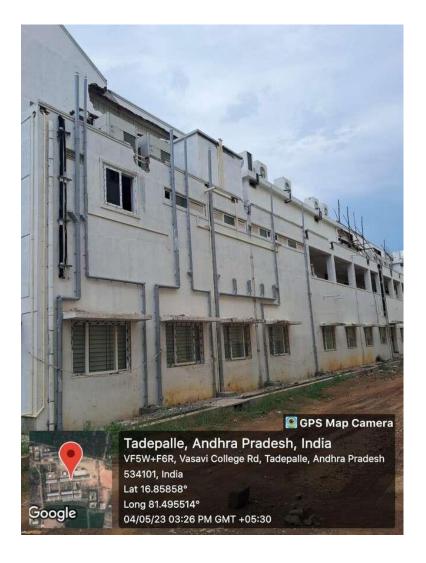


Making products from E-Waste

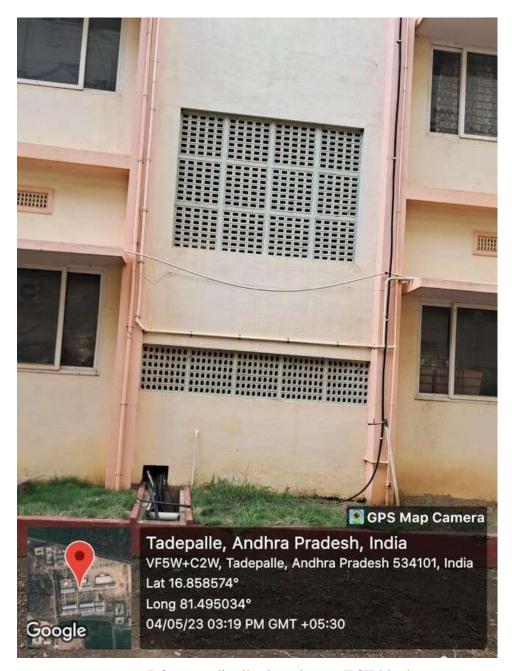
Water management:

Over head tanks in each block:

Well maintained over head tanks are constructed to supply water for various purposes like rest rooms, laboratories, etc., The capacity of over head tank in ECE block is 2000 liters



Water distribution pipes in Auditorium block



RO water distribution pipes at ECE block



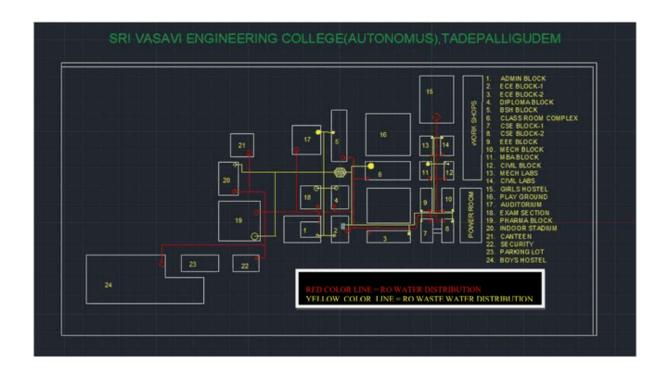
Sump with motor 3HP motor (2 numbers) are used to supply (Bore water) Auditor block

And BSH block wash areas.





Borewell-1 & 2 with 20HP Submersible pump



RO water distribution and RO- waste water distribution system at SVEC

Tank at SVEC for waste water treatment



Water tank with 50000 litres capacity



7. Observations:

- 1. The students and staff are aware of ban of plastic and implementing plastic ban policy in the campus.
- 2. The students and staff are parking their vehicles in parking areas only.
- 3. Campus cleaning and maintenance process including RO plant are done regularly.
- 4. It is observed that the bio gas plant near canteen is functioning and food wastes are utilized properly.
- 5. E-waste and paper waste track records are maintained properly.
- 6. NSS activities towards green initiatives in the campus are satisfactory.

8. Conclusions:

From the green audit following are the conclusions, which can be taken for improvement in the campus.

- Food waste generated in campus is mostly collected from dining areas & utilized for producing bio-gas.
- E-waste are segregated, handled and disposed properly in an ecofriendly manner.
- Reducing the use of one-time use plastic bottles, cups, folders, pens, bouquets, decorative items will be useful to solve the problem of plastic pollution to some extent.
- Rain water is collected from roof tops and used to recharge the ground water level.

9. Recommendations:

- 1. Number of sensor-based water conservation systems can be increased.
- 2. Waste water treatment plant should be installed in the campus.



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SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)

(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

Pedatadepalli, **TADEPALLIGUDEM – 534 101**, W.G. Dist, (A.P.)

Date: 28-04-2023

GREEN AUDIT REPORT

Objectives: To Conduct Green Audit for greenery, Water usage, Waste water treatment and reuse, including greenery, wastes management.

The Green Audit provides insights into the existing status of handling of tree plantation, shrubs, lawns and gardens maintenance and management. It also includes the different types of wastes produced in greenery maintenance in the campus and suggestions to improve, if any, and recommendations as per the 'Green Policy' of the institute to increase the green practices in the campus.

- Greenery Audit: This indicator addresses the Plantation in the open spaces and around the buildings within the campus, green landscape, gardening, lawns and parks management.
- Water and Wastewater Usage Audit: This indicator addresses water sources and usage, wastewater treatment and reuse, storm water management and rainwater harvesting, etc.
- Solid Waste Management Audit: This indicator addresses the solid waste generation and disposal method for various types of wastes: Fallen Leaves, Grass cuttings, Plant cuttings, etc.
- 4. Greenery Development, Maintenance and Management Plan: It Provides Suggestions and recommendations on the greenery growing and management of Sri Vasavi Engineering College Campus. It also suggests about which area is to be given priority and how to implement.

Green audit is being conducted on regular basis annually to maintain clean and green campus.

The audit committee visited various facilities and recorded the available data in the campus on **27-04-2023 from 9 A.M. to 5 P.M.** and interacted with the respective in-charges for managing water and wastewater, solid waste, energy and greenery area available. The committee has looked into different aspects of greening solutions and came out with the following finding and suggestions for further Improvement.

SVEC GREENERY PHOTOS



Greenery View at ECE Block-1



Greenery View at ECE Block-2



Greenery View between CSE-1 & ECE-1 Blocks



Greenery View at Admin Block

The college is spread over 35 acres in a beautiful and serene atmosphere ideally suited for quality based technical education. The infrastructure and facilities available on the campus are amongst the best.

Trees Enumeration:

The tree species were enumerated and the results are presented in Table - 1,2 & 3. The results indicated that there are nearly 300 trees and shrubs of which the first five species account for 64% of tree and these include Teak, Jamun, Neem, Peltophorum, Coconut and Pongamia trees and flowering shrubs like hibiscus, crape jasmine. The avenue plantations in the campus act as major habitat foravifauna.

Biomass of Trees:

Woody biomasses of the trees were estimated through ecological methods, and the top five species which were high in numbers have contributed significantly to the biomass.

Carbon Stocks:

With the tree biomass, the Carbon stocks in the campus lands were estimated using standard stock assessment methods based on the formula of Tree above C in ground biomass + C in Below ground Biomass + Soil Carbon. About 3974 tons of Carbon stocks are estimated to be in the campus greenery area. The scope of Biodiversity is good in the campus.

Table 1: Large trees and small trees recorded from the campus (bounded)

S.I.	Common Name	Vernacular Name	Scientific Name
1	Edakula tree	ఏడాకుల చెట్టు	Alstoniascholarsis
2	Turai red	తురాయి	Luffa acutangular
	Turai yellow	తురాయి	Turmeric
3	Sitaphal	సీతాఫలం	Annona squamosal
4	Neem	పేప	Azadirachta indica
5	Fabaceae	ఫాబేసీ	Albizia chinensis
6	Golden Shower	ਰੇਂਦਾ	Cassia fistula
7	Papaya	బొప్పాయి	Carica papaya
8	Coconut	కొబ్బరి చెట్టు	Cocos nucifera

9	Palm tree	తాటిచెట్టు	Arecaceae
10	Flame of forest	గుల్మొహర్	Delonix regia
11	Eucalyptus	జామాయిల్	Eucalyptus globulus
12	Crape myrtle	Ũ¹∕2	Lagerstroemia
13	Golden bamboo	బొంగు పెదురు	Phyllosstachysaurea
14	Bullet wood	ಖೆ'ಗಡ	Mimusopselengi
15	Foxtail palm	ఫాక్పటైల్	
16	Drumstick	మునగచెట్టు	Moringa oleifera
17	Mango	మామిడి	Mangifera indica
18	Fishtail palm	చేపతోకతాటి	Caryota
19	False Asoka	అశోక	Polyalthia longifolia
20	Rk palm tree	తాటి చెట్టు	Chrysalidocarpus
21	Indian Gooseberry	ఉసిరి	Phyllanthus emblica
22	Indian Beech	కానుగ	Pongamia pinnata
23	Guava	జామ	Psidium guajava
24	Pomegranate	దానిమ్మ	Punica granatum
25	Nerium	ನೆರೆఊಂ	Nerium oleander
26	Jungle Badam	అడవి బాదాం	Sterculia foetida
27	Senna	సీమ తంగేడు	Senna siamea
28	Ficus prestige	<u></u> ઢેડ	Ficus benjaminareginald
29	Jamun	జామున్ చెట్టు	Syzygiumcumini
30	Crape Jasmine	నందివరనం	Tabernaemontanadivaricat a
32	Indian Almond	బాదం	Terminalia catappa
33	Arjuna	తెల్ల మద్ది	Terminalia arjuna
34	Teak	టేకు	Tectona grandis
35	Yellow Bells	సువర్ణ గన్నేరు	Tecoma stans
37	Royal Palm	రాయల్ పామ్	Roystonea regia
38	Durantha gold	గొల్దెస్ దురంత	Duranthaerecta
39	Akalipa big	ఆకలిఫ బిగ్	Acalypha wikesiana
40	Akalipha ring	ఆకలిఫ బిగ్	Acalypha indica
41	Jani preece	ఝని ప్రీచె	Spondiasmombin
42	Cycas	సైకస్	Cycas
43	Sita asoka tree	అశోకవృక్షం	Saracaasoca
44	Neolamarckia Cadamba	కదంబకము	Antocephaluscadamba

Table2: Shrubs, climbers and Herbs recorded from the campus (excluding avenue plantations)

Shrub	Shrubs and Herbs species recorded		
S.I.	Common Name	Vernacular Name	Scientific Name
1	Country Mallow	దుప్పెన టెండ	Abutilon indicum
2	Latjeera	ස ජු ටි ශ්	Achyranthes aspera
3	Peacock flower	రత్నగంధి	Caesalpinia pulcherrima
4	Gourd (wild)	అడవి దొండ	Coccinia indica
5	Spiderwort	అమృతకాడ	Commelinabenghalensis
6	Hibiscus	మందారం	Hlbiscus rosa sinensis
7	Tulasi	తులిప	Ocimumtenuiflorum
8	Indigo	నీలిచెటు	Indigofera tinctoria
9	Lantana	తలంబ్రాల చెట్టు	Lantana camara
10	Coat buttons	గడి చామంతి	Tridax procumbens
11	Moon seed	తిప్పతీగ	Tinospora cordifolia

Table 3: Grasses recorded from the campus

Grass species from the campus			
S.I.	Common Name	Scientific Name	
1	Purple false brome	Brachypodiumdistachyon	
2	Bermuda Grass	Cynodonbarberi	
3	Star grass	Cynodondactylon	
4	Basketgrass	Oplismenusburmannii	

Based on the findings from the campus visit by the committee members, the following holistic suggestions on the greenery development, maintenance and management of the **Sri Vasavi Engineering College** campus are recommended.

 Solid waste components generated through grass and plant cuttings, bush trimmings and fallen leaves shall be shredded and composted effectively in the open air to reduce the period of composting. The composted material can be used as a biofertilizer for plants and trees on the campus.

- Medicinal plants need to be identified and planted all over the campus to create awareness among students and all the staff members about the Medicinal plants.
 Flowering plant species may be identified and grown throughout the campus wherever possible.
- The number of sensor-based water conservation systems can be increased.
- The students and staff are aware of the ban on plastic and implementing plastic ban policy on the campus.
- The students and staff have used the parking slots to park their vehicles

Campus cleaning and maintenance process was done regularly.

(Dr.E. KUSUMA KUMARI)

(Sri K.N.HARINIVAS)

(Sri E. HANUMAN SAI GUPTA)

(Dr.M. THAMARAI)

Gri B. HEMA SUNDAR)



(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

Pedatadepalli, **TADEPALLIGUDEM – 534 101,** W.G. Dist, (A.P.)

Date: 13-12-2022

GREEN AUDIT REPORT

Objectives: To Conduct Green Audit for greenery, Water usage, Waste water treatment and reuse, including greenery, wastes management.

The Green Audit provides insights into the existing status of handling of tree plantation, shrubs, lawns and gardens maintenance and management. It also includes the different types of wastes produced in greenery maintenance in the campus and suggestions to improve, if any, and recommendations as per the 'Green Policy' of the institute to increase the green practices in the campus.

- Greenery Audit: This indicator addresses the Plantation in the open spaces and around the buildings within the campus, green landscape, gardening, lawns and parks management.
- Water and Wastewater Usage Audit: This indicator addresses water sources and usage, wastewater treatment and reuse, storm water management and rainwater harvesting, etc.
- Solid Waste Management Audit: This indicator addresses the solid waste generation and disposal method for various types of wastes: Fallen Leaves, Grass cuttings, Plant cuttings, etc.
- 4. Greenery Development, Maintenance and Management Plan: It Provides Suggestions and recommendations on the greenery growing and management of Sri Vasavi Engineering College Campus. It also suggests about which area is to be given priority and how to implement.

Green audit is being conducted on regular basis annually to maintain clean and green campus.

The audit committee visited various facilities and recorded the available data in the campus on 12-12-2022 from 9 A.M. to 5 P.M. and interacted with the respective in-charges for managing water and wastewater, solid waste, energy and greenery area available. The committee has looked into different aspects of greening solutions and came out with the following finding and suggestions for further Improvement.

SVEC GREENARY PHOTOS



GREENARY VIEW AT ECE BLOCK



GREENARY VIEW AT EEE BLOCK



GREENARY VIEW AT DIPLOMA BLOCK

The college is spread over 35 acres in a beautiful and serene atmosphere ideally suited for quality based technical education. The infrastructure and facilities available on the campus are amongst the best.

Trees Enumeration:

The tree species were enumerated and the results are presented in Table - 1,2 & 3. The results indicated that there are nearly 300 trees and shrubs of which the first five species account for 64% of tree and these include Teak, Jamun, Neem, Peltophorum, Coconut and Pongamia trees and flowering shrubs like hibiscus, crape jasmine. The avenue plantations in the campus act as major habitat foravifauna.

Biomass of Trees:

Woody biomasses of the trees were estimated through ecological methods, and the top five species which were high in numbers have contributed significantly to the biomass.

Table 1: Large trees and small trees recorded from the campus (bounded)

S.I.	Common Name	Vernacular Name	Scientific Name
1	Edakula tree	ఏడాకుల చెట్టు	Alstoniascholarsis
2	Turai red	తురాయి	Luffa acutangular
	Turai yellow	తురాయి	Turmeric
3	Sitaphal	సీతాఫలం	Annona squamosal
4	Neem	పేప	Azadirachta indica
5	Fabaceae	ఫాబేసీ	Albizia chinensis
6	Golden Shower	రేలా	Cassia fistula
7	Papaya	బొప్పాయి	Carica papaya
8	Coconut	కొబ్బరి చెట్టు	Cocos nucifera
9	Palm tree	తాటిచెట్టు	Arecaceae
10	Flame of forest	గుల్మొహర్	Delonix regia
11	Eucalyptus	జామాయిల్	Eucalyptus globulus
12	Crape myrtle	Ű ¹ / ₂	Lagerstroemia
13	Golden bamboo	బొంగు పెదురు	Phyllosstachysaurea
14	Bullet wood	బొగడ	Mimusopselengi
15	Foxtail palm	ఫాక్స్టటైల్	
16	Drumstick	మునగచెట్టు	Moringa oleifera
17	Mango	మామిడి	Mangifera indica
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20	Rk palm tree	ತಾಟಿ ವಿಟ್ಲು	Chrysalidocarpus
21	Indian Gooseberry	ఉసిరి	Phyllanthus emblica
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23	Guava	జామ	Psidium guajava
24	Pomegranate	దానిమ్మ	Punica granatum
25	Nerium	నెరిఊం	Nerium oleander
26	Jungle Badam	అడవి బాదాం	Sterculia foetida
27	Senna	సీమ తంగేడు	Senna siamea
28	Ficus prestige	<u></u> ইুS	Ficus benjaminareginald
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30	Crape Jasmine	నందివరనం	Tabernaemontanadivaricat
32	Indian Almond	బాదం	Terminalia catappa

33	Arjuna	తెల్ల మద్ది	Terminalia arjuna
34	Teak	టేకు	Tectona grandis
35	Yellow Bells	సువర్ణ గస్నేరు	Tecoma stans
37	Royal Palm	రాయల్ పామ్	Roystonea regia
38	Durantha gold	గొల్దెస్ దురంత	Duranthaerecta
39	Akalipa big	ఆకలిఫ బిగ్	Acalypha wikesiana
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41	Jani preece	ఝని ప్రీచె	Spondiasmombin
42	Cycas	సైకస్	Cycas
43	Sita asoka tree	అశోకవృక్షం	Saracaasoca
44	Neolamarckia Cadamba	కదంబకము	Antocephaluscadamba

Table2: Shrubs, climbers and Herbs recorded from the campus (excluding avenue plantations)

Shrub	Shrubs and Herbs species recorded			
S.I.	Common Name	Vernacular Name	Scientific Name	
1	Country Mallow	దుప్పెన బెండ	Abutilon indicum	
2	Latjeera	් ජුටිශ්	Achyranthes aspera	
3	Peacock flower	రత్నగంధి	Caesalpinia pulcherrima	
4	Gourd (wild)	అడవి దొండ	Coccinia indica	
5	Spiderwort	అమృతకాడ	Commelinabenghalensis	
6	Hibiscus	మందారం	Hlbiscus rosa sinensis	
7	Tulasi	తాలిు	Ocimumtenuiflorum	
8	Indigo	నీలిచెటు	Indigofera tinctoria	
9	Lantana	తలంబ్రాల చెట్టు	Lantana camara	
10	Coat buttons	గడి చామంతి	Tridax procumbens	
11	Moon seed	తిప్పత <u>ీ</u> గ	Tinospora cordifolia	

Table 3: Grasses recorded from the campus

Grass sp	Grass species from the campus			
S.I.	Common Name	Scientific Name		
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4	Basketgrass	Oplismenusburmannii		

Based on the findings from the campus visit by the committee members, the following holistic suggestions on the greenery development, maintenance and management of the **Sri Vasavi Engineering College** campus are recommended.

- Solid waste components generated through grass and plant cuttings, bush trimmings and fallen leaves shall be shredded and composted effectively in the
- open air to reduce the period of composting. The composted material can be used as a bio-fertilizer for plants and trees on the campus.
- Medicinal plants need to be identified and planted all over the campus to create
 awareness among students and all the staff members about the Medicinal plants.
 Flowering plant species may be identified and grown throughout the campus
 wherever possible.
- The number of sensor-based water conservation systems can be increased.
- The students and staff are aware of the ban on plastic and implementing plastic ban policy on the campus.
- The students and staff have used the parking slots to park their vehicles.
- Campus cleaning and maintenance process was done regularly.
- Maintenance supervisor is advised to maintain a track of paper and other waste disposal and management.

(Dr. E. KUSUMA KUMARI)

(Sri K.N.H. RHYVAS)

(Sri. G. RADHAKRISHNAN)

(Dr. M. THAMARAI)

(Dr.M.V.RAMESH)



(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

Pedatadepalli, **TADEPALLIGUDEM – 534 101,** W.G. Dist, (A.P.)

Date: 26-11-2021

GREEN AUDIT REPORT

Objectives: To Conduct Green Audit for greenery, Water usage, Waste water treatment and reuse, including greenery, wastes management.

The Green Audit provides insights into the existing status of handling of tree plantation, shrubs, lawns and gardens maintenance and management. It also includes the different types of wastes produced in greenery maintenance in the campus and suggestions to improve, if any, and recommendations as per the 'Green Policy' of the institute to increase the green practices in the campus.

- Greenery Audit: This indicator addresses the Plantation in the open spaces and around the buildings within the campus, green landscape, gardening, lawns and parks management.
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- 4. Greenery Development, Maintenance and Management Plan: It Provides Suggestions and recommendations on the greenery growing and management of Sri Vasavi Engineering College Campus. It also suggests about which area is to be given priority and how to implement.

Green audit is being conducted on regular basis annually to maintain clean and green campus.

The audit committee visited various facilities and recorded the available data in the campus on **25-11-2021 from 9 A.M. to 5 P.M.** and interacted with the respective in-charges for managing water and wastewater, solid waste, energy and greenery area available. The committee has looked into different aspects of greening solutions and came out with the following finding and suggestions for further Improvement.

The college is spread over 35 acres in a beautiful and serene atmosphere ideally suited for quality based technical education. The infrastructure and facilities available on the campus are amongst the best.

Trees Enumeration:

The tree species were enumerated and the results are presented in Table - 1,2 & 3. The results indicated that there are nearly 300 trees and shrubs of which the first five species account for 64% of tree and these include Teak, Jamun, Neem, Peltophorum, Coconut and Pongamia trees and flowering shrubs like hibiscus, crape jasmine. The avenue plantations in the campus act as major habitat foravifauna.

Biomass of Trees:

Woody biomasses of the trees were estimated through ecological methods, and the top five species which were high in numbers have contributed significantly to the biomass.

Table 1: Large trees and small trees recorded from the campus (bounded)

S.I.	Common Name	Vernacular Name	Scientific Name
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2	Turai red	తురాయి	Luffa acutangular
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3	Sitaphal	సీతాఫలం	Annona squamosal
4	Neem	<u>పే</u> ప	Azadirachta indica
5	Fabaceae	ఫాబేసీ	Albizia chinensis
6	Golden Shower	రేలా	Cassia fistula
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14	Bullet wood	బొగడ	Mimusopselengi
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16	Drumstick	మునగచెట్టు	Moringa oleifera Page

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47	Managa	మామిడి	NA Ye
17	Mango	5.4. c6.4	Mangifera indica
18	Fishtail palm	చేపతోకతాటి లశోక	Caryota
19	False Asoka	9 75	Polyalthia longifolia
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Based on the findings from the campus visit by the committee members, the following holistic suggestions on the greenery development, maintenance and management of the **Sri Vasavi Engineering College** campus are recommended.

Solid waste components generated through grass and plant cuttings, bush trimmings
and fallen leaves shall be shredded and composted effectively in the open air to
reduce the period of composting. The composted material can be used as a biofertilizer for plants and trees on the campus.

- A few new landscapes that were already developed may need to be planted with new
 plant species to enhance the aesthetic value of these places. Further landscaping at
 appropriate locations may be developed to increase the greenery.
- Medicinal plants need to be identified and planted all over the campus to create awareness among students and all the staff members about the Medicinal plants. Flowering plant species may be identified and grown throughout the campus wherever possible.
- The number of sensor-based water conservation systems can be increased.
- The students and staff are aware of the ban on plastic and implementing plastic ban policy on the campus.
- The students and staff have used the parking slots to park their vehicles.
- It is observed that the biogas plant near the canteen is not functioning and the committee suggested making it ready for usage.
- Campus cleaning and maintenance process was done regularly.
- Maintenance supervisor is advised to maintain a track of paper and other waste disposal and management.
- Biological waste generated in the kitchen and other places of the campus may be utilized properly.

Ellwallme (Dr. E. KUSUMA KUMARI)

(Sri K.N.M. RINIVAS)

(Sri. G. RADHAKRISHNAN)

(Dr.M. THAMARAI)

(Dr.M.V.RAMESH)



(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

Pedatadepalli, **TADEPALLIGUDEM – 534 101**, W.G. Dist, (A.P.)

Date: 16-12-2020

GREEN AUDIT REPORT

Objectives: To Conduct Green Audit for greenery, Water usage, Waste water treatment and reuse, including greenery, wastes management.

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Green audit is being conducted on regular basis annually to maintain clean and green campus.

The audit committee visited various facilities and recorded the available data in the campus on **15-12-2020 from 9 A.M. to 5 P.M.** and interacted with the respective in-charges for managing water and wastewater, solid waste, energy and greenery area available. The committee has looked into different aspects of greening solutions and came out with the following finding and suggestions for further Improvement.

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2	Turai red	తురాయి	Luffa acutangular
	Turai yellow	తురాయి	Turmeric
3	Sitaphal	సీతాఫలం	Annona squamosal
4	Neem	<u>వ</u> ేప	Azadirachta indica
5	Fabaceae	ఫాబేసీ	Albizia chinensis
6	Golden Shower	రేలా	Cassia fistula
7	Papaya	బొప్పాయి	Carica papaya
8	Coconut	కొబ్బరి చెట్టు	Cocos nucifera
9	Palm tree	తాటిచెట్టు	Arecaceae
10	Flame of forest	గుల్మొహర్	Delonix regia
11	Eucalyptus	జామాయిల్	Eucalyptus globulus
12	Crape myrtle	Ũ¹⁄2	Lagerstroemia
13	Golden bamboo	బొంగు పెదురు	Phyllosstachysaurea
14	Bullet wood	బొగడ	Mimusopselengi
15	Foxtail palm	ఫాక్ <u>పట</u> ెల్	
16	Drumstick	మునగచెట్టు	Moringa oleifera Page

17	Mango	మామిడి	Mangifera indica
18	Fishtail palm	చేపతోకతాటి	Caryota
19	False Asoka	అశోక	Polyalthia longifolia
20	Rk palm tree	తాటి చెట్టు	Chrysalidocarpus
21	Indian Gooseberry	ఉసిరి	Phyllanthus emblica
22	Indian Beech	కానుగ	Pongamia pinnata
23	Guava	జామ	Psidium guajava
24	Pomegranate	దానిమ్మ	Punica granatum
25	Nerium	నెరిఊం	Nerium oleander
26	Jungle Badam	అడవి బాదాం	Sterculia foetida
27	Senna	సీమ తంగేడు	Senna siamea
28	Ficus prestige	್ಷiS	Ficus benjaminareginald
29	Jamun	జామున్ చెట్టు	Syzygiumcumini
30	Crape Jasmine	నందివరనం	Tabernaemontanadivaricat a
32	Indian Almond	బాదం	Terminalia catappa
33	Arjuna	తెల్ల మద్ది	Terminalia arjuna
34	Teak	టేకు	Tectona grandis
35	Yellow Bells	సువర్ణ గస్నేరు	Tecoma stans
37	Royal Palm	రాయల్ పామ్	Roystonea regia
38	Durantha gold	గొల్దెస్ దురంత	Duranthaerecta
39	Akalipa big	ఆకలిఫ బిగ్	Acalypha wikesiana
40	Akalipha ring	ఆకలిఫ బిగ్	Acalypha indica
41	Jani preece	ఝని ప్రీచె	Spondiasmombin
42	Cycas	సైకస్	Cycas
43	Sita asoka tree	అశోకవృక్షం	Saracaasoca
44	Neolamarckia Cadamba	కదంబకము	Antocephaluscadamba

Table2: Shrubs, climbers and Herbs recorded from the campus (excluding avenue plantations)

Shrub	Shrubs and Herbs species recorded		
S.I.	Common Name	Vernacular Name	Scientific Name
1	Country Mallow	దుప్పెన బెండ	Abutilon indicum
2	Latjeera	ස ජු ටි ශී	Achyranthes aspera
3	Peacock flower	రత్నగంధి	Caesalpinia pulcherrima
4	Gourd (wild)	అడవి దొండ	Coccinia indica
5	Spiderwort	అమృతకాడ	Commelinabenghalensis
6	Hibiscus	మందారం	Hlbiscus rosa sinensis
7	Tulasi	తాలి	Ocimumtenuiflorum
8	Indigo	నీలిచెటు	Indigofera tinctoria
9	Lantana	తలంబ్రాల చెట్టు	Lantana camara
10	Coat buttons	గడి చామంతి	Tridax procumbens
11	Moon seed	తిప్పతీగ	Tinospora cordifolia

Table 3: Grasses recorded from the campus

Grass species from the campus			
S.I.	Common Name	Scientific Name	
1	Purple false brome	Brachypodiumdistachyon	
2	Bermuda Grass	Cynodonbarberi	
3	Star grass	Cynodondactylon	
4	Basketgrass	Oplismenusburmannii	

Based on the findings from the campus visit by the committee members, the following holistic suggestions on the greenery development, maintenance and management of the **Sri Vasavi Engineering College** campus are recommended.

 Solid waste components generated through grass and plant cuttings, bush trimmings, and fallen leaves shall be shredded and composted effectively in the open air to reduce the period of composting. The composted material can be used as a bio-fertilizer for plants and trees on the campus.

- A few new landscapes that were already developed may need to be planted with new plant species to enhance the aesthetic value of these places. Further landscaping at appropriate locations may be developed to increase the greenery.
- Medicinal plants need to be identified and planted all over the campus to create awareness among students and all the staff members about the Medicinal plants. Flowering plant species may be identified and grown throughout the campus wherever possible.
- The students and staff are aware of the ban on plastic and implementing the plastic ban policy on the campus.
- The students and staff are parking their vehicles in parking areas only.
- It is observed that the biogas plant near the canteen is not functioning and the committee suggested making it ready for usage.
- Campus cleaning and maintenance process done regularly.
- Maintenance supervisor is advised to maintain a track of paper and other waste disposal and management.

(Dr.E. KUSUMA KUMARI)

(Sri K.NH.SRINIVAS)

(Sri. G. RADHAKRISHNAN)

(Dr.M. THAMARAI)

(Dr.M.V.RAMESH)

(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada Pedatadepalli, **TADEPALLIGUDEM – 534 101**, W.G. Dist, (A.P.)

Date: 24-10-2019

GREEN AUDIT REPORT

Objectives: To Conduct Green Audit for greenery, Water usage, Waste water treatment and reuse, including greenery, wastes management.

The Green Audit provides insights into the existing status of handling of tree plantation, shrubs, lawns and gardens maintenance and management. It also includes the different types of wastes produced in greenery maintenance in the campus and suggestions to improve, if any, and recommendations as per the 'Green Policy' of the institute to increase the green practices in the campus.

- Greenery Audit: This indicator addresses the Plantation in the open spaces and around the buildings within the campus, green landscape, gardening, lawns and parks management.
- 2. Water and Wastewater Usage Audit: This indicator addresses water sources and usage, wastewater treatment and reuse, storm water management and rainwater harvesting, etc.
- 3. **Solid Waste Management Audit:** This indicator addresses the solid waste generation and disposal method for various types of wastes: Fallen Leaves, Grass cuttings, Plant cuttings, etc.
- 4. Greenery Development, Maintenance and Management Plan: It Provides Suggestions and recommendations on the greenery growing and management of Sri Vasavi Engineering College Campus. It also suggests about which area is to be given priority and how to implement.

Green audit is being conducted on regular basis annually to maintain clean and green campus.

The audit committee visited various facilities and recorded the available data in the campus on **23-10-2019 from 9 A.M. to 5 P.M.** and interacted with the respective in-charges for managing water and wastewater, solid waste, energy and greenery area available. The committee has looked into different aspects of greening solutions and came out with the following finding and suggestions for further Improvement.

The college is spread over 35 acres in a beautiful and serene atmosphere ideally suited for quality based technical education. The infrastructure and facilities available on the campus are amongst the best.

Trees Enumeration:

The tree species were enumerated and the results are presented in Table - 1,2 & 3. The results indicated that there are nearly 300 trees and shrubs of which the first five species account for 64% of tree and these include Teak, Jamun, Neem, Peltophorum, Coconut and Pongamia trees and flowering shrubs like hibiscus, crape jasmine. The avenue plantations in the campus act as major habitat foravifauna.

Biomass of Trees:

Woody biomasses of the trees were estimated through ecological methods, and the top five species which were high in numbers have contributed significantly to the biomass.

Table 1: Large trees and small trees recorded from the campus (bounded)

S.I.	Common Name	Vernacular Name	Scientific Name
1	Edakula tree	ఏడాకుల చెట్టు	Alstoniascholarsis
2	Turai red	తురాయి	Luffa acutangular
	Turai yellow	తురాయి	Turmeric
3	Sitaphal	సీతాఫలం	Annona squamosal
4	Neem	పే ప	Azadirachta indica
5	Fabaceae	ఫాబేసీ	Albizia chinensis
6	Golden Shower	రేలా	Cassia fistula
7	Papaya	బొప్పాయి	Carica papaya
8	Coconut	కొబ్బరి చెట్టు	Cocos nucifera
9	Palm tree	తాటిచెట్టు	Arecaceae
10	Flame of forest	ಗುಲ್ಮೌ ಘರ್	Delonix regia
11	Eucalyptus	జామాయిల్	Eucalyptus globulus
12	Crape myrtle	Ũ¹∕2	Lagerstroemia
13	Golden bamboo	బొంగు పెదురు	Phyllosstachysaurea

14	Bullet wood	బొగడ	Mimusopselengi
15	Foxtail palm	ఫాక్\టైల్	······································
16	Drumstick	మునగచెట్టు	Moringa oleifera
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Table2: Shrubs, climbers and Herbs recorded from the campus (excluding avenue plantations)

Shrub	Shrubs and Herbs species recorded		
S.I.	Common Name	Vernacular Name	Scientific Name
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7	Tulasi	తాలి	Ocimumtenuiflorum
8	Indigo	నీలిచెటు	Indigofera tinctoria
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10	Coat buttons	గడి చామంతి	Tridax procumbens
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(Dr.E. KUSUMA KUMARI)

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(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

Pedatadepalli, **TADEPALLIGUDEM – 534 101**, W.G. Dist, (A.P.)

Date: 18-12-2018

GREEN AUDIT REPORT

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Green audit is being conducted on regular basis annually to maintain clean and green campus.

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- A few new landscapes that were already developed may need to be planted with new
 plant species to enhance the aesthetic value of these places. Further landscaping at
 appropriate locations may be developed to increase the greenery.
- Medicinal plants need to be identified and planted all over the campus to create awareness among students and all the staff members about the Medicinal plants.
 Flowering plant species may be identified and grown throughout the campus wherever possible.
- Biological waste generated in the kitchen and other places of the campus may be utilized properly.
- The students and staff are aware of the ban on plastic and implementing the plastic ban policy on the campus.
- The students and staff have used the parking slots to park their vehicles.

Campus cleaning and maintenance process done regularly.

(Dr.E. KUSUMA KUMARI)

(Sri K.NH.SRINIVAS)

(Sri. G. RADHAKRISHNAN)

(Dr.M. THAMARAI)

M. Thes

(Dr.M.V.RAMESH)