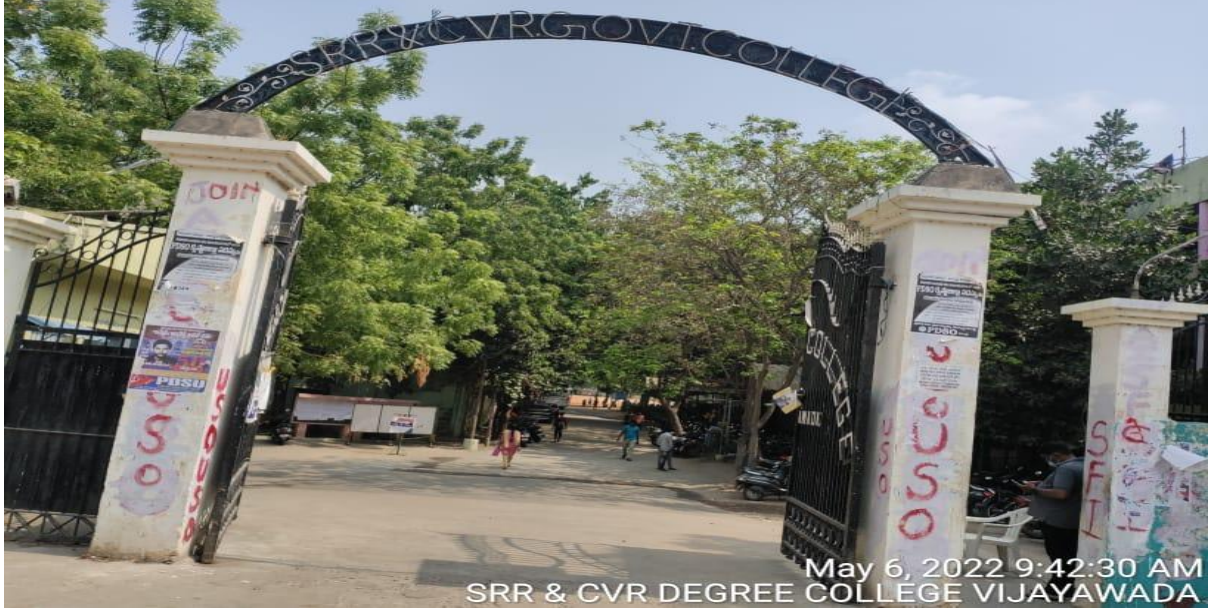


# Green Audit Report

2021-2022

SRR & CVR Government Degree College (A),

Karl Marx Road, Machavaram, Vijayawada-520004





महात्मा गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद  
Mahatma Gandhi National Council of Rural Education  
(formerly National Council of Rural Institutes)  
Department of Higher Education, Ministry of Education, Government of India



## MGNCRE - World Environment Day 2022

S. No	Reporting items	Details
1	Name of the Activity	Nourishing the Nature
2	Name of the College	SRR & CVR Government Degree College (A)
3	District and State	NTR District, Andhra Pradesh
4	No. of students participated in the Activity	10
5	No. of Faculty Members Participated	10
6	Date	28-05-2022
7	Highlights of the program/ Activity	<ul style="list-style-type: none"><li>❖ Plantation programme</li><li>❖ Recharge pit</li><li>❖ Vermicompost from plant leaf debris of college</li></ul>
8	Feedback	Staff and students actively participated in this programme in the college to nourish mother earth through plantation and construction of recharge pit.

9

Notes

SRR and CVR Government Degree College is a premier institution in the NTR District of Andhra Pradesh. On the eve of world Environmental day June 2022, with the theme of the year "Only One Earth" as the campaign slogan and with focus on "Living Sustainably in Harmony with Nature" the college has conducted a programme "Nourishing the nature". Under this programme, activities like plantation, construction of a recharge pit and preparing bed for vermicompost using fallen leaf litter of the campus were carried out. Ten faculty members and the Principal involved participated in this programme.



**Preparation of Vermicompost Bed**



Vijayawada, Andhra Pradesh, India  
GJ9X+MJ3, Machavaram, Vijayawada, Andhra Pradesh  
520004, India  
Lat 16.519085°  
Long 80.6488°  
28/05/22 10:09 AM

**Plantation programme**



Vijayawada, Andhra Pradesh, India

SRR College Bus Stop, Eluru Rd, Machavaram,

Vijayawada, Andhra Pradesh 520004, India

Lat 16.518783°

Long 80.648913°

28/05/22 10:14 AM



भारत सरकार / Government of India  
महात्मा गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद / Mahatma Gandhi National Council of Rural Education  
उच्चशिक्षाविभाग / Department of Higher Education  
शिक्षामंत्रालय / Ministry of Education



### ***District Green Champion Certificate***

This is to certify that **SRR & CVR GOVERNMENT DEGREE COLLEGE (A)** is hereby recognized as **District Green Champion** for NTR District, Andhra Pradesh for the Academic Year 2021-22. The institution has successfully elevated the Swachhta Action Plan, adopted and implemented best practices in the areas of Sanitation, Hygiene, Waste Management, Water Management, Energy Management and Greenery Management.

  
**Dr W G Prasanna Kumar**  
Chairman, MGNCRE  
Ministry of Education, Government of India

शपनसंख्या/ Memo no: MGNCRE/SAP22/N49



MGNCRE

महात्मा गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद

Mahatma Gandhi National Council of Rural Education

Department of Higher Education, Ministry of Education, Government of India



### *Certificate of Appreciation*

***Dr.K.Bhagya Lakshmi, Principal, SRR & CVR GOVERNMENT DEGREE COLLEGE (A) VIJAYAWADA, NTR District, Andhra Pradesh has contributed to the World Environment Day Celebrations June 2022 by facilitating and completing the Green activities on campus. The initiatives taken up under Swachhta Activities were building outdoor classrooms, reinforcing greenery and showcasing the green decisions of the Institution. Mahatma Gandhi National Council of Rural Education congratulates the Institution for its participation and adding impetus to the activities conducted by the faculty members and students.***

Date: 20.06.2022  
Certi: MG/SAP/WED/N16

**B S C Naveen Kumar**  
MGNCRE World Environment Day 2022  
Monitoring Officer



MGNCRE

महात्मा गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद

Mahatma Gandhi National Council of Rural Education

Department of Higher Education, Ministry of Education, Government of India



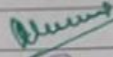


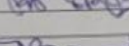



### *Certificate of Appreciation*

***DR. CH.SRINIVASA REDDY, LECTURER, SRR & CVR GOVERNMENT DEGREE COLLEGE(A) VIJAYAWADA, NTR DISTRICT, ANDHRA PRADESH has contributed to the World Environment Day Celebrations June 2022 as a faculty coordinator by conducting and completing the Green activities on campus. The initiatives taken up under Swachhta Activities were building outdoor classrooms, reinforcing greenery and showcasing the green decisions of the Institution. Mahatma Gandhi National Council of Rural Education appreciates the team work during the activities.***

Date: 20.06.2022  
Certi: MG/SAP/WED/HC/17

**B S C Naveen Kumar**  
MGNCRE World Environment Day 2022  
Monitoring Officer

## Signatures of participants

1.	Dr.K.Bhgaya Lakshmi	Principal	
2.	Dr.Ch.Srinivasa Reddy	Lecturer	
3.	Dr.K.SudhakaraRao	Lecturer	
4.	J. Nageswara Rao	Lecturer	
5.	A.L.K.Krupavaran	Lecturer	
6.	TV.Rambabu	Lecturer	
7.	Dr. G.Nagarjuna	Lecturer	
8.	Veera Babu	Office staff	P. Veera Babu
9.	Kumar	Office staff	M. Kumar
10.	Valli	Office staff	Valli
11.	P.Sateesh	Student	P. Sateesh
12.	M.Gayatri	Student	M. Gayatri
13.	D.Sirivalli	Student	D. Sirivalli
14.	K.Ishwarya	Student	K. Ishwarya
15.	N.Jyothi	Student	N. Jyothi
16.	G.Vengamamba	Student	G. Vengamamba
17.	P.Bharat sai	Student	P. Bharat Sai
18.	G.Rupa	Student	G. Rupa Vathi
19.	B.Rachel	Student	B. Rachel Evangelin
20.	K.Mounika	Student	K. Mounika



**PROCEEDINGS OF THE PRINCIPAL SRR & CVR GOVT. DEGREE  
COLLEGE (A), VIJAYAWADA**

Present: Dr. K. Bhagya Lakshmi, M.Sc., M.Phil., Ph.D.,

Re. No. 226/Aud. Com. /2021-22

Date: 15.12.2021

Sub: SRR & CVR Government Degree College (A), Vijayawada – Constitution of Committee for Energy Audit, Green Audit & Environmental Audit – Orders – Issued – Regarding.

Ref: Guidelines from CCE office.

\* \* \*

ORDER:

As per the reference cited, a committee is constituted to prepare Energy Audit, Green Audit and Environmental Audit in our college for the ensuing NAAC which is submitted for SSR through NAAC website.

- |  |                 |
|--|-----------------|
| 1. Dr. K Bhagya Lakshmi, Principal           | Chairman        |
| 2. Dr. Ch. Srinivasa Reddy, Lec. in Botany   | Coordinator     |
| 3. Dr. PRG Nallappa reddy, Lec. in Chemistry | Member          |
| 4. Smt. TV Vakula Priya, Lec. in Physics     | Member          |
| 5. Smt. ALK Krupavaram, Lec. in Zoology      | Member          |
| 6. Smt. A Umatarangini, Lec. in History      | Member          |
| 7. Kum S Tejaswini, G. Lec. in Com. Sci,     | Tech. Support   |
| 8. Mr. B. Mohan, II BZC                      | Student Nominee |
| 9. Mr. M. Narendra, II MECS                  | Student Nominee |

Coordinator is informed to complete the three audits with the help of all the members and submit the reports to the IQAC Coordinator in a couple of months.

  
**PRINCIPAL**  
**SRR & CVR GOVT. DEGREE COLLEGE**  
**(Autonomous)**  
**Machavaram, VIJAYAWADA - 520 004.**

Copy to  
Coordinator & all members,  
Copy to A2 Section,  
File-1.

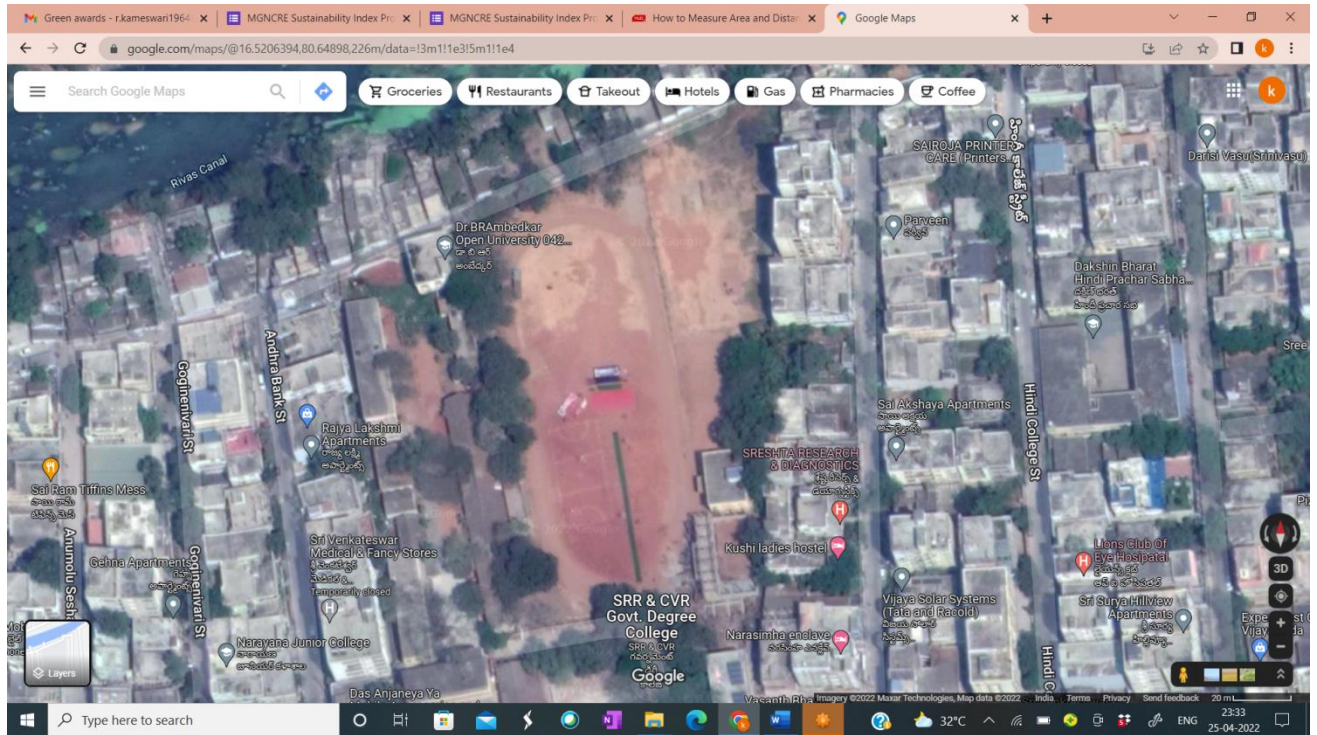
Disclaimer

Green Audit

Green audit Executive summary report

1. About College
2. Environmental

ACKNOWLEDGEMENT



IQAC and Green Audit Assessment team thanks to the Principal, SRR & CVR Government Degree College (A), Vijayawada for assigning the task of Green Audit. We are very thankful to all the faculty both teaching and nonteaching and students for their cooperation during the entire process in collection of data. Our special thanks to Dr. K. Bhagya Lakshmi, Principal for her warm support and encouragement from the beginning till the end of the process.

**Dr. Ch. Srinivasa Reddy**  
**Green Audit Team,**  
**SRR & CVR Government Degree College (A), Vijayawada**

**DISCLAIMER**

Green Audit Team has prepared this report on the basis of preliminary data collected from all sources in different areas of the college. All precautionary measures has been taken in collection and preparation of green audit; details contained in this report have been compiled in good faith based on information gathered.

Prepared by:

IQAC & Green Audit Team

## **GREEN AUDIT**

The purpose of conducting green audit is to improve the environmental condition of college and its surroundings. It is carried out by focusing the study of key parameters like water management, Air and noise pollution, waste management, green belt area and Bio diversity and eco-friendly environmental initiatives.

### **Objective of the Green Audit**

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards which will have an impact on the eco-friendly ambience.

## GREEN AUDIT EXECUTIVE SUMMARY REPORT

### 1. About College

Name of the College : SRR & CVR Government Degree College (A)

Address : Karl Marx Road, Machavaram, Vijayawada,  
Andhra Pradesh, India

Year of Establishment : 1937

Email : [srrandcvr@gmail.com](mailto:srrandcvr@gmail.com)

College website :  
<http://www.srrcvt.ac.in>

Name of the Principal : Dr. K. Bhagya Lakshmi

Mobile Number : 9848251236

No. of Departments : 20?

No. of students : 2400

Number of Faculty members: 123

Number of NonTeaching members: 41

Total campus area: 7 Acres

### 2. Environmental policy of the College

The college always believes in maintaining its own standard in concern of environmental issues. The college has initiated number of activities to protect its own ecosystem. Being an eco-friendly college, the college adopted number of environment friendly activities on regular basis such as plantation programmes during raining season, feather friendly notion-to feed the avian fauna in summer, no vehicle day etc., For sustainable development the college has adopted the following.

- Sensitization of students and staff in proper usage of water
- To bestow in use of Rain water harvesting in campus
- Going towards paperless office
- Vermicompost preparation from solid waste of the campus
- To minimize the sound pollution in campus
- To protect the Biodiversity of college and main greenery in the campus

### 3. Constitution for Green Audit

The green audit of the campus is carried out as per the environmental policy of SRR & CVR Government Degree College (A), Vijayawada. The main objective of the study is to check the existing practices which are in force and to recommend the better development of environmental policy and practices in key areas like

- Waste management -solid waste and e-waste
- Water harvesting and conservation in the campus
- Tree plantations
- Preservation and conservation of energy
- Eco-friendly campus
- Green and clean campus

**4. Members of Green Audit team**

<b>S.No</b>	<b>Name of the Auditor</b>	<b>Designation</b>
<b>1</b>	<b>Dr.K.Bhagya Lakshmi(Chairman)</b>	<b>Principal</b>
<b>2</b>	Dr. Ch. Srinivasa Reddy, Lec. in Botany	Coordinator
<b>3</b>	Dr. PRG Nallappa reddy, Lec. in Chemistry	Member
<b>4</b>	Smt. TV Vakula Priya, Lec. in Physics	Member
<b>5</b>	Smt. ALK Krupavaram, Lec. in Zoology	Member
<b>6</b>	Smt. A Umatarangini, Lec. in History	Member
<b>7</b>	Kum S Tejaswini, G. Lec. in Com. Sci,	Tech. Suppot
<b>8</b>	Mr. B. Mohan, II BZC	Student Nominee
<b>9</b>	Mr. M. Narendra, II MECS	Student Nominee

**EXECUTIVE SUMMARY**

SRR and CVR Government Degree College owes its existence to two illustrious persons, Sri Rajah Venkatadri Apparao Bahudur, Zamindar of Nuzvid and Sri. Chunduri Venkata Reddy, a local Industrialist and Philanthropist. The former started the college in 1937 as a private college in perpetuation of the memory of his father, Sri Rangayya Appa Rao Bahdur and the later shared the responsibility of running the Institution as a committee College along with the founder Zamindar. Then the College was named as “Sri Rajah Rangayya Appa Rao and Chunduri Venkata Reddy College” (S.R.R. & C.V.R. College). This was the first and foremost college in Vijayawada catering to the needs of Higher Education to the people in and around Krishna District.



**Fig-1:** Aerial view of SRR & CVR Government Degree College (A), Vijayawada

The College is spread over an area of about seven acres of land situated in a prime locality of Machavaram, which is in the corporation limits of Vijayawada. The college is only one Government college in the Capital city of Andhra Pradesh. The main buildings of the college were constructed between 1940 and 1942 and were inaugurated on 07-02-1942 by the then Vice Chancellor of Andhra University, Waltair, Dr. Cattamanchi

Ramalinga Reddy, M.A. (Cantab) D.Litt., a distinguished educationist and academician of Andhra Pradesh and since then it has been a part of the academic, intellectual, social and cultural history of Vijayawada. After successfully running the College for two decades, the erstwhile management handed over the College to the Govt. of A.P. with effect from 01-07-1958 by means of a G.O.Ms. No. 1691 Edn.Dt.29-6-1958. Then the College was named as S.R.R.& C.V.R. Government College, Vijayawada. From 2010-11, the College affiliated to Krishna University, Machilipatnam. The College was recognized by U.G.C. under 2 (f) and 12 (b) from the academic year 1978-79.



**Fig-2: Entrance gate of SRR & CVR Government Degree College (A), Vijayawada**

The aim of institution is to provide quality higher education to the students of this region particularly those coming from economically and

socially backward, and other weaker sections keeping in view the avowed policies of the Government of Andhra Pradesh and the guidelines issued by the Commissioner of Collegiate Education, A.P. from time to time and to train the students in various vocational streams and job orientated professional skills and soft skills. This also aims at inculcating educational, social and cultural values. The college has a glorious history of having intellectual stalwarts like the first Jnanapith Awardee, Kavisamrat Sri Viswanatha Satyanarayana and Sri.Jonnalagadda Satyanarayana on the faculty. The Institution also has the unique distinction of having the largest number of alumni who have become reputed academicians, personalities, experts, statesmen and celebrities in various fields both in India and abroad. Among the luminaries, the College mentions with pride the names of Sri. N.T.Rama Rao, former Chief Minister of Andhra Pradesh, His Excellency Sri.P.S.Rama Mohana Rao, former Governor of Tamilnadu, His Excellency Sri.V.Rama Rao, former Governor of Sikkim. The Alumni also comprises numerous bureaucrats, professionals, politicians, social workers, writers and artistes etc.

### COLLEGE MOTTO

“VIDHYA DHARMENA SOBHATE”

विद्या धर्मेना शोभते

ودیا دھر مینا شوبتے

విద్యా ధర్మేణ శోభతే

### Methodology

The College has adopted a strategy “**Green Campus Concept**” where environmental friendly practices and education combine to promote sustainable and eco-friendly practices in the campus. Teaching pedagogy and curriculum are designed in line to create awareness about environmental concern and sustainable development.

1. Water management
2. Energy Conservation

### 3. Waste management

#### **Focus area of study**

- Water management
- Air pollution management
- Noise pollution management
- Energy use and conservation
- Waste management
- Greenery and Biodiversity
- Eco-friendly initiatives

#### **Water Management**

#### **Water conservation facilities available in the Campus**

Water conservation is the practice of using water efficiently to reduce unnecessary water usage. According to Fresh Water Watch, water conservation is important because fresh clean water is a limited resource, as well as a costly one. College has adopted rainwater harvesting for recharging groundwater which is one of the simplest and best measures in conserving water across the globe.

#### **Observations**

Bore water and municipal irrigation are the two major sources of water in the college. This water is mainly used for drinking, gardening, canteen, laboratories and for flushing toilets. From the survey it was observed no water loss is observed either through leakage or by over flow of water from overhead tanks. On an average the total use of water in the college is 25640 L/day.

#### **Recommendations**

Continuous monitoring, controlling overflow is essential to minimize the water loss. In campus small scale/medium scale/ large scale reuse and recycle of water system is necessary. Equipment's which required water and electricity such as RO Water plant, water distillation etc. are regularly serviced to minimize the wastage of water. The detergents and powders used for cleaning should have minimal effect on college ecosystem i.e. mostly biodegradable and non-toxic.



**Fig:- RO Water Unit**

**CAPACITY OF THE WATER TANKS ON THE CAMPUS**

S.No	Capacity of Tank (L)	Total number of tanks (L)	No. of times each tank filled (L)	Total water availability (L)	Total Available water in the campus	Usage of water per day (L)	Usage of water per week (L)
1	1000	3	2	6000	26000	25640	179,480
2	1500	6	2	18000			
3	2000	1	2	2000			

### Calculation

Number of students=2400

Total number of teaching staff=123

Total number of nonteaching staff=41

Total number of people in the class=2564

Water requirement by each individual on an average=10 L

Usage of water per day in the campus= 2564 X 10= 25640 L

## AIR POLLUTION MANAGEMENT

The college has been conducting periodic awareness programs for staff, students and society. The college student's and staff are actively involved in activities through NSS. Green audit team observed that every day 223 bikes, 10 cars (7-Diesel and 3- petrol) are coming in college premises. Using Ambee app air quality index of college at different places is measured and found that overall the air in the college possessing good air quality index.

S. No	Place	Morning							Evening						
		Air quality index	PM <sub>10</sub> / m <sup>3</sup>	PM <sub>2.5</sub> / m <sup>3</sup>	CO <sub>p</sub> m	NO <sub>2</sub> ppb	O <sub>3</sub> ppb	SO <sub>2</sub> ppb	Air quality index	PM <sub>10</sub> / m <sup>3</sup>	PM <sub>2.5</sub> / m <sup>3</sup>	CO <sub>p</sub> m	NO <sub>2</sub> ppb	O <sub>3</sub> ppb	SO <sub>2</sub> ppb
1	College Main gage	19	0.78	0.35	0.40	3.74	20.15	3.79	32	1.54	0.87	0.40	4.21	34.47	3.72
2	Principal chamber	19	0.78	0.35	0.40	3.74	20.15	3.79	36	1.57	0.85	0.37	3.36	39.40	3.72
3	College ground	17	0.78	0.35	0.42	3.55	17.88	3.79	32	1.54	0.87	0.40	4.21	34.47	3.72
4	Library	17	0.78	0.35	0.42	3.55	17.88	3.79	32	1.54	0.87	0.40	4.21	34.47	3.72
5	Canteen	17	0.78	0.35	0.42	3.55	17.88	3.79	32	1.54	0.87	0.40	4.21	34.47	3.72
6	Laboratories	19	0.78	0.35	0.40	3.74	20.15	3.79	36	1.57	0.85	0.37	3.36	39.40	3.72
7	Class room	17	0.78	0.35	0.42	3.55	17.88	3.79	32	1.54	0.87	0.40	4.21	34.47	3.72

### Recommendations

- World Environmental Day is to be observed on every year 5<sup>th</sup> June and both students and staff should take an oath on the theme of Environmental day.
- Air quality index is to be regularly monitored
- Display boards related to environment should be arranged to make awareness
- Encourage the students for use of public transport and bicycles.

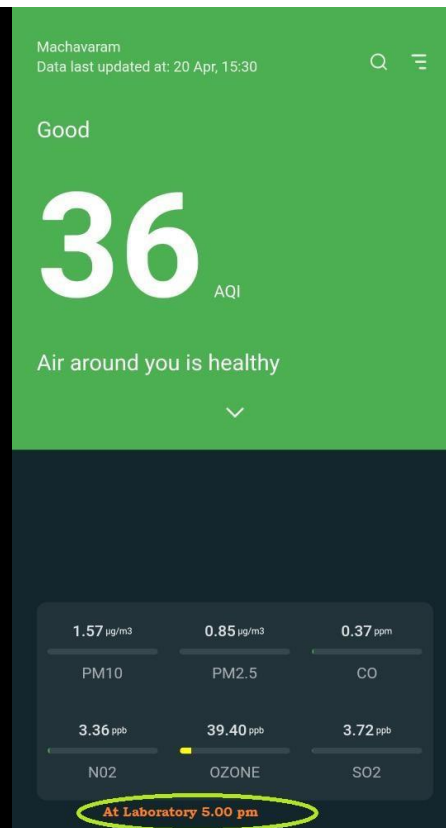
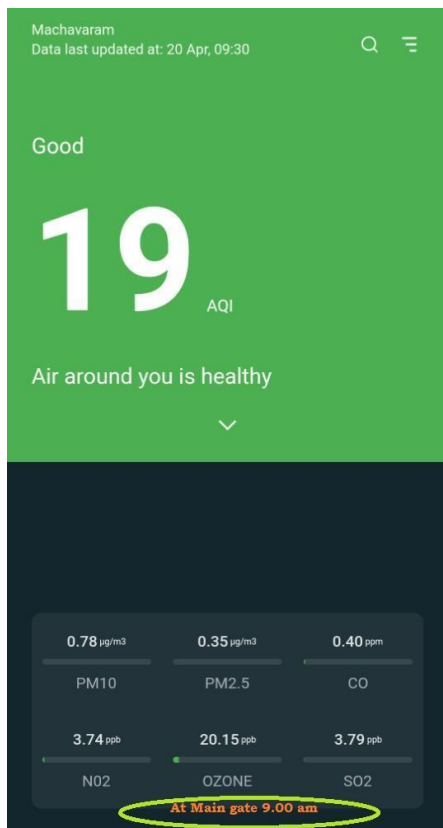
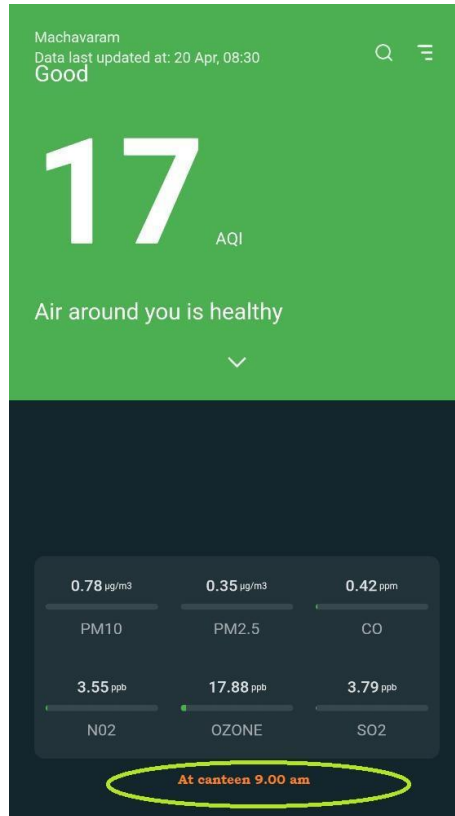
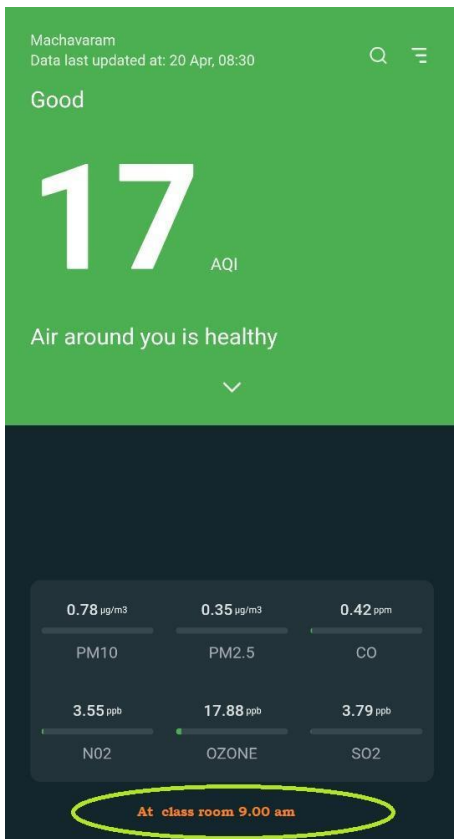


Fig: Air quality index collected at different places in college in different times

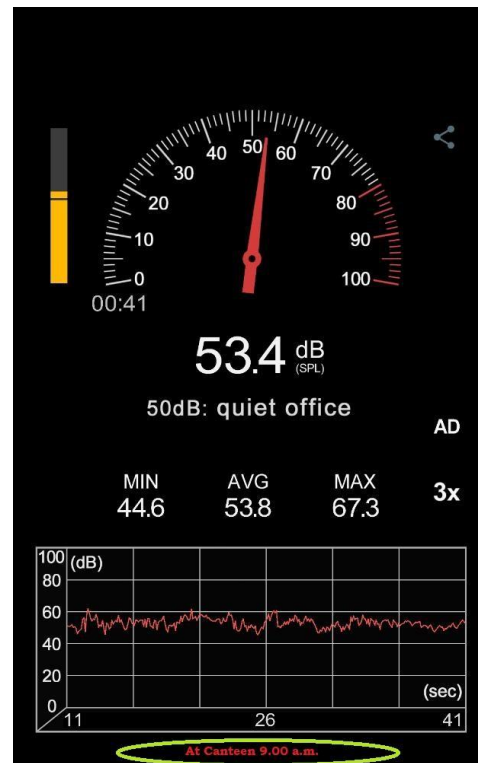
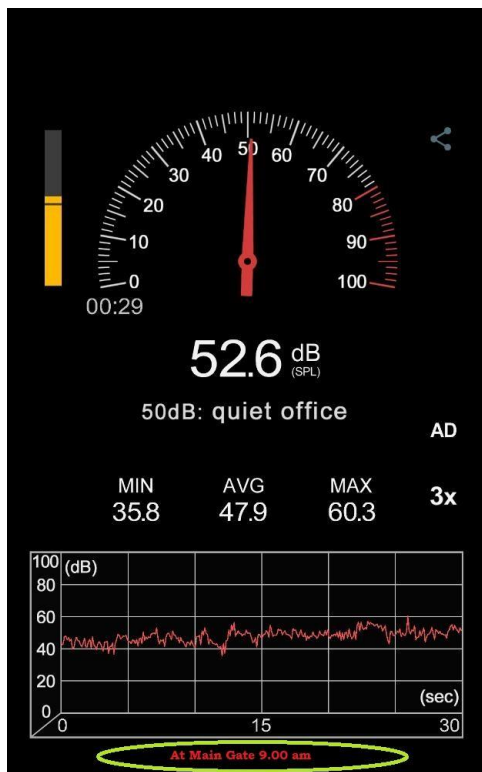
## NOISE POLLUTION MANAGEMENT

Using Sound meter app sound levels of college at different places is measured and found that the college is located in tolerance range.

S.No	Name of the Place	Morning	Afternoon	Evening
1	Main gate	61.0dB	53.4 dB	70.7 dB
2	Canteen	47.4dB	52.6 dB	43.9 dB
3	Class room	43.8 dB	53.1 dB	42.1 dB
4	Laboratory	40.6 dB	41.7dB	42.5 dB

### Recommendations

- Regular noise level monitoring should be done the campus
- Vehicular movement shall be restricted by placing barricades and no entry boards.



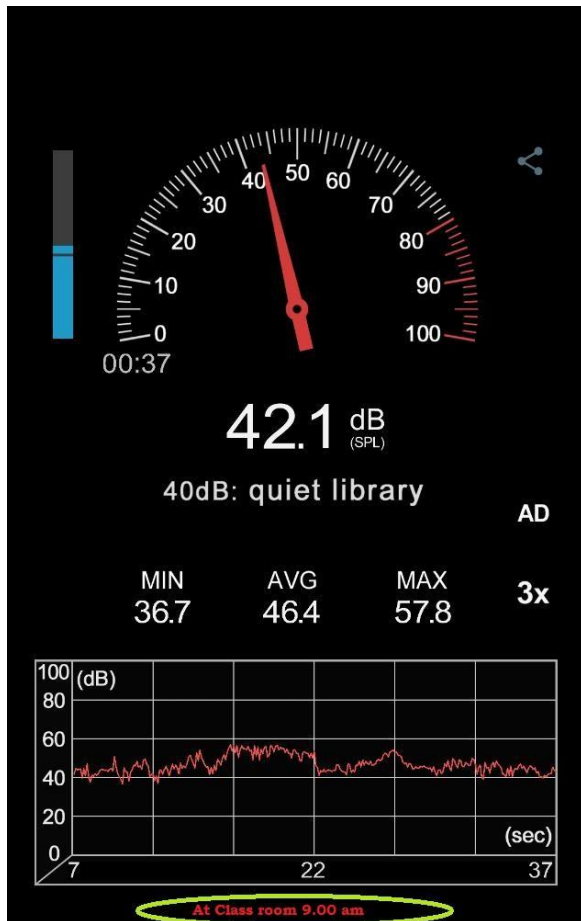


Fig: Noise pollution collected in different places in College

## ENERGY USE AND CONSERVATION

**Observations**

**Recommendations**

## WASTE MANAGEMENT

College has been adopted a zero waste approach for biodegradable material. Fallen leaf material collected in the college premises used to prepare vermicompost. Nearly 20 kg of litter is accumulated and will be used making vermicompost.



Department of Physics had made a MoU with “Green wave solutions”, Vizag to dispose the e-waste of the college. A Bin is arranged to deposit the e-waste and once the bin is filled, it will be collected by the green wave solution for recycling.



Separate bins are arranged to collect wet and dry waste in the college and regularly collected by Vijayawada Municipal Corporation.



## Recommendations

- Encourage waste-free lunches by cutting down on food packaging, single-use and disposable items
- Promoting plastic free environment

## GREENERY AND BIODIVERSITY

The college has adopted green campus concept where environmental friendly practices and education combine to promote sustainable and eco-friendly practices in force. A survey was conducted in the campus by green audit team and listed out the flora and fauna.

### List of plants in the Campus

S.No	Botanical Name	Family	No
1	<i>Citrus sinensis</i>	<i>Rutaceae</i>	1
2	<i>Albizia lebbek</i>	<i>Mimosaceae</i>	1
3	<i>Anthocephalus cadamba</i>	<i>Bignoniaceae</i>	1
4	<i>Annona reticulara</i>	<i>Annonaceae</i>	2
5	<i>Artocarpus heterophyllus</i>	<i>Moraceae</i>	1
6	<i>Acacia auriculoformis</i>	<i>Mimosaceae</i>	4
7	<i>Azadirachta indica</i>	<i>Meliaceae</i>	8
10	<i>Calophyllum inophyllum</i>	<i>Cluciaceae</i>	2

11	<i>Chrysalidocarpus lutescence</i>	<i>Palmae</i>	20
12	<i>Citrus aurantifolia-Rutaceae</i>	<i>Rutaceae</i>	1
13	<i>Cicca acidua</i>	<i>Euphorbiaceae</i>	1
15	<i>Ficus religiosa</i>	<i>Moraceae</i>	2
16	<i>Delonix regia</i>	<i>Caesalpinaceae</i>	5
17	<i>Ficus racemsoa</i>	<i>Moraceae</i>	2
18	<i>Entrelobium saman</i>	<i>Mimosaceae</i>	1
19	<i>Ficus benghalensis</i>	<i>Moraceae</i>	1
20	<i>Ficus benjamina</i>	<i>Moraceae</i>	2
21	<i>Gliricidia maculate</i>	<i>Fabaceae</i>	1
24	<i>Ixora coccinia</i>	<i>Rubiaceae</i>	2
25	<i>Kigelia pinnata</i>	<i>Bignoniaceae</i>	1
27	<i>Leucaena latisiliqua</i>	<i>Mimosaceae</i>	4
29	<i>Millingtonia hortensis</i>	<i>Bignoniaceae</i>	1
30	<i>Mimusops elengi</i>	<i>Sapotaceae</i>	6
33	<i>Nerium oleander</i>	<i>Apocynaceae</i>	2
34	<i>Peltophorum pterocarpum</i>	<i>Caesalpinaceae</i>	22
35	<i>Phyllanthus emblica</i>	<i>Euphorbiaceae</i>	1
36	<i>Plumeria rubra</i>	<i>Apocynaceae</i>	1
37	<i>Polyalthia longifolia</i>	<i>Annonaceae</i>	13
38	<i>Pongamia pinnata</i>	<i>Fabaceae</i>	7
39	<i>Psidium guajava</i>	<i>Myrtaceae</i>	3
40	<i>Thevetia nerrifolia</i>	<i>Apocyanaceae</i>	1
41	<i>Roystonea regia</i>	<i>Palmae</i>	6
42	<i>Samanea saman</i>	<i>Mimosaceae</i>	4
43	<i>Spathodea companulata</i>	<i>Bignoniaceae</i>	2
44	<i>Syzygium cumini</i>	<i>Myrtaceae</i>	1
45	<i>Thunberia</i>	<i>Bignoniaceae</i>	1
46	<i>Tecoma stans</i>	<i>Bignoniaceae</i>	3
48	<i>Terminalia catappa</i>	<i>Combretaceae</i>	4
49	<i>Termina arjuna</i>	<i>Combretaceae</i>	2



a. *Peltophorum pterocarpum*



b. *Enterolobium saman*



c. *Kigelia pinnata*



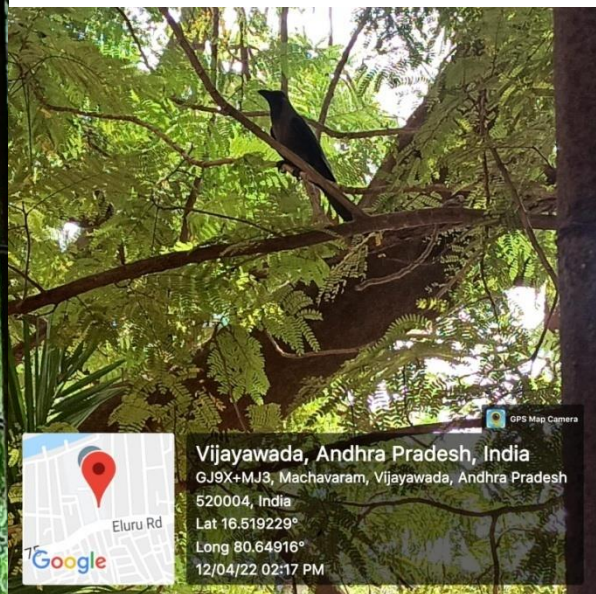
d. *Ixora indica*

**Fig: Some of the Campus flora during flowering**

**LIST OF FAUNA IDENTIFIED ON THE CAMPUS (VERTEBRATES)**

S.NO	COMMON NAME	ZOOLOGICAL NAME	CLASS
1	Frog	<i>Rana hexadactyla</i>	Amphibia
2	Toad	<i>Bufo bufo</i>	Amphibia
3	Garden lizard	<i>Calotes versicolor</i>	Reptilia
4	Wall lizard	<i>Hemidactylus</i>	Reptilia
5	House lizard	<i>Gecko gecko</i>	Reptilia
6	Crow	<i>Carvus splendens</i>	Aves
7	Parrot	<i>Psittacula eupteria</i>	Aves
8	Cuckoo	<i>Eudynamis scolopacea</i>	Aves
9	Pigeon	<i>Columba livia</i>	Aves
10	Owl	<i>Bubo bubo</i>	Aves

11	Blue jay	<i>Coraciasindica</i>	Aves
112	Squirrel	<i>Funambulus</i>	Mammalia
13	Rat	<i>Rattus rattus</i>	Mammalia
14	Mouse	<i>Mus musculus</i>	Mammalia
15	Bandicoot	<i>Perameles</i>	Mammalia
16	Dog	<i>Canisfamiliaris</i>	Mammalia
17	Cat	<i>Felisdomesticus</i>	Mammalia
18	Bat	<i>Pteropus</i>	Mammalia





**Fig: Selected Fauna of the College**

### **ECO FRIENDLY INITIATIVES**

Eco friendly activities in the campus includes regular plantation programmes to improve quality of air. To feed avian fauna and other miniature animals in the campus water and seed pots are arranged by Department of Botany in college to feed the animals.



**SRR & CVR GOVERNMENT DEGREE COLLEGE , VIJAYAWADA**



Vijayawada, Andhra Pradesh, India  
 GJ9X+GGV, Machavaram, Vijayawada, Andhra Pradesh  
 520004, India  
 Lat 16.518848°  
 Long 80.648733°  
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## పక్షుల దాహార్తి తీర్చడం బాధ్యత

**మాచవరం, న్యూస్టుడే :** వేసవిలో పక్షుల దాహార్తి, ఆకలి తీర్చాల్సిన బాధ్యత ప్రతి ఒక్కరి పైనా ఉందని ఎస్సారార్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాల ప్రిన్సిపల్ డాక్టర్ కె. భాగ్యలక్ష్మి పేర్కొన్నారు. వృక్షశాస్త్ర ఉద్యాన వనంలో 'ఫెదర్ ఫ్రెండ్లీ నోప్' అనే కార్యక్రమాన్ని గురువారం చేపట్టారు. ఈ సందర్భంగా ఆమె మట్టి పాత్రలో నీళ్లు, గింజలు వేశారు. ఇలాంటి కార్యక్రమాలు ఎంతో ఆదర్శవంతంగా ఉంటాయని చెప్పారు. ప్రకృతి నుంచి పొందడమే కాకుండా మనవంతు ప్రకృతికి తిరిగి ఇవ్వాలన్నారు. మూగ జీవుల పట్ల కరుణ, ప్రేమ చూపాలని విద్యార్థులకు సూచించారు.



మట్టి పాత్రల్లో గింజలు వేస్తున్న భాగ్యలక్ష్మి

వృక్షశాస్త్ర విభాగాధిపతి జి.స్వప్న, అధ్యాపకులు వి.నాగపద్మావతి, డాక్టర్ సి.హెచ్. శ్రీనివాసరెడ్డి, ఐ.ప్రశాంతి తదితరులు పాల్గొన్నారు.



**S.R.R. & C.V.R. GOVT. DEGREE COLLEGE**  
(Autonomous)



NAAC accredited with 'B+' Grade

Machavaram, VIJAYAWADA - 520 004, Krishna District.

Cell : 9848251236 Ph : 0866-2430060, Fax : 0866-2441092, www.srrcvr.ac.in srrandcvr@gmail.com

**INTERNAL ENERGY AUDIT REPORT OF  
SRR&CVR GDC(A),  
VIJAYAWADA, NTR DT.**

Submitted to

Principal,

SRR&CVR GOVERNMENT DEGREE COLLEGE(A),

Vijayawada, NTR Dt.

By

INTERNAL AUDIT TEAM,

SRR&CVR GDC(A),

VIJAYAWADA, NTR DT.

## PREFACE

- Data collection for energy audit of the SRR & CVR GDC(A), Vijayawada Campus was conceded by team for the period of 1 Jan 2020 to 30 June 2022.
- The energy audit process will be continued during following years
- This audit was over sighted to inquire about convenience to progress the energy competence of the campus.
- To drop of energy utilization whilst cultivate or humanizing comfort, health and safety were of prime anxiety.
- This audit required to recognize the mainly energy proficient appliances.
- Besides, several each day processes concerning common appliances have been provided which facilitate sinking the energy expenditure.
- The energy audit survey was completed by II B.Sc. Physics Students. All data collected from each classroom, laboratory, every room.
- The work is completed by considering, how much tubes, fan, A. Cs, electronic instruments, etc in each room. How much was participation of each component in total electricity consumption.

## Acknowledgement

Internal Energy Audit Team, SRR & CVR GDC(A), Vijayawada, is very much thankful to principal Dr.K.Bhagya Lakshmi, for motivating us for energy audit as a part of our duty and responsibility in the college.

DATE: 26/10/2022

STATION: VIJAYAWADA

1. Dr.R.Kameswari, Lecturer in  
Physics
2. T.V.Vakula Priya, Lecturer in  
physics
- 3.B.M.G.Kalidas , II MECS Std
4. K.Ajay kumar , II MPCS Std

## **Introduction:**

In India the entire field of education and other fields of intelligent activities had been monopolized by a handful of men before independence.

But today we are marching towards the desirable status of a developed nation with fast strides. But the development should be a sustained one.

For achieving such a interminable development energy management is essential .

As far as concerning electricity crisis, we are facing lack of electricity during office work. So, institutional management is taking design regarding production of electricity and saving electricity for eco- social aspect.

Energy requirement of India is growing and incomplete domestic fossil fuel treasury. The country has motivated strategy to enlarge its renewable energy resources and policy to establish the nuclear power plants.

India has the world's fifth biggest wind influence advertise and plans to include about 20GW of solar electricity. India increases the involvement of nuclear power to largely electrical energy development facility from 4.2% to 9%. India's industrial demand accounted for 35% of electrical power requirement, domestic household use accounted for 28%, agriculture 21%, commercial 9%, public lighting and other miscellaneous applications accounted for the rest.

Energy conservation means reduction in energy consumption without making any sacrifice of quantity or quality.

A successful energy management program begins with energy conservation; it will lead to adequate rating of equipment, using high efficiency equipment and change of habits which causes enormous wastages of energy .

By observing lack of electricity and huge electricity demands. It is necessary to plan to being self sufficient in electricity requirement.

In the present study, college electricity audit has been done. In this study considered practical laboratory instruments, Fans, air conditioners, Computers etc are considered.

We have studied total budget of the college, total economic investment of college on the electricity and total generation electricity from the solar electricity generation units. Also, we have studied total saving of electricity and money from solar generation and requirement of solar energy.

Also, it is studied that exact contribution of bulb, fans, computers, instruments etc in the total requirement of electricity. We studied all these mentioned things by collecting exactly data from survey.

### **Experimental and data collection:**

All required data is collected by II B.Sc. Physics students. In this data different teams are prepared and students make survey of the college. In this survey they named buildings like Academic building 1, Lab 2, New building etc. In these buildings, in every room, how many fans, tubes, computers, instrument AC, etc. are measured.

New Building				
Rooms	Tube Lights	Fans	CC-Cam	Solar Pannels
101	2	2	0	0
102	2	2	0	0
103	3	2	0	0
104	3	2	0	0
105	3	2	0	0
106	3	2	0	0
Garden	6	0	1	10
Total	22*30	12*50	1*10	10*
Hours for uses	9	9	9	
Grand Total	5940	5400	90	
New building final watts	11430			
three floors total	49640			

	Tube Lights	Fans	Computer	Printer	AC	Speaker	CC-Cam
LAB-2							
Botany Staff Room	5	3	1	1	0	1	0
Botany Museum	5	3	0	0	0	0	0
Botany Class Room-1	3	4	0	0	0	0	0
Botany Class Room-2	3	5	0	0	0	0	0
Corridor-1	2	0	0	0	0	0	1
Corridor-2	2	0	0	0	0	0	0
Corridor-3	0	0	0	0	0	0	0
Bathrooms	0	0	0	0	0	0	0
Total	20*30	15*50	1*100	1*30	0*230	1*100	1*10
Hours for uses	9	9	2	1	4	1	9
Grand Total	5400	6750	200	30	0	100	90
Lab2 final Watts	12570						





### OBSERVATIONS:

S. No	Bill YEAR	NET UNITS CONSUMED	SOLAR UNITS
1	2020	22907	2356
2	2021	1,07,993	2388
3	2022	84936	1308
	TOTAL	215836	6052

### CONCLUSION:

The solar power system was installed in the college in the year 2016-17,2019-20. There are two Units (Service nos 6424399014992, 6424399015121-) attach to the blocks.

Each service Unit in the block has the following solar power capacity.

Service Unit no	Capacity
6424399014992	7 Kwatts
6424399015121	10 K watts

In the Year 2020-2021 due to Pandemic the solar system Could not be maintained and the college could not benefit the savings from electricity bills. However after cleaning and maintenance of solar panels the potential of solar energy has increased and bringing the Nett units consumed low.

The solar Units attached to service no- 6424399015121 is not functioning, and the service no- 6424391052826 is not attached to any of the solar panels. Hence service Supervisor has been addressed a letter to rectify the defect and bring the system in to operation.



Apr 29, 2022 11:53:21 AM  
308° NW  
Machavaram  
Vijayawada  
Krishna  
Andhra Pradesh  
Area = 56.86m

SRR & CVR E



Latitude  
16° 31' 10.67736" N  
City & State  
Vijayawada, Andhra Pradesh  
Known Place  
Satyaranayana Puram  
Postal Code  
520004

Longitude  
80° 38' 57.31656" E  
Country  
India  
Date & Time  
04/28/2022 03:11:32



GPS Map Camera

Vijayawada, AP, India

NH 16, Seetharampuram,

Vijayawada, 520011, AP, India

Lat 16.518779, Long

80.648747

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Note : Captured by GPS Map

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SRR & Co. Model  
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Medical & Pharmacy

Maps

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