CRITERION VII
INSTITUTIONAL VALUES AND BEST PRACTICES

Key Indicator	7.1. Institutional Values and Social Responsibilities
Metric	7.1.3 Quality audits on environment and energy regularly undertaken by the Institution

ENVIRONMENTAL PROMOTIONAL ACTIVITIES CONDUCTED BEYOND THE CAMPUS

In addition to upholding a clean and green campus, the institution actively engages in diverse development activities within neighbouring communities. The institution plays a proactive role in educating these communities about the significance of preserving natural resources and advocating for a clean and secure environment. This involvement includes the organization of various programs, as outlined below.

S. No.	Date	Title of the Program
1.	25.11.2023	Tree Adaptation and Sapling Plantation Program
2.	24.03.2023-25.03.2023	National Conference and Exhibition on Rural Innovation
3.	07.03.2023	Field Visit millet fair cum Exhibition TNAU - Madurai -
4.	23.12.2022	Tree Sapling event
5.	26.04.2022 - 02.05.2022	Field visit to Sri Sakthi Trust - Ayyampalyam

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Principal
Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Palani Road Dindigul 624 002

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC).
(Accredited by NBA – ECE, EEE & MECH UG Programs)
Dindigul – Palani Highway, Dindigul 624 002

Unnat Bharat Abhiyan - SSMIET

30.11.2023

Report on Tree Plantation in Adopted Villages under UBA

The Tree Plantation Program organized by Unnat Bharat Abhiyan (UBA) of SSM Institute of Engineering and Technology (SSMIET), Dindigul, aimed to create awareness on climate change and promote environmental sustainability. On November 25, 2023, the institute successfully planted 100 saplings in the adopted villages of UBA – Kuttathupatti and Puliarajakkapatti as part of their commitment to social responsibility and environmental conservation.

The primary objective of the Tree Plantation Program was to sensitize the local communities to the impacts of climate change and emphasize the role of trees in mitigating these effects. By actively involving the community in planting saplings, the initiative aimed to foster a sense of ownership and responsibility towards the environment.

The program was executed in the adopted villages under the Unnat Bharat Abhiyan, strategically chosen to maximize the impact of the tree plantation initiative in the locality of the Institute thus serving the local community. The selected villages were identified based on their environmental needs and the potential for community engagement.

The Tree Plantation Program commenced with a brief inauguration ceremony at each village, where Faculty Coordinators and 50 student volunteers of UBA-SSMIET along with the local community engaged in the tree planting process. A diverse range of 100 saplings, including native species, were distributed among the villagers. Each participant received a sapling along with information on its proper care and growth. First plantation was done in Kuttathupatti village by 9.45 am followed by plantation in Puliarajakkapatti by 11.10 am. Refreshments were provided to the Faculty and Student volunteers at Puliarajakkapatti. A comprehensive maintenance plan was discussed and shared with the villagers, ensuring the long-term health and growth of the planted saplings. This plan included regular watering schedules, protection from grazing animals, and periodic health check-ups. The events emphasized the importance of sustainable practices, the role of trees in carbon sequestration, and the broader implications of climate change. The active involvement of villagers fostered a sense of ownership and responsibility for the planted saplings, contributing to the long-term success of the initiative. The

SSM Institute of Engineering and Technology * DINDIGUL-624 002 *

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC),
(Accredited by NBA – ECE, EEE & MECH UG Programs)

Dindigul – Palani Highway, Dindigul 624 002

UBA Coordinator

Principal

SSM Institute of Engineering and Technology * DINDIGUL-624 002 *

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002

program strengthened the bond between SSMIET and the adopted villages under UBA, paving the way for future collaborative initiatives aimed at sustainable development.

By planting 100 saplings and actively involving the local community, the initiative not only contributed to environmental conservation but also promoted awareness and community empowerment. The institute remains committed to its role in fostering sustainable practices and addressing the challenges posed by climate change in the adopted villages.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village. Sindalagundu (Po),
Palani Road, Dindigul 624 002

Go to home page

ssmiet.ac.in

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi • Affiliated to Anna University, Chennai • Accredited by NAAC)

Dr.D.Senthil Kumaran, M.E., Ph.D
Principal

SSMIET/107/January/2023

Date: 18.01.2023

To

Dr. Virendra Kumar Vijay,
Professor, at Center for Rural Development and Technology
IIT-Delhi
National Co-ordinator
UBA

Respected Professor.

Greetings from SSMIET,

We are pleased to inform your kind self that UBA of SSMIET is organizing a National Conference and Exhibition on Rural innovation dated on March 24th and 25th 2023.

Herewith the information leaf-let is attached for your esteemed reference.

We will be honored by your acceptance to be the Chief Guest to inaugurate this event. We appeal for your highest consideration for being the Chief Guest.

Thanking You

PRINCIPAL

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

0451 - 2448800-2448899 0451-2448855

Dindigul - Palani Highway, Dindigul - 624 002. ssmietdgl@gmail.com

ssmiet.ac.in

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi •Affiliated to Anna University, Chennai •Accredited by NAAC)

SSMIET/105/January/2023 Date: 12.01.2023

Dear Sir Madam,

Greetings from SSMIET

Under the aegis of Unnat Bharat Abhiyan (UBA),we are organising National level Conference and Exhibition on Rural Innovations.

We are very happy to invite you to participate in this two-day event scheduled on March 24(Friday)-25(Saturday) in our campus. You can contribute your credentials as.

1. A Paper Presenter
2. An Exhibiter
3. A Knowledge Partners
4. A Sponsor &
5. An Observer

WITH NO REGISTRATION FEES

We expect your valuable presence representing your institution on this occasion.

Thank you

With Regards,

Dr.K.Vinoth Kumar M.E.,M.B.A.,Ph.D.,Post-Doctoral Fellow (Malaysia)
Convener NCERI-2023
Professor/Department of Electronics & Communication Engineering
SSM Institute of Engineering and Technology, Dindigul, Tamil Nadu,India.
GSM: 9787367067

0451 - 2448800, 2448801 0451-2448855

Dindigul - Palani Highway, Dindigul - 624 002.

ssmietdgl@gmail.com

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuruthampatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

COMMITTEE OF CO-CHAIRS

Dr. G. Sankaranarayanan, Head/Mech./SSMIET
Dr. S. Karthigai Lakshmi, Head/ECE /SSMIET
Dr. K. A. Sundararaman, Head/Auto/SSMIET
Dr. G. Mohanbabu, Head/EEE/SSMIET
Dr. C. Sujatha, Head/CSE /SSMIET
Dr. G. Shanmugam, Head / Physics/SSMIET
Dr. G. Selvabharathi, Head/Civil/SSMIET
Dr. M. Rameswari, Head/Maths/SSMIET

TECHNICAL COMMITTEE

Dr.V. Sivakumar, AsP/EEE/SSMIET
Dr.M.Jeyalakshmi, AsP/ECE/SSMIET
Contact No 7639112777

PUBLICATION AND REGISTRATION COMMITTEE

Dr. K. Rajesh, AsP/ECE/SSMIET
Contact No 8667091500

HOSPITALITY, TRANSPORT AND FOOD COMMITTEE

Dr.S.Joseph Dominic Vijayakumar, Prof./Mech
Contact No 9942614577

PROCUREMENT COMMITTEE

Mr. P. Ramasamy, AO/SSMIET
Dr. V. Kandavel, AsP/Mech./SSMIET
Contact No 9942614577

CONFERENCE SECRETARIAT

Mrs. P. Kothai Natchiar, AP/English/SSMIET
Mrs. G. Rajarajeshwari, AP/ECE/SSMIET
Mrs. J. Dhanalakshmi, AP/CSE/SSMIET
Contact No 9003326766

CORRESPONDENCE DETAILS

The correspondence related to the conference can be made to **Mr.R.Senthil Kumar @ 9597156522**

The correspondence related to the exhibition can be made to **Mr.C.Silambarasan @ 7373707001**

Email –id : **nceri2023@gmail.com**
nceri2023@ssmiet.ac.in

PATRONS

Dr. D. Senthil Kumaran, Principal, SSMIET, Dindigul, Tamil Nadu

Prof. K. Ravichandran
UBA Regional Coordinator, Gandhigram Rural Institute (Deemed to be University), Dindigul, Tamil Nadu

CONVENER

Dr. K. Vinoth Kumar, Professor/ECE/SSMIET

ORGANIZING SECRETARIES

Mr. C. Silambarasan, AP/Mech./SSMIET
Mr. R. Senthil Kumar, AP/ECE/SSMIET

ADVISORY COMMITTEE MEMBERS

1. **Prof. Manoj Kumar Tiwari**, IIT Kharagpur
2. **Prof. Praveen Kumar**, IIT Roorkee
3. **Prof. P.M.V.Subbarao**, IIT Delhi
4. **Prof. Indumathi Nambi**, IIT Madras
5. **Dr. R. Ramesh**, NIRD & PR Hyderabad
6. **Prof. Pramod Kumar**, Sri Aurobindo College - Delhi University
7. **Dr.E.Somasundaram**, TNAU Coimbatore (Department of Agribusiness)
8. **Dr.R.Balaji**, TNAU Madurai. (Export and Innovations)
9. **Prof.B.S.Murty**, IIT Madras
10. **Dr.Ravikumar Kandasamy**, MGIRI (Deputy Director - Energy & Infrastructure)
11. **Mrs. Uma Chandrika**, MSME Madurai (Assistant Director - Chemical)
12. **Mr.Nanu Swamy**, Founder and Managing Director, Maxelerator Foundation Madurai
13. **Mr.Mu.Balasubramanian**, Expert in Sustainable Agriculture, Pothigaisolai Sivagiri.
14. **Dr.N.V.Sugathan**, M.D., Ph.D, Principal, Sarada Krishna Homoeopathic Medical College, Kulasekharam, Kanyakumari
15. **Dr.N.Sampath Kumar**, Principal, SSM College of Arts and Science, Dindigul
16. **Dr.M.Daniel Jebaraj**, Managing Trustee, PROSPER Foundation, Theni

NATIONAL CONFERENCE AND EXHIBITION ON RURAL INNOVATIONS

Date : March 24 - 25, 2023

Organized by

Unnat Bharat Abhiyan
SSM Institute of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai, Accredited by NAAC(2019-2024) & NBA(2022-2025))
Dindigul, Tamilnadu - 624002.

In Association with

- **Mahatma Gandhi Institute for Rural Industrialization (MGIRI)**
- **MSME Madurai**
- **MAXELERATOR Foundation Madurai**
- **UBA of TNAU**

Dr. D. SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sithaiyancottai (PO),
Palani Road, Dindigul - 624 002.

About USA

Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. The conceptualization of USA started with the initiative of a group of dedicated faculty members of IIT Delhi working for long in the area of rural development and appropriate technology. The concept was nurtured through wide consultation with the representatives of a number of technical institutions.

About SSMIET

Sri Shanmugavel Mills (SSM) is one of the leading business houses in Textile Industry in Dindigul District for over 30 years. SSM Group's strong desire to offer world-class high-quality Engineering Education has led to the launch of SSMIET at Dindigul from the academic year 2011-2012. Knowledge is provided by teachers, text books and interactive modes with others in the society. Skills could be developed only through perennial practice. SSMIET imbibe those qualities in the younger generation, besides education. As a basic philosophy, all the students would be inculcated with the importance of ethics, values, respect for nature and national pride.

About Conference

The objective of the conference is to demonstrate how rural problems can be treated as research challenges so that mainstream researchers take interest in order to get quality publications while solving socially relevant problems. This in turn will help in the documentation and awareness generation throughout the world not to mention. Satisfying the criteria for career advancement, it is expected that such activities among our younger generation will make them more conscious about the gross root level social issues enabling them to bring new technological solutions in the form of appropriate design or entrepreneurship models for the benefit of the rural masses. In addition, other organizations working in similar directions are also invited to submit papers and participate to evolve sustainable synergy among ourselves.

Call for Papers

Original papers preferably based on the following themes are invited.

Conference Themes

I. Water and waste Management
1. Water Management
2. Sewage Management
3. Liquid waste management
4. Agriculture Waste management

II. Rural Infrastructure
1. Participatory Technological outreach
2. Communication Technologies
3. Health : Physical and Mental
4. Service-Learning Approaches

III. Rural Energy System
1. Batteries and Energy Storages
2. Application of Sensors
3. Renewable Energy Technologies
4. Bio Energy and Solar Energy

IV. Sanitation
1. Technology for sanitation
2. Wash Strategies and Initiatives
3. Successful Wash Implementation
4. Networking with wash Institute

V. Capacity Building Strategies for convergence & Implementation

VI. Environment and Sustainable Resource Management
1. Supply chain Management for Rural Sector
2. Resource Mapping for Villages
3. Tele medicine

Dr. D. SENTHIL KUMARAN, M.E., PH.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Submission of Abstract

Authors are requested to prepare their abstract and research paper and send a soft copy through email at nceri2023@gmail.com or nceri2023@ssmiet.ac.in.The authors are requested to adhere to the following guidelines.

1. Every paper must be accompanied by a cover page, which should include the title of the paper, name(s) of the author(s) and their affiliations, resident country and the complete postal and e-mailaddresses.
2. The Research Papers should be in a Word Document format, Times New Roman, 12- point font size with 1.5 line spacing, 1-inch margins and APA style of referencing.
3. Abstracts should be limited to 350-500 words.

Selected candidates will be informed through mail. The decision of the Review Committee regarding the selection of papers will be final and binding.
Selected papers will be published in the conference proceedings.

Important Dates

Last Date for Paper Submission	:	11.03.2023
Notification of Acceptance	:	18.03.2023
Last Date for Registration	:	20.03.2023

Exhibition Details

This exhibition intends to connect 3 different cross section of people namely,
1. Rural innovators
2. Promoting companies
3. Target audience

There are 20 stalls of standard dimensional space in which rural innovation/Technology products to be exhibited.

Any product relevant to any one of the subthemes shall be exhibited for 2 days. For further details contact **Mr.C.Silamabarasan (73737 07001).**

Engineering and Technology
SSM • DINDIGUL-624 002 •

www.ssmiet.ac.in

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, Dindigul

Cordially invite all for the

Inauguration of

"National Conference & Exhibition on Rural Innovations"

In the presence of

Sri. C. KANDASWAMY
Managing Trustee, SSMIET

Sri. K. SHANMUGAVEL
Chairman, SSMIET

Chief Guest

Mr. JAISINH VAERKAR

Chairman, CII - Southern Region, Madurai Zone
Managing Partner, The Peninsular Export Company,
Virudhunagar.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (PO),
Palani Road, Dindigul - 624 002.

On 24th March 2023 (Friday)
@ 10.00 a.m, Seminar Hall-1, SSMIET

SSM Institute of Engineering and Technology

M&M 99652 96969

Note : Exhibition on rural Innovation will be inaugurated by the chief guest @ 11.30 am

Dr. K. Vinoth Kumar	Prof. K. Ravichandran	Dr. D. Senthil Kumaran
Convener	UBA Regional Coordinator	Principal

NATIONAL CONFERENCE AND EXHIBITION ON RURAL INNOVATIONS

Organized by

Unnat Bharat Abhiyan SSM Institute of Engineering and Technology

Dindigul-Palani Highway, Dindigul - 624 002.
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC (2019-2024) & NBA (2022-2025)- ECE, EEE & Mech

Registration Form

Paper ID	NCERI - WWM - 15
Title of the Paper	AN OVERVIEW OF WASTE MANAGEMENT IN MADURAI DISTRICT.
Name of the Institution	THIAGARAJAR COLLEGE OF ARTS AND SCIENCE, MADURAI
Authors Details with Designation	1. P. MARI MANJU LAKSHMI - (STUDENT) II - M.A ECONOMICS. 2. 3. 4. 5.
Accommodation	YES / NO
Email ID	marimanjulakshmi@gmail.com
Whats App No	7448476211
Address	8/3, KRISHNA ILLAM, ABIRAMI STREET, NEW VILANGUDI. MADURAI - 625018.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi • Affiliated to Anna University, Chennai • Accredited by NAAC)

Dr.D.Senthil Kumaran, B.E., M.E., Ph.D
Principal

SSMIET/216/March/2023

Date: 25.03. 2023

திண்டுக்கல், SSM பொறியியல் கல்லூரியில் உன்னத் பாரத் அபியான் சார்பில் SSM கல்லூரியின் முதல்வர் முனைவர் D. செந்தில் குமரன் தலைமையில் தேசிய அளவிலான கருத்தரங்கம் மற்றும் ஊரக வளர்ச்சிக்கான கண்காட்சி மார்ச் 24 மற்றும் 25 ஆகிய தேதிகளில் நடைபெற்றது. இவ்விழாவில் சிறப்பு விருந்தினர்களாக Maxelarator Foundation, மதுரை நிறுவனர் திரு. நானுசாமி மற்றும் திருமதி நவீனா நானுசாமி, UBA மண்டல ஒருங்கிணைப்பாளர் முனைவர் K. ரவிச்சந்திரன் கலந்து கொண்டனர். விழாவில், கிராமப்புற ஊரக வளர்ச்சித் திட்டங்கள் குறித்து பல்வேறு தலைப்புகளில் கருத்தரங்க விவாதம் மற்றும் கண்காட்சி நடைபெற்றது. இவ்விழாவில் பல்வேறு கிராமப்பற மக்கள் மற்றும் கல்லூரி மாணவர்கள் பங்கேற்று பயன்பெற்றனர். MSME – DFO மதுரையின் உதவி இயக்குநர், உமா சந்திரிக்கா அவர்கள் கருத்தரங்கம் நிறைவு விழாவில் பங்கேற்று சிறப்புரை ஆற்றினார். நிகழ்ச்சி ஏற்பாட்டினை பேராசிரியர்கள் K.வினோத்குமார், R.செந்தில்குமார் மற்றும் C.சிலம்பரசன் ஆகியோர் செய்தனர்.

PRINCIPAL
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti, Vellage, Sundragundu (Po),
Palani Road, Dindigul - 624 002.

0451-2448855
Dindigul - Palani Highway, Dindigul - 624 002.
ssmietdgl@gmail.com

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti, Village, Sundragundu (Po),
Palani Road, Dindigul - 624 002.

Go to home page

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul – 624 002.

Academic Year 2022-2023

06.03.2023

UBA (Unnat Bharat Abhiyan) Programme

Submitted to the Principal for kind approval

Sub: Visit millet fair cum Exhibition – TNAU - madurai – Reg.

I wish to bring to your kind notice that we are planning to visit millet fair cum Exhibition at Agricultural College and Research Institute(TNAU –Madurai) on 07.03.2023 (Tuesday). In this connection, from our institution 41 students and 8 faculty members interested to visit the exhibition.i request you to approval for this visit. Herewith, I have attach the details , list of students and faculty details for your reference.

6/3/23

Staff In-charge

[R.SENTHILKUMAR
AP/ECE]

Principal

SSM Institute of Engineering and Technology DINDIGUL

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kumathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002.

S.No.	Department	Register No.	Student Name	Year
1	ECE	922120106001	AARTHY E P	III
2		922120106003	AISHWARYA K	III
3		922120106031	KAVYASHREE K K	III
4		922120106016	HARINI J	III
5		922120106033	LATHEEF MAIDEEN A	III
6		922120106046	PAVITHRA R	III
7		922120106052	SAHITHA M.V	III
8		922120106071	TERRENCE RITHIK ARON S	III
9		922120106073	UMAPRIYADHARSHINI J	III
10		922120106081	G.S.VIJAYRAGUNATH	III
11		922121106010	DHIVYA N	II
12		922121106011	DHIVYA DHARSHINI B	II
13		922121106026	KAMATCHI VELAN M	II
14		922121106039	LOGESH K	II
15		922121106041	MAHALAKSHMI T	II
16		922121106074	ROBIN J J	II
17		922121106095	SUBASH NATRAYAN R	II
18		922121106107	VEDHASRI S	II
19		922121106113	YUVASRI M	II
20	EEE	922120105001	AKASH M	III
21		922120105005	DINESHKUMAR U	III
22		922120105007	JOTHISELVAM P	III
23		922120105016	SADHAM HUSSIAN S	III
24		922120105018	SHANMUGAVEL	III
25	CSE	922120104024	LOKESH G	III
26		922120104047	SHARMILA S	III
27		922120104052	SOUNDARYA DEVI M	III
28		922120104033	PRADEEP V	III
29		922120104042	SANTHIYA DHARSHINI	III
30	CIVIL	922121103001	DHARUN M	II
31		922121103009	NITHEESH KANNAN P	II
32		922121103303	PRAVEEN R	II
33	MECH	922120114008	JAIKUMAR PANDIAN J	III
34		922120114013	LAKSHMI N	III
35		922120114308	DHIWAKAR C	III
36		922120114020	NITHIS KUMAR J	III
37		922120114030	SUGAN B	III
38		922120114031	TAMIL SELVAN S	III
39		922121114005	BALACHANDRAN	II
40		922121114021	RAGULRAJ	II
41		922121114028	SUBASH PANDIAN	II

SSM Institute of Engineering and Technology DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Palani Road, Dindigul 624 002

List of faculty:

S.No.	FACULTY NAME	DESIGNATION / DEPT.
1	Dr. K. Vinothkumar	PROF /ECE
2	Mr.R.Senthil Kumar	AP/ECE
3	Dr.K.Ganapriya	AP/ECE
4	Mrs. K.Divya	AP/ECE
5	Mr..C.Silambarasan	AP/Mech
6	Mr.P.M Sharan Karthick	AP/Civil
7	Mr.G.Murugan	AP/CSE
8	Mr.T.Arul Kumar	AP/EEE

7/3/23

Staff In-charge

[R. SENTHIL KUMAR
AP/ECE]

Principal

SSM Institute of Engineering and Technology
DINDIGUL - 624 002

Go to home page

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
[illegible]patti Village Sindalagundu (Po),
[illegible] Road, Dindigul 624 002

WORLD RECORD EVENT OF TREE PLANTING EVENT

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY
Dindigul – Palani Highway, Dindigul – 624 002.
Phone : 0451 – 2448800 – 99 (100 Lines) Fax: 0451 – 2448855
Email :ssmietdgl@gmail.com Website : www.ssmiet.ac.in

C.No.68/SSMIET/2022 **Date: 19.12.2022**

Circular

On 23.12.2022-Friday, a tree sapling ceremony (6 lakh saplings in 6 hours) is going to be held at Edayakottai in Dindigul Oddanchatram Taluk in the presence of our Hon'ble State Minister (Thiru. R. Sakkarapani, MLA, Food & Civil Supplies). Those interested in attending the event should fill out and submit the Google Form below by this evening (09.12.2022-Saturday) at 5 pm. For further details, students can contact Mr.R.Satheesh Babu, AP/Maths.

The following items will be provided during the program:

1) Lunch
2) T-shirt
3) A World Record Certificate is possible.

Conditions :

1) Students should reach the college by 6 a.m on 23.12.2022.

2) Cell phones are strictly prohibited throughout the program.

3) Students must be Dindigul District residents only.

Link : https://forms.gle/nK8OBCGEBqHJUhY2A

NSS Coordinator - R. Satheesh Babu

PRINCIPAL

Copy to: ED for kind information

Administrative Officer

HoD's

AUTO CIVIL CSE ECE MECH Mech S&H

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kannathupatti Village Sindalagundu (Po),
Road, Dindigul 624 002

TREE SAPLING CEREMONY

REPORT

A world record event of Tree planting (6 lakh saplings in 6 hours) held on 23.12.2022 (Friday) at Edayakottai in Oddanchatram Taluk of Dindigul District. Tamil Nadu Food and Food Supply Department (Food and Food Supply, Consumer Protection, Price Control) Minister Mr. Inaugurated by R. Chakrapani. Two additional ministers graced the occasion by participating More than 200 students and 19 faculty members from our college participated in it. Also, A large number of college students, public works department employees, village administrators, social welfare department employees, local municipality department officers and government officials participated in this. Local municipality department officers guided us on how to plant a sapling properly. The trees are important in environmental and ecology concern. Neem, Punga, Vagai, Kodukkapuli, Amla, Arjuna, Vengai and Atthi and various new verities items were planted. Due to rain and water availability, 90% saplings are getting survival and people are involving in tree planting and rearing work. On that afternoon, lunch was organized for everyone by the government. Our students participated with great enthusiasm.

28/12/22

NSS Coordinator
R. Satheesh Babu

Principal

SSM Institute of Engineering and Technology
DINDIGUL-624002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
... Village Sindalagundu (Po),
... Road, Dindigul 624002

PHOTOS.

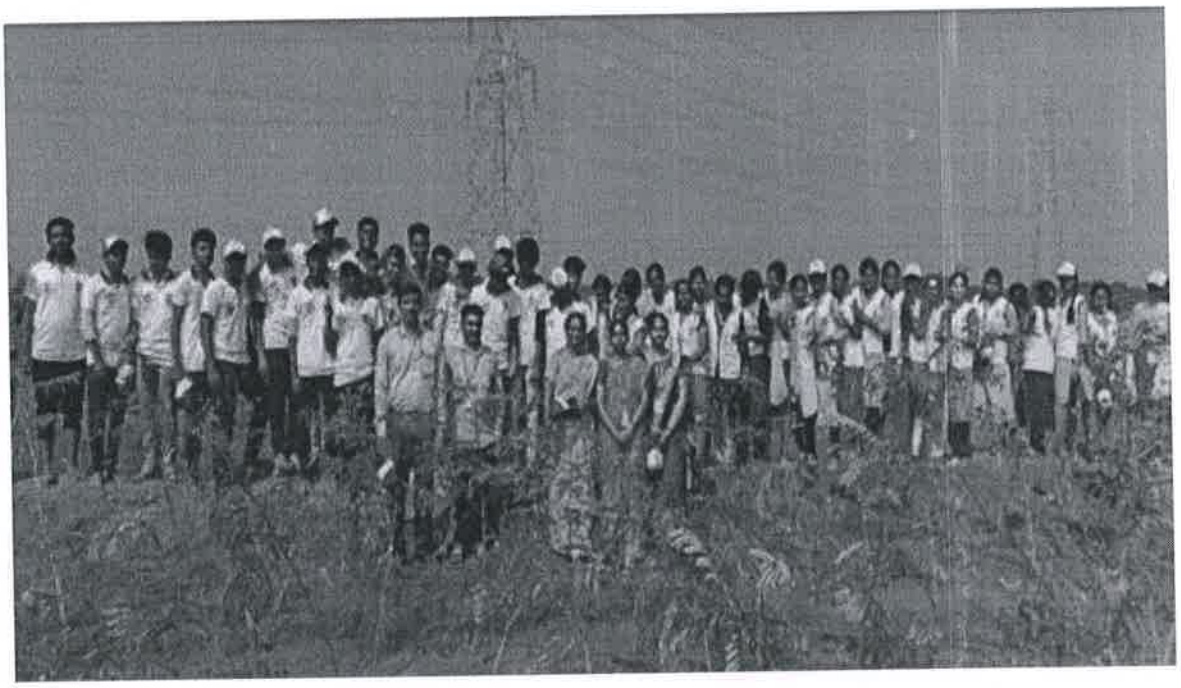


Fig 11. SSMIET Faculties along with the students in Tree Sapling event

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002

Fig 12. Tree Sapling by SSMIET Students

Fig 13. SSMIET Faculties along with the students

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po).
Palani Road, Dindigul - 624 002

Participant Details

TREE SAPLING CEREMONY (23.12.2022)			
S.No	NAME	DEPT.	Certificate Received
1	MANIKANDAN S	ECE-2	Manikandan S
2	MOHAMED UVAIS N	ECE-2	Uvais N
3	MOHESHWARAN E.	ECE-2	
4	MUGUNTHA S	ECE-2	
5	NAVEEN KUMAR A	ECE-2	A. Naveen Kumar
6	NICKY JOSEPH A	ECE-2	Nicky
7	OM SRINATH U	ECE-2	
8	PRANAVV S	ECE-2	S. Pranavv
9	PRAVEEN KUMAR M	ECE-2	M. Praveenkumar
10	RAAM PRASANTH P.T	ECE-2	P.T Raam prasanth
11	RAGUL.V	ECE-2	V. Ragul
12	SANJAY K	ECE-2	K. Sanjay
13	SANTHOSH S	ECE-2	S. Santhosh
14	SARAN D	ECE-2	D. Saran
15	SHAHUL HAMMED M	ECE-2	
16	SHAM SANTHOSH P	ECE-2	
17	SHARON R	ECE-2	R. Sharon
18	KETHRA PACKIAM B	ECE-2	B kethra packiam
19	LAKSHITHA SRI B	ECE-2	B Lakshitha sri
20	LAKSHMI PRABAA S	ECE-2	S. Lakshmi prabaa
21	NANDHANA T	ECE-2	Nandhana T
22	NAVEENA K	ECE-2	K. Naveena
23	NESA SHEEBA J	ECE-2	J Nesa Sheeba
24	PAGALAVATHII R	ECE-2	R Pagalavathii
25	PALLAVI T	ECE-2	T. Pallavi
26	PAULINA J	ECE-2	J Paulina
27	PREETHIKA A	ECE-2	A Preethika
28	PRIYADHARSHINI M	ECE-2	M. Priyadharshini
29	SAMEERA SHARIFA K.D.	ECE-2	Sameera K
30	SANJANA M.K.	ECE-2	Sanjana M K
31	SANTHANA RENGANAYAGI K	ECE-2	Santhana Renganayagi
32	SANTHIYA S	ECE-2	Santhiya. S
33	SARANYA S	ECE-2	Saranya S

SSM Institute of Engineering and Technology
DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

TREE SAPLING CEREMONY (23.12.2022)			
S.No	NAME	DEPT.	Certificate Received
1	SHIYAM B	ECE-3	
2	THANGAVEL N	ECE-3	
3	THANIAL DISHOSHA R	ECE-3	
4	VIJAYAKUMAR B	ECE-3	
5	YOGESH K	ECE-3	
6	YOGESH KANNA AL	ECE-3	
7	SHRI SHADHA J	ECE-3	
8	SIVASANKARI R	ECE-3	
9	SONIYA FLORA S	ECE-3	
10	SOWMIYAVARTHINI S	ECE-3	
11	SUBHAGEETHA K	ECE-3	
12	SUBIKSHA A	ECE-3	
13	THAARANI S	ECE-3	
14	UPASNASREE S	ECE-3	
15	VASUKI K	ECE-3	
16	VIGNESHWARI S	ECE-3	
17	YAZHINI S	ECE-3	
18	HALITH FAIZAL M	EEE	
19	MAHARAJAN G	EEE	
20	MOHAMED B	EEE	
21	PRAVEEN RAJ P	EEE	
22	NAVEEN BHARATHYP	EEE	
23	RUTHRAKUMAR K	EEE	
24	SANKARAGOPI B	EEE	
25	DEEPADHARANI M	EEE	
26	ELAMATHI K	EEE	
27	GRACIOUS LOUISSANA L	EEE	
28	GRENA JELCY A	EEE	
29	NIVITHA M	EEE	
30	SHALINI M	EEE	
31	SOWNDARYA R	EEE	
32	VARSHINI M	EEE	
33	VISWA NANDHINI A	EEE	

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
[illegible] Village Sindalagundu (Po),
[illegible] Road, Dindigul 624 002

TREE SAPLING CEREMONY (23.12.2022)

S.No	NAME	DEPT.	Certificate Received
1	SAI B	CSE-3	
2	SANGEETH N	CSE-3	
3	SATHISH KARTHICK G	CSE-3	
4	SAKTHI HARIHARAN V	CSE-3	
5	SARATHY V	CSE-3	
6	SUNDHARESHWARAN R	CSE-3	
7	TAMIL SELVAN R	CSE-3	
8	VINITH S	CSE-3	
9	SAIMICA INFANT X	CSE-3	
10	SAKTHI VARSHINI V	CSE-3	
11	SARVATHA R	CSE-3	
12	SIVA BHARATHI M	CSE-3	
13	SRI SWETHA Y	CSE-3	
14	SUBBULAKSHMI S. G	CSE-3	
15	SUSMITHA G	CSE-3	
16	VIJAYA RAGHAVI J.K	CSE-3	
17	WINFRED REJI D.R	CSE-3	
18	ABDUL RAHUMAN A	MECH	
19	AKILAN D	MECH	
20	DANIEL RAJ V	MECH	
21	JAFFAR SATHIK A	MECH	
22	KAVIARASU S	MECH	
23	KESAVAN M	MECH	
24	LAWRANCE A	MECH	
25	MUHAMAD AAKIL Z	MECH	
26	NAHAKISHORE S.R	MECH	
27	NAVEENKUMAR M	MECH	
28	PONNARASAN B	MECH	
29	PRAVEEN MANICKAM I	MECH	
30	RAMANAN P	MECH	
31	RIYAZ AHAMED M	MECH	
32	SAKTHI RUTHRAN M	MECH	
33	SATHISH KUMAR V	MECH	
34	STALIN RAJA S	MECH	
35	VASANTHAKUMAR K	MECH	
36	VIMAL SASTAA P	MECH	

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Palani Road, Dindigul 624 002.

TREE SAPLING CEREMONY (23.12.2022)			
S.No	NAME	DEPT.	Certificate Received
1	ABDUL WAHITH J	ECE-1	J. Abdul Wahith
2	AJAY KRISHNA S	ECE-1	S. Ajay krishna
3	ARUNKUMAR A	ECE-1	A Arunkumar
4	BALAJI M	ECE-1	M. Balaji
5	DEEPAK P	ECE-1	P. Deepak
6	FRANCIS MARIA RUBAN P	ECE-1	P.Ruban
7	GERSHON S	ECE-1	
8	GOBINATH C	ECE-1	Gobinath
9	GOKUL NATH R	ECE-1	R. Gokul nath
10	GOPINATH S	ECE-1	S. GOPINATH
11	GOPINATH S	ECE-1	S. GopiNath.
12	GUNASEKARAN S	ECE-1	S Gunasekaran
13	ISMAIL SAIT M	ECE-1	M
14	JEGATHEESH K	ECE-1	K. Jegatheesh.
15	KARTHIKEYAN M	ECE-1	M. KarthiKeyan.
16	KAUSAL NEYAN S	ECE-1	S. Kaul Neyan
17	ANANYA S	ECE-1	
18	ANGEETHA SHRUTI SHREE S	ECE-1	S. Angeetha
19	ASHMITA M	ECE-1	M. Ashmita.
20	ASMITHAA S	ECE-1	S. Asmithaa.
21	CATHRINE PRABA P	ECE-1	P. cathrine praba
22	DEVI PRIYA P	ECE-1	P. Devipriya
23	DHARINI SRI K	ECE-1	K Dharini Sri
24	DHARSHINI S	ECE-1	S. Dharshini
25	DHIVYA D	ECE-1	D. Dhivya
26	DIVYA JENIFER A	ECE-1	A. Divyajenifer.
27	GOWRI K	ECE-1	Gowri. K
28	HARISHMA REETHU S	ECE-1	S Harshi
29	JANANI P	ECE-1	
30	JINETTA SHREE G. J	ECE-1	
31	KANIMOZHI R	ECE-1	R. Kanimozhi
32	KAVITHA G	ECE-1	G. Kavitha
33	KAVYADHARSHINI K	ECE-1	K. Kavyadharshini

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS.
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

TREE SAPLING CEREMONY (23.12.2022)			
S.No	NAME	DEPT.	Certificate Received
1	KALEEL AHAMED J	CSE-2	
2	PRAVIN M	CSE-2	
3	RAJA PANDI K	CSE-2	
4	JEYA SHRI P	CSE-2	
5	JEYA SREE C	CSE-2	
6	JINU MISTIKA R	CSE-2	
7	KANISHA G	CSE-2	
8	KIRUBA M	CSE-2	
9	KOWSIKA S	CSE-2	
10	PAVITHRA B	CSE-2	
11	PRAVEENA B	CSE-2	
12	PRICILLA RUBY S	CSE-2	
13	PRIYANGA SALETH MARY S	CSE-2	
14	RAKHZANAA R.	CSE-2	
15	RESHMA S	CSE-2	
16	RITHIKAA B	CSE-2	
17	ROHINI M	CSE-2	
18	SAHITHYA DHARANI J	CSE-2	
19	DHANUSHPANDI J	CSBS	
20	DHIYANESHPANDI S	CSBS	
21	GOPALA KRISHNAN S	CSBS	
22	HARIHARAN A	CSBS	
23	JENSEN DANIEL RAJ S	CSBS	
24	MOHANAHARIRAM S	CSBS	
25	MONISH BABU V M	CSBS	
26	RAMPRASANTH S	CSBS	
27	RAVIN KUMAR K	CSBS	
28	SATHYA VASAGAN E	CSBS	
29	THARUPRASATH A	CSBS	
30	AAYSHA SITHICKA M	CSBS	
31	DHANACHELLAM K.D	CSBS	
32	DIVYAPRATHA K	CSBS	
33	ISWARIA P	CSBS	
34	KAVISHREE S	CSBS	
35	KAVIYA LAKSHMI M	CSBS	
36	MADHUMITHA V	CSBS	
37	PRIYA DHARANI J	CSBS	
38	REXI B	CSBS	
39	SENTHAMIZHINIYA A	CSBS	
40	SUBISH METHINA S	CSBS	

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Go to home page

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY
Dindigul – Palani Highway, Dindigul – 624 002.
Academic Year 2021-2022

18.04.2022

UBA (Unnat Bharat Abhiyan) Programme

Submitted to the Principal for kind approval

Sub: Sri Sakthi Trust Field Visit – Ayyampalayam – Reg.

I wish to bring to your kind notice that we are planning to conduct a field visit for our students in collaboration with UBA /SSMIET and Sri Sakthi Trust from 25.04.2022 to 30.04.2022. In this connection, in our college, six batches (each with 50 students) of I, II and III year students are in association with UBA were identified. Herewith we attach the details of the programme, tentative dates and schedule for the field visit. Hence, approval may kindly be given to initiate the field visit to Sri Sakthi Trust.

SSM Institute of Engineering and Technology • DINDIGUL 624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul – 624 002.

Academic Year 2021-2022

22.04.2022

Schedule Plan

UBA (Unnat Bharat Abhiyan) Programme

Field visit to Sri Sakthi Trust - Ayyampalyam

Sl. No	Date	Students Details	Total	Accompanying Faculty
1	25.04.2022 Monday	II ECE A II ECE B III ECE-A	50	UBA Co-Ordinator + 2 Faculty
2	26.04.2022 Tuesday	III ECE-B III ECE-C	50	UBA Co-Ordinator + 2 Faculty
3	27.04.2022 Wednesday	III EEE II MECH	50	UBA Co-Ordinator + 2 Faculty
4	28.04.2022 Thursday	II CSE	50	UBA Co-Ordinator + 2 Faculty
5	29.04.2022 Friday	I Year	50	UBA Co-Ordinator + 2 Faculty
6	30.04.2022 Saturday	II CIVIL III CIVIL III AUTO III MECH	50	UBA Co-Ordinator + 2 Faculty

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul – 624 002.

Academic Year 2021-2022

Executed schedule

UBA (Unnat Bharat Abhiyan) Programme

Field visit schedule to Sri Sakthi Trust - Ayyampalyam

Sl. No	Date	Students Details		Total	Accompanying Faculty
1	25.04.2022 Monday	II ECE A II ECE B	9 25	56	Mr.K.Senthilkumar Dr.K.Vinothkumar Dr.Premkumar Mrs.A.Geetha Mrs.S.Abirami
		III ECE-A	22		
2	26.04.2022 Tuesday	III ECE-B	29	58	Mr.J.Vetrimanikumar Mr.V.P.Gokulan Mr.K.S.Arunkumar Mrs.G.Saranya
		III ECE-C	29		
3	27.04.2022 Wednesday	III EEE	43	66	Mr. P.Sankarkannan Mrs. V. Preethi Mr. U Karthick Mr. V. Sivakumar Mrs. S. Vijaya Samundeeswari Mr. K. G. Murugan, TA/EEE
		II MECH	23		
4	28.04.2022 Thursday	II CSE	45	45	Dr.G.Prabu Mrs.N.J.Divya Mr.X.Franklin Aro,TA/CSE
5	29.04.2022 Friday	I EEE-1	17	51	Mrs.S.Kavitha Mrs.S.Hemalatha Mrs.R.Janani Ms.R.Vithyadevi Mrs.J.John Prateeba Mrs.V.Sumithra Mrs.P.Kothai Natchiar Dr.S.Sudha,Librarian Mr.S.Nagaraj,TA/Che Mr.Antony,TA/Phy
		I MECH	6		
		I ECE-3	28		
6	30.04.2022 Saturday	II CIVIL III CIVIL	22 13	61	Dr.G.Selvabharathi Mr.V.Praveen Jesuraj Mr.P.M.Sharan Karthik Mr.Seenivasa Perumal Mr. P Dheenadhyalan Mr. T Karthick Muniasami
		III AUTO	8		
		III MECH	18		
7	02.05.2022 Monday	I CSE-1	19	43	Mr.R.Satheesh Babu Mrs.K.Thara Mrs.S.Soundaralakshmi Mr.M.Christopher Mr.S.Nagaraj,TA/Che Mr.Antony,TA/Phy
		I CSE-2	8		
		I EEE-2 & Civil	16		

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul – 624 002.

Academic Year 2021-2022

List of I Year Students for Field Visit on 02.05.2022

Sl.No	Name of the Student	Sl.No	Name of the Student
CSE-1		**EEE-2 & CIVIL**	
1	ANAND CHARUKESAN K	28	GOKULL V
2	ANISHA J	29	KARTHIKEYAN M
3	BAVANI K	30	KAVINNILAVAN S
4	DEVAKI R	31	NAGAJOTHI
5	DHARSHINI S	32	NITHEESH KANNAN
6	DHIYANESH S	33	PRAVEEN VENGADESH S
7	HARINI S	34	SANJAY G
8	INDHIRARAJ S	35	SANTHOSH C
9	JEYARAMAN S	36	SELVAKUMAR C
10	JEYA SHREE S	37	NIVASHINI P
11	KAJALAKSHMI M	38	RAGAVI R
12	KARPAGAM S	39	RAJESHWARI J
13	KARTHEKEYAN M	40	SANTHIYA M
14	KAVIYA J	41	SHARMILA M
15	KISHOR KUMAR S	42	VAISHALI M
16	MANOJKUMAR V	43	VANAJA G
17	MAHIMA R		
18	MANIKANDAN B		
19	MANTHRA SRI D		
CSE-2			
20	MATHAVAN S		
21	SANTHOSH K		
22	SHIVANI K		
23	THAMEEM RAJA K		
24	UMAR FAROOK J		
25	VIDHYA SAGAR P		
26	YOGESHWARAN B		
27	YUVARAJ V		

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sanarpalagunnu (Po),
Palani Road, Dindigul - 624 002.

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul – 624 002.

Academic Year 2021-2022

List of I Year Students for Field Visit on 29.04.2022

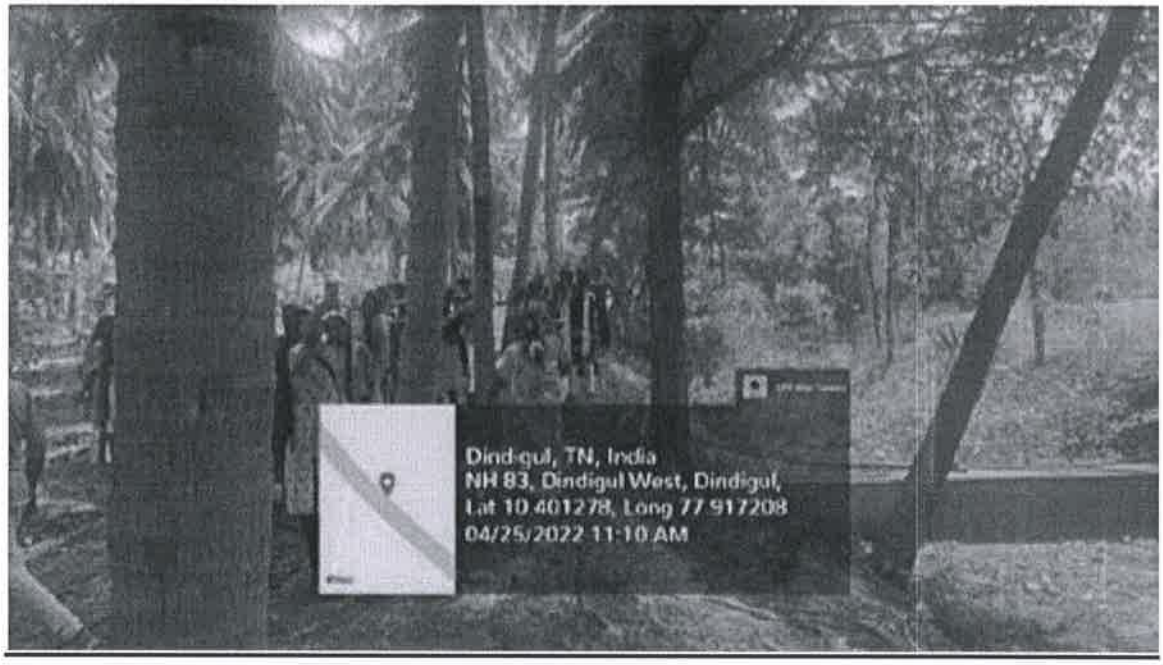
Sl.No	Name of the Student	Sl.No	Name of the Student
ECE-3		**MECH**	
1	SABITHA JONES M	29	INBA THAMIZAN
2	SANJITHA FATHIMA S	30	HARSAN M S
3	SANTHI A	31	KISHORE KUMAR S
4	SANTHOSH R	32	NITHISH KUMAR R
5	SARATHI V	33	SYED ABUDHAHIR S
6	SASHMITHA SHREE M	34	YASHWATHKUMAR B
7	SATHISH KUMAR S	**EEE-1**	
8	SELVA MADHESVARAN	35	ABIRAMI G
9	SENTHIL NATHAN M	36	AISHWARYA M.P
10	SHANMUGAPRIYA S	37	ARCHANA DEVI B
11	SIBISUDHAN R	38	BALA SUBRAMANIYAN R
12	SIVASANKARI K	39	BHUVANESWARI G
13	SONAISAKTHI M	40	CATHRIN NISHA M
14	SOORIYA K	41	DIVYA J
15	SRI ISWARYA	42	DOMINIC SCAPLARRAJ A
16	SRIRAM M	43	JAYASRI S
17	SRISRUTHI S	44	KAMILA SAI K
18	SUBASH NATRAYAN R	45	KANYA K
19	SUBHA N	46	KAVIYA LAKSHMI S
20	SUGAPRIYA P	47	MANI VEL G
21	SWETHA S	48	MINIPRIYA K
22	VASANTHA KUMAR P	49	MOHAMMED SIDDIQ A
23	VALARMATHI	50	NARMATHA DEVI P
24	VEDHASRI S	51	PRIYA DHARSHINI J
25	VIGNESH V		
26	VIKASHINI K		
27	VISHNUPRIYA		
28	YUVASRI M		

SSM Institute of Engineering and Technology DINDIGUL-624 002

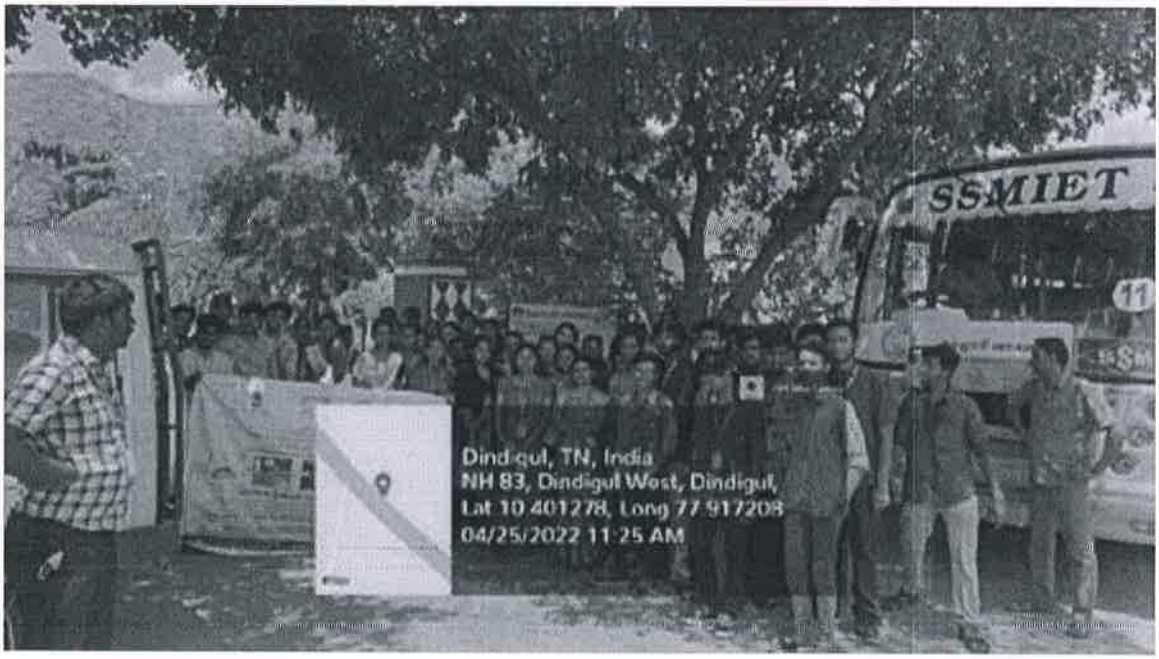
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Palani Road, Dindigul 624 002.

Field Visit on 25.04.2022

1.Check Dam Visit by the Students



2. Biodiversity gardens, including herbal gardens visit

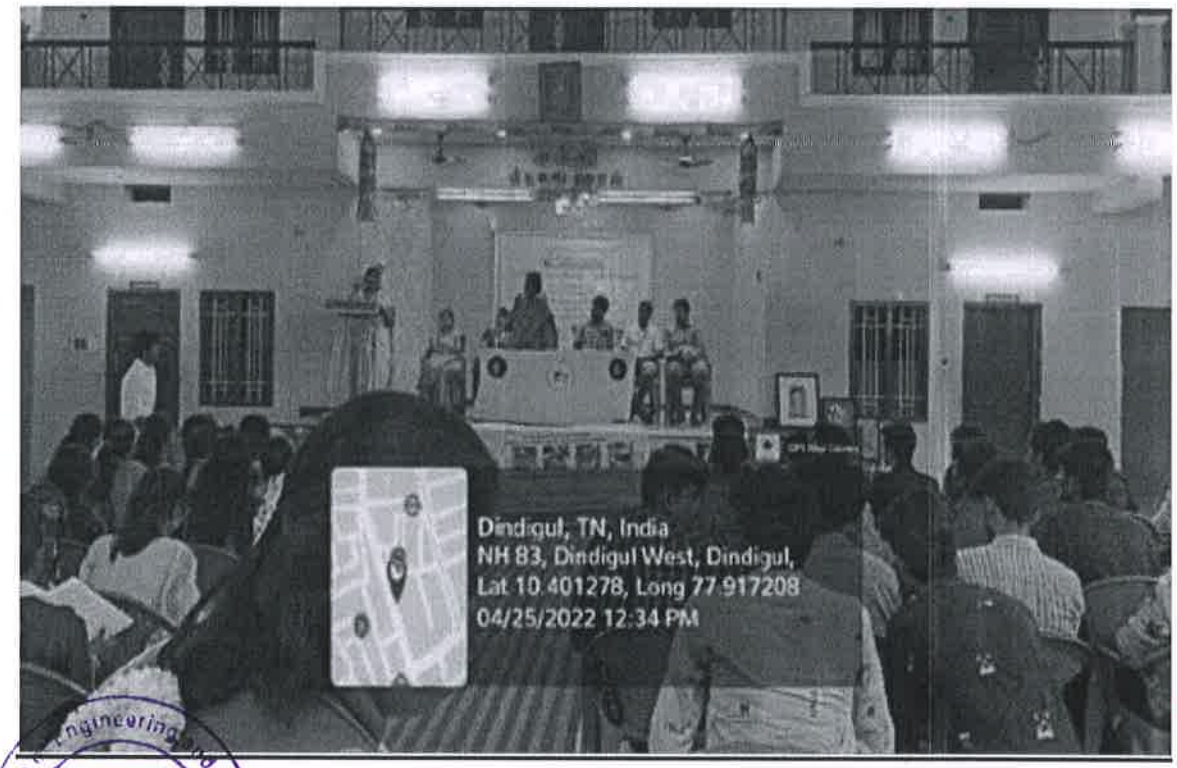


SSM Institute of Engineering and Technology
DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu(Po),
Palani Road, Dindigul - 624 002.

3. Agricultural product Value Addition

4. Presentation on various developmental activities undertaken by Sakthi Trust

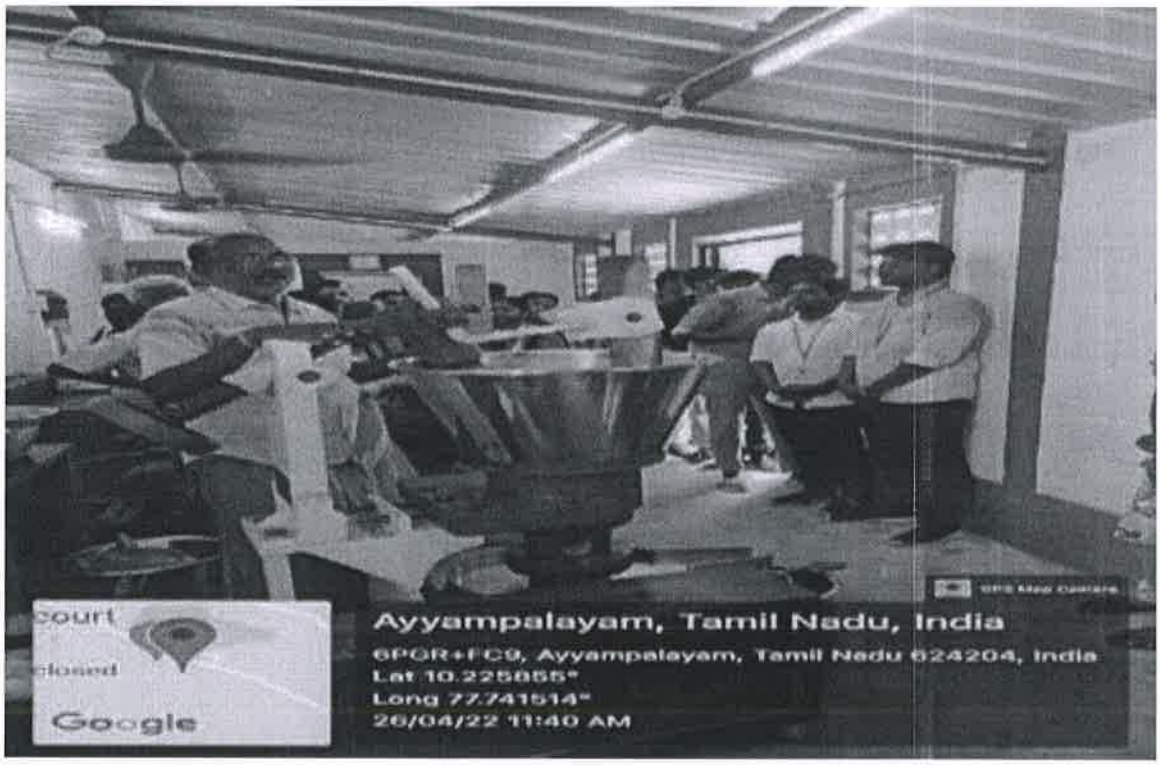


SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

Field Visit on 26.04.2022

1. Agricultural product Value Addition

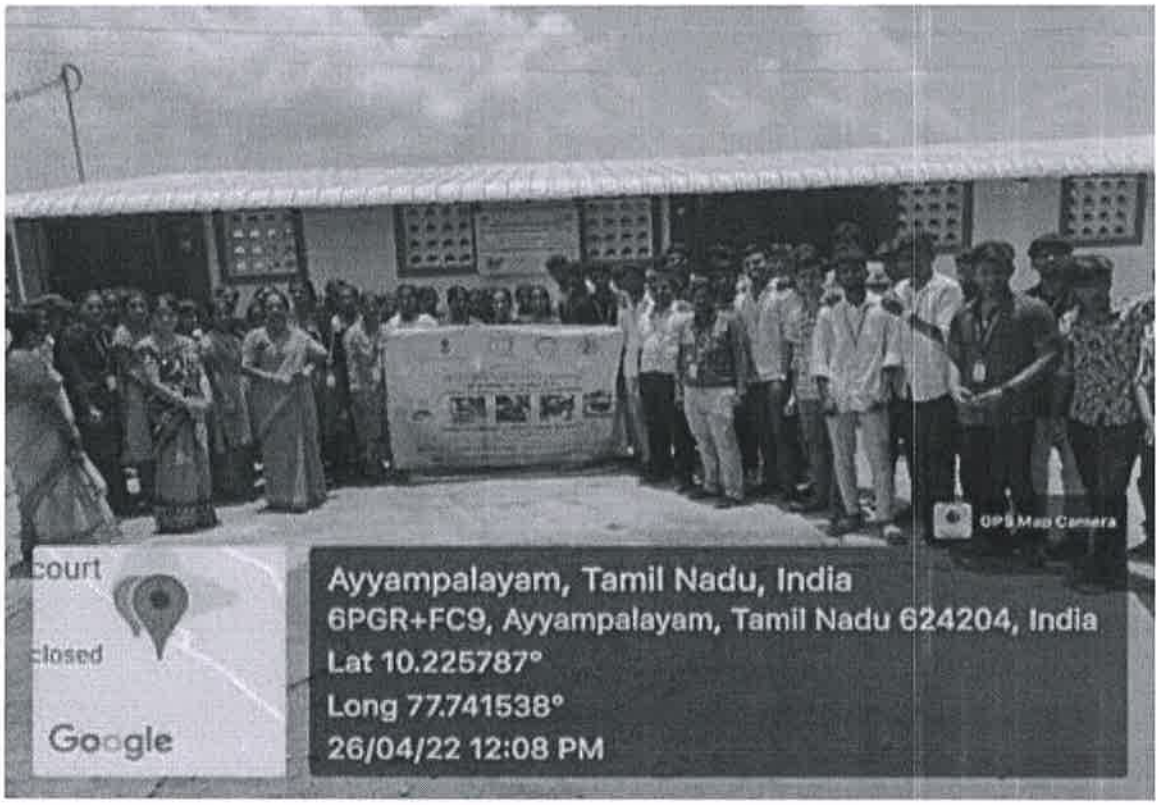


2. Presentation on various developmental activities undertaken by Sakthi Trust

SSM Institute of Engineering and Technology • DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., MISTE
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sindalagundu (Po),
Natham Road, Dindigul 624 002.

3. Agricultural product Value Addition

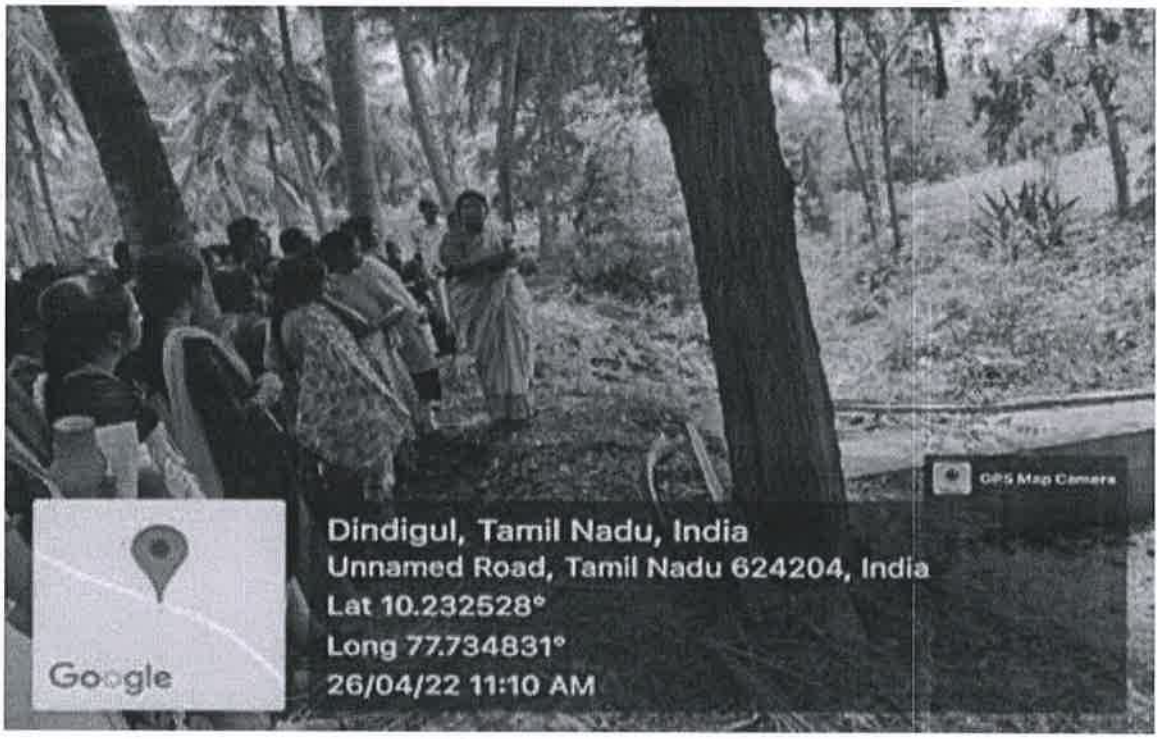


4. Visited Automatic weather station

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Principal
SSM Institute of Engineering and Tech...
Kuttathupatti Village Sindalagunda...
Palani Road, Dindigul ...

5. Visited Check Dam construction

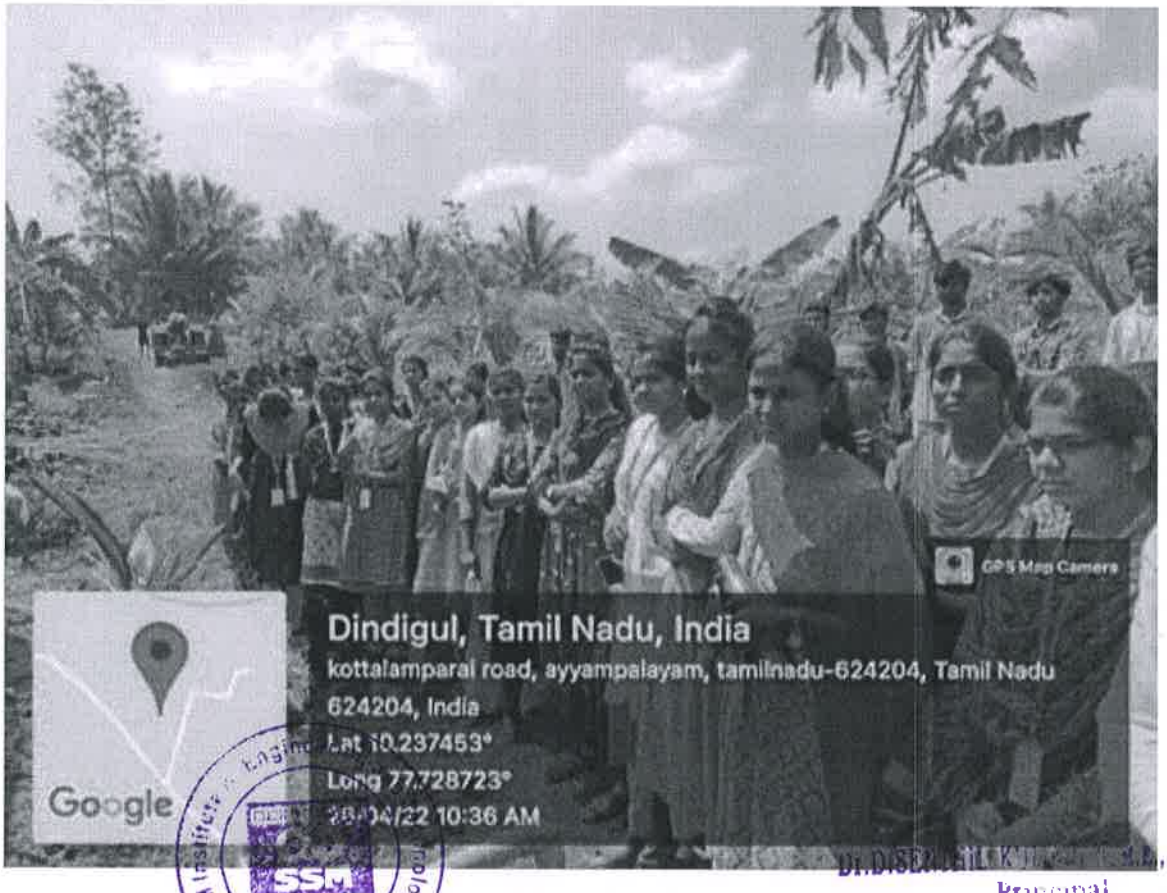


6. Climate Resilient Agriculture

SSM Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D
Principal
SSM Institute of Engineering and Tech...
Kuttathupatti Village, Sindalagunt...
Palani Road, Dindigul - 624 002

7. Water Conservation Technologies



SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

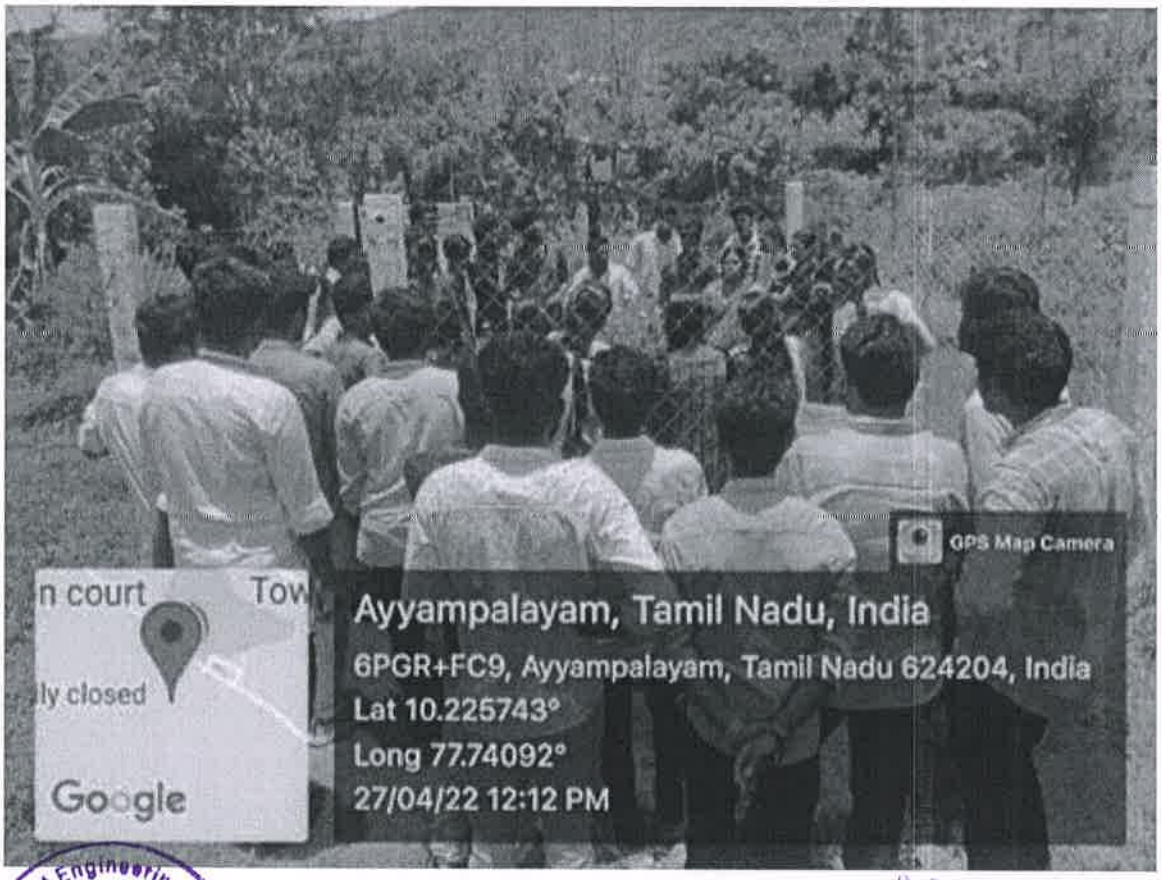
Ph.D.,

Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002

Field Visit on 27.04.2022

1. Agricultural product Value Addition

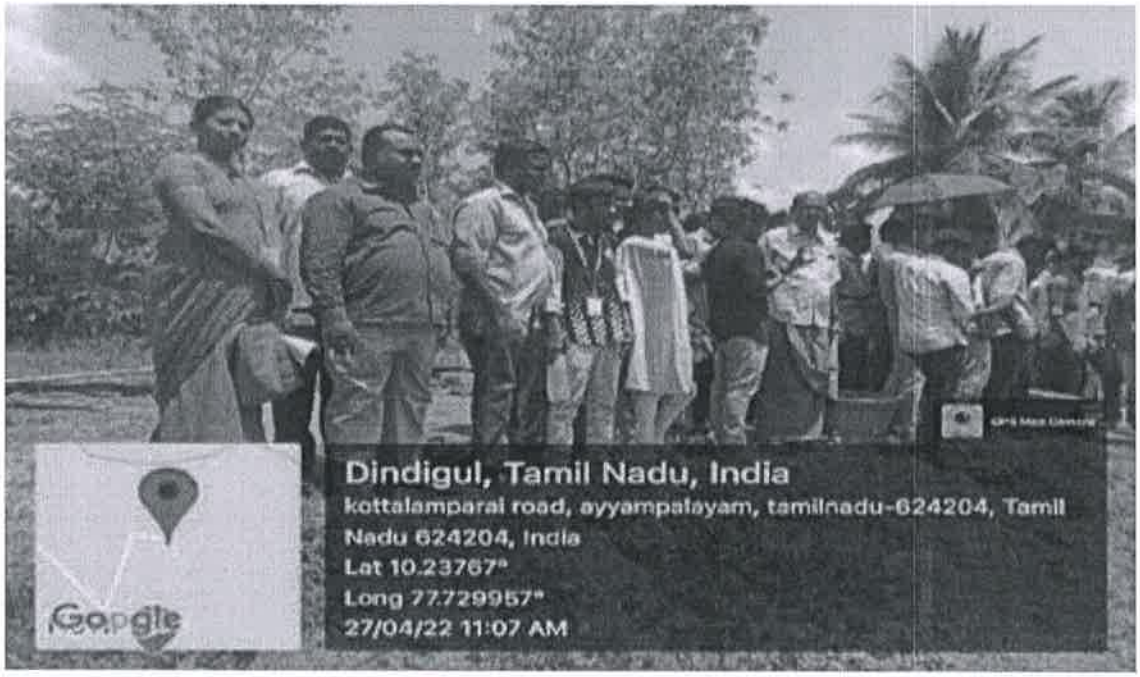
2. Visited Automatic weather station



SSM Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagunau (Po),
Palani Road, Dindigul - 624 002

3. Climate Resilient Agriculture



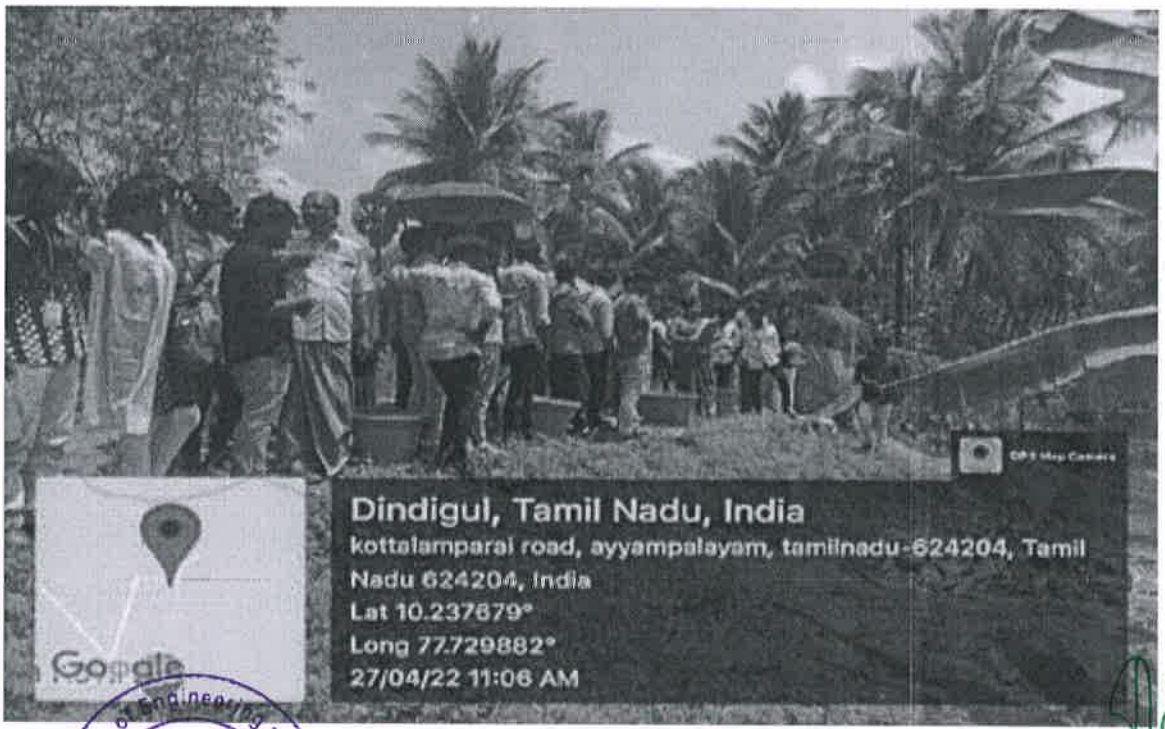
4. Visited Check Dam construction

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Via),
Palani Road, Dindigul - 624 002

5. Water Conservation Technologies

6. Climate Resilient Agriculture



SSM Institute of Engineering and Technology
DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

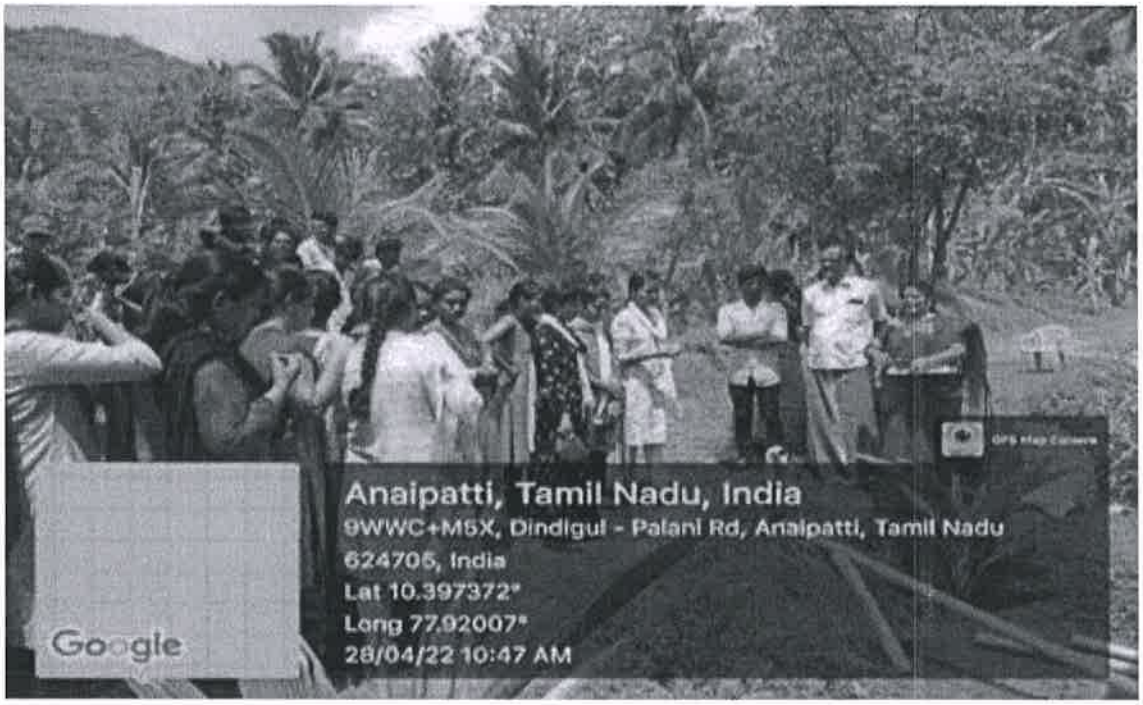
7. Visited Biodiversity gardens, including herbal gardens

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

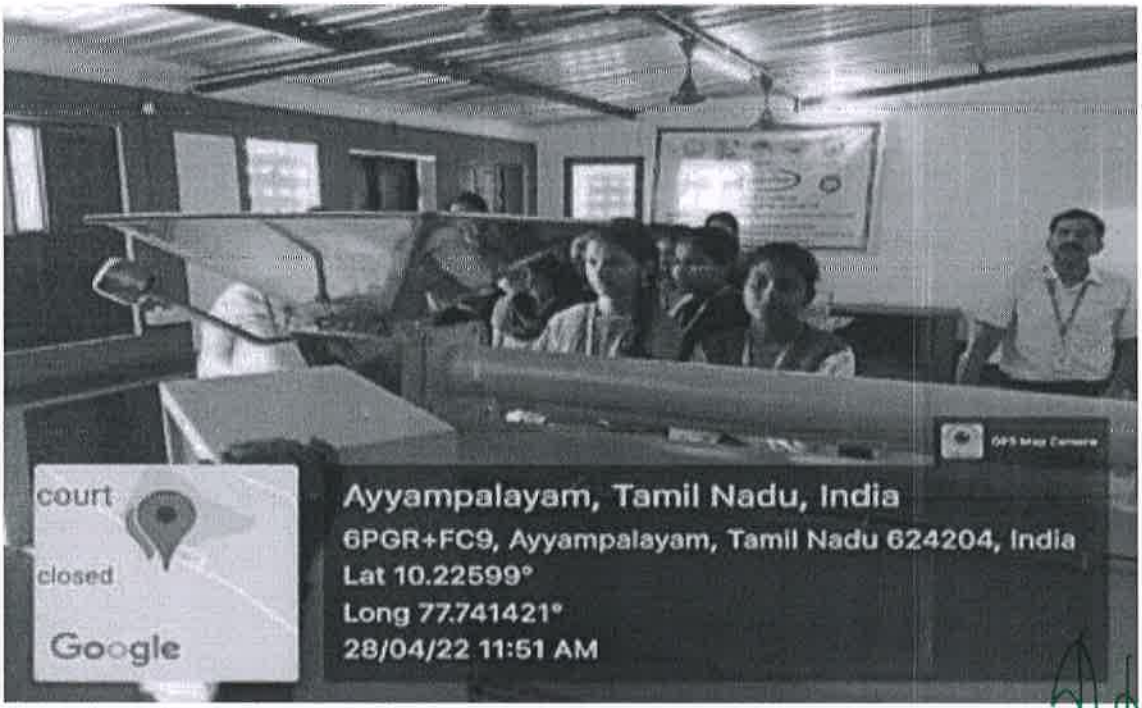
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village Sinnalagundu (Po),
Palani Road, Dindigul 624 002.

Field Visit 28.04.2022

1. Water Conservation Technologies



2. Agricultural product value addition



SSM Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,
Principal
SSM Institute of Engineering and Technology
Kuttaiyupatti Village Sindalagundu (Po),
Palani Road, Dindigul 624 002

3. Agricultural product value addition

4.Check Dam Visit

SSM Institute of Engineering and Technology
DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti, Vilpatti, Sundarapuram (PO),
Palani, Kerala, Dindigul - 624618

5. Presentation on various developmental activities undertaken by Sri Sakthi Trust

SSM Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology

Field Visit on 29.04.2022

1. Visited Check Dam construction

2. Climate Resilient Agriculture

SSM Institute of Engineering and Technology

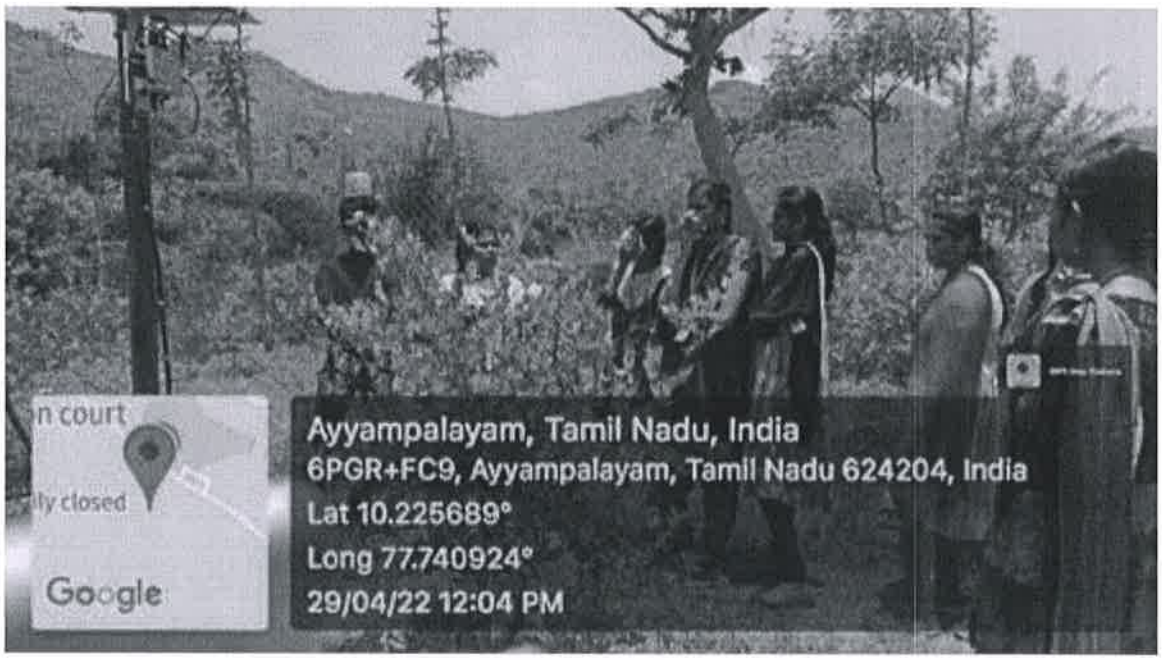
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Siddalagundu Po,
Palani Road, Dindigul 624002.

3. Presentation on various developmental activities undertaken by Sri Sakthi Trust

SSM Institute of Engineering and Technology
DINDIGUL - 624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(IVS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

4. Visited Automatic weather station

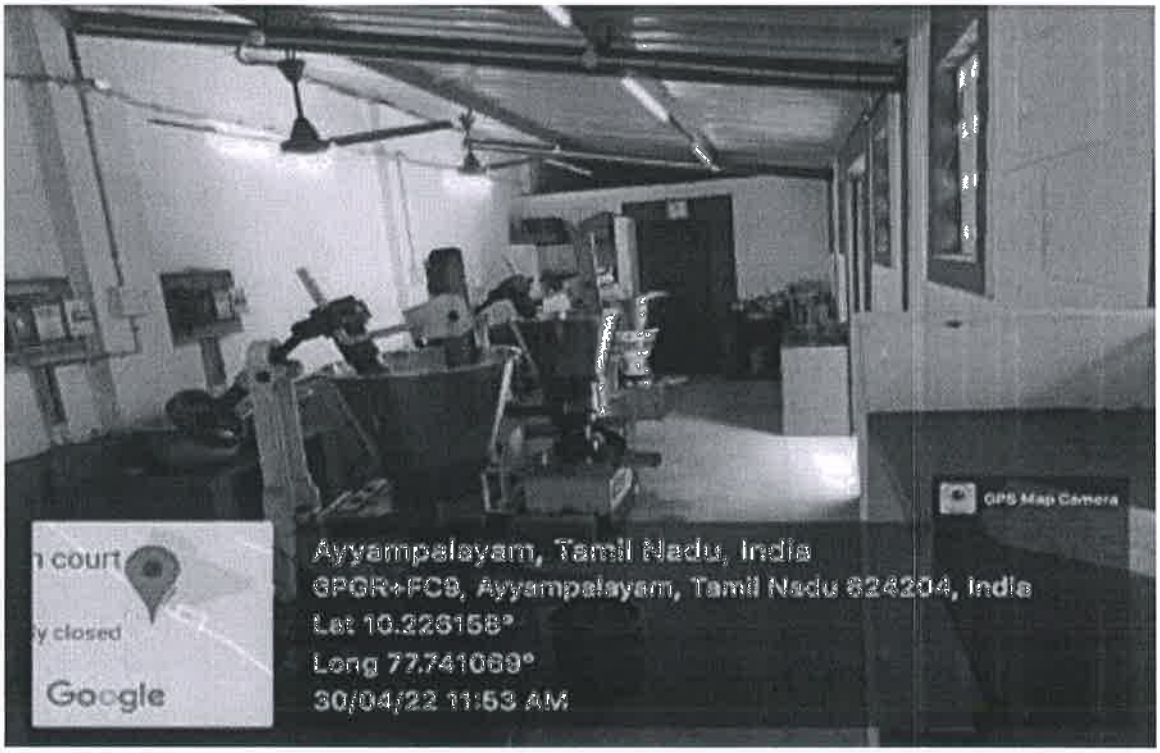


SSM Institute of Engineering and Technology • DINDIGUL 624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttatbupatti Village, Singalagundu Pop.
Palani Road, Dindigul [illegible]

Field Visit on 30.04.2022

1. Agricultural product Value Addition

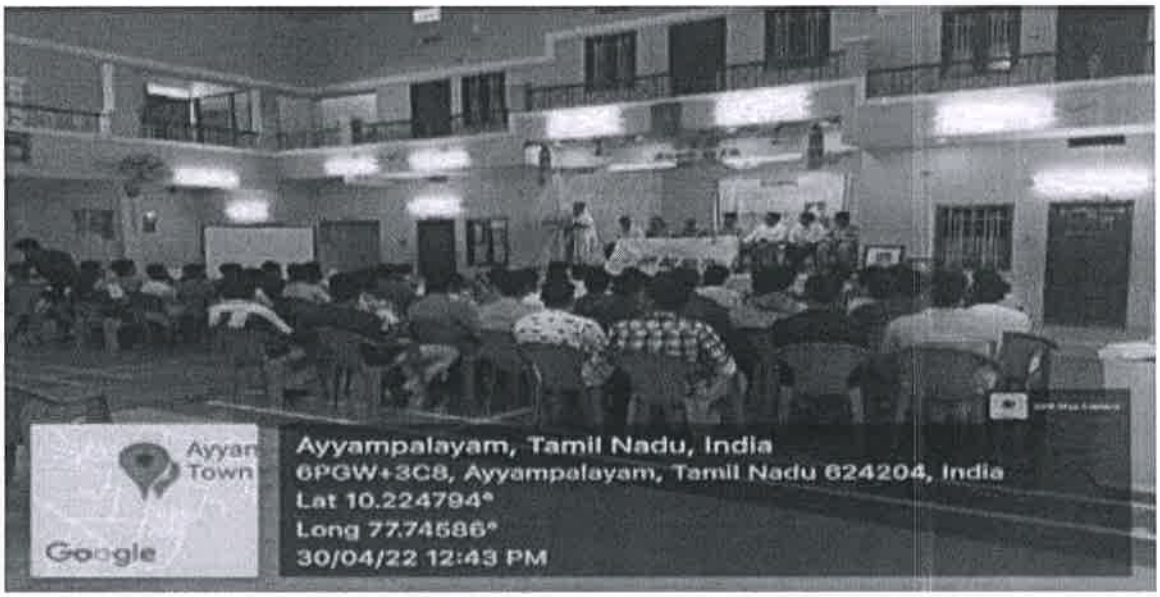


2. Visited Check Dam construction

SSM Institute of Engineering and Technology

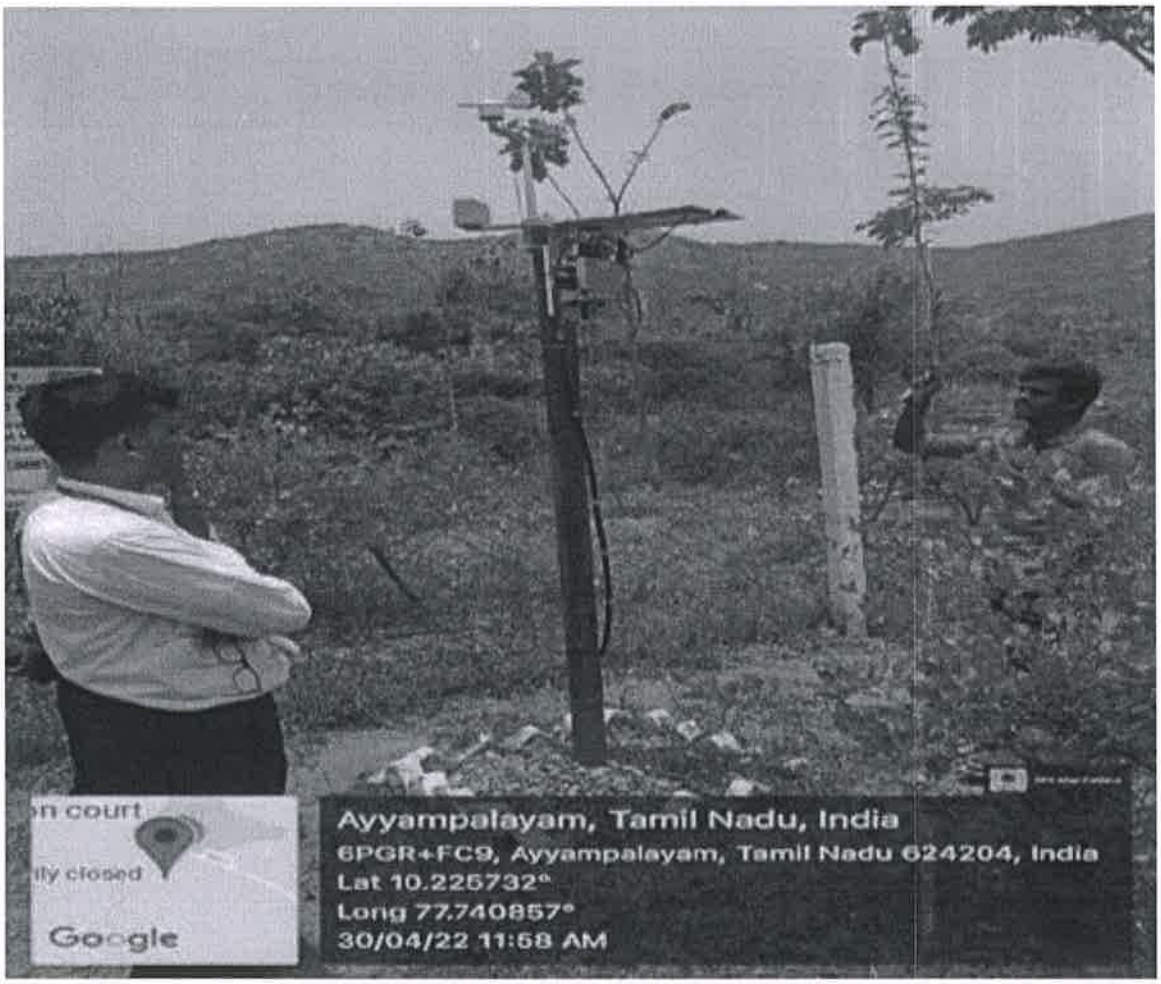
Dr.D.SENTHIL KUMARAN, M.E., Ph.D.
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagunde Post
Palani Road, Dindigul - 624 002

3. Presentation on various developmental activities undertaken by Sakthi Trust



4.Visited Automatic weather station

Dr.D.SENTHIL KUMARAN M.E., Ph.D.
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagunta,
Palani Road, Dindigul

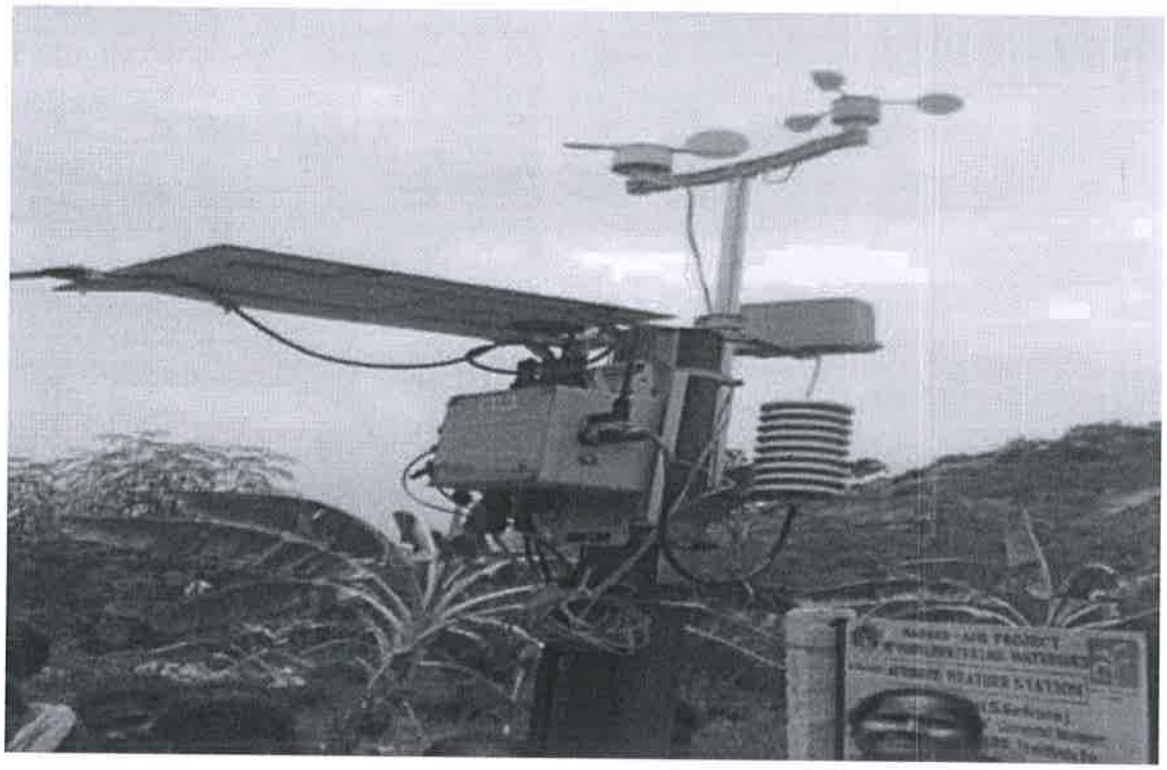


Field Visit on 02.05.2022

1.Visited Check dam construction

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (IIT)
Principal
SSM Institute of Engineering and Technology
Kamarajupatti Village, Sindalagu...
Palani Road, Dindigul 624 002

2. Visited Automatic weather station



3. Water Conservation Technologies

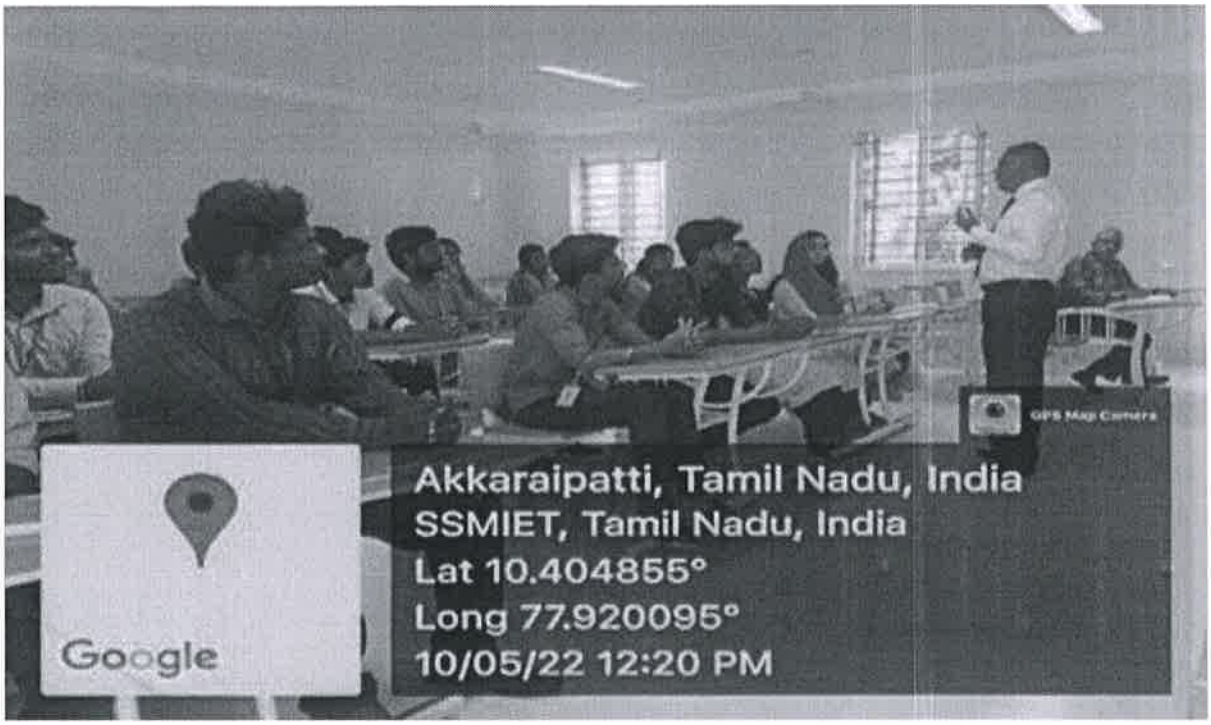
SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

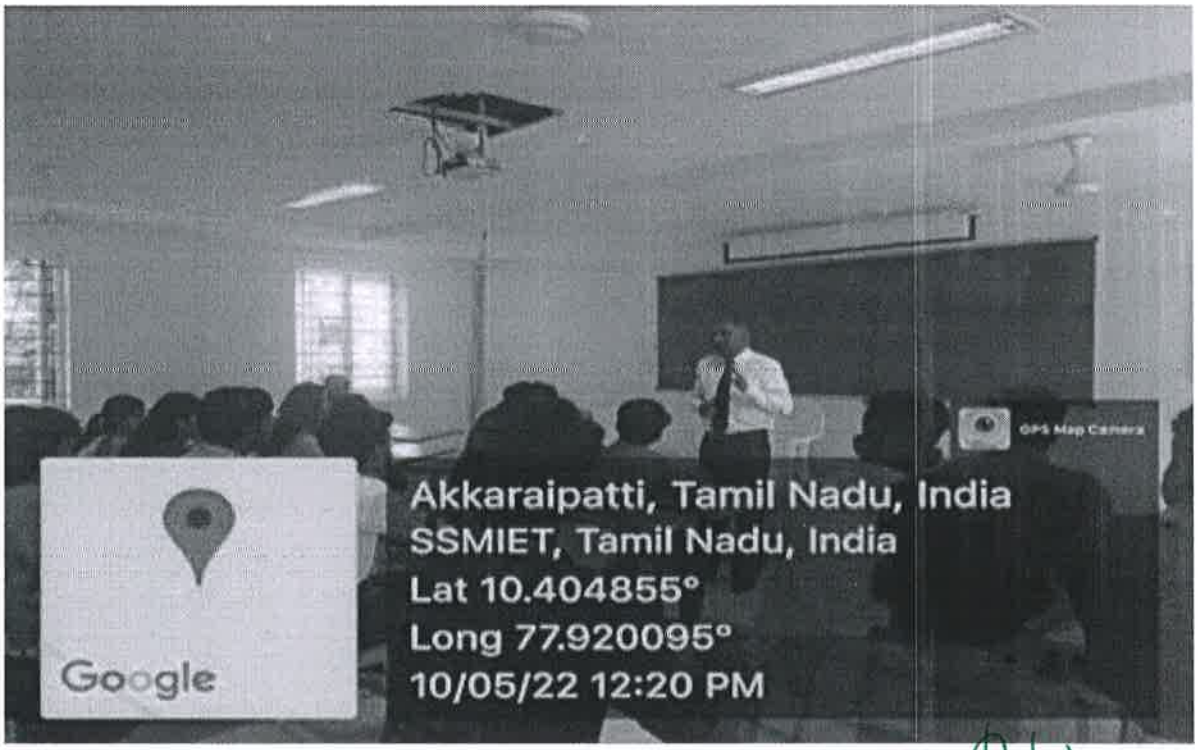
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul 624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D
Principal
SSM Institute of Engineering and T
Kuttathupatti Village. Sindalagu
Palani Road, Dindigul - 624

SSM Institute of Engineering and Technology - DINDIGUL

Feedback Meeting held on 10.05.2022





SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,
Principal
SSM Institute of Engineering and Tech
Kuttathupatti Village Sindalagund
Palani Road, Dindigul 624 002

Go to home page

CRITERION VII
INSTITUTIONAL VALUES AND BEST PRACTICES

Key Indicator	7.1. Institutional Values and Social Responsibilities
Metric	7.1.3 Quality audits on environment and energy regularly undertaken by the Institution

CERTIFICATION BY THE AUDITING AGENCY

A copy of the certificates issued by the auditing agency for energy, environment, and green audit undertaken by the institution is attached below.

Principal

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu(Po),
Palani Road, Dindigul - 624 002.

SSM Institute of Engineering and Technology
DINDIGUL-624 002

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

ENERGY AUDIT CERTIFICATE

RAM KALAM/SSMCET/EA/December/2023/01

This is to certify that, we have conducted a detailed ***ENERGY AUDIT*** in **SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India on 20 December 2023. The college is now practicing various energy conservation measures, implemented energy efficient lighting system, following Best operating Practices (BoP) and utilizing all kind of energy in a Judicious manner.**

Audit conducted and verified by

Dr. S.R. SIVARASU
BEE Certified Energy Auditor (EA-27299)
Lead Auditor – ISO 14001: EMS; IGBC AP, GRIHA CP
CII Certified Professional in SWM
ISO-14064: Implementor & Auditor - Carbon Footprint Management

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalaguadu (Po),
Palani Road, Dindigul - 624 002.

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

ENERGY AUDIT CERTIFICATE

RAM KALAM/SSMCET/EA/December/2023/01

AUDIT SUMMARY

Date of Audit	20 December 2023
Present Annual Energy Consumption	3,19,219kWh + 2,736 kg LPG
Present Energy Cost	Rs. 45.9 Lakhs
Proposed % of Energy Savings	14.8 % Electricity + 36.0 % LPG
Annual Energy Savings	51,481 kWh + 986 kg LPG
Annual Financial Savings	Rs. 7.4 Lakhs
Initial Investment Required	Rs. 7.7 Lakhs
Simple Payback Period	Nearly 1.0 Year (12.5 Months)

(Detailed Energy Conservation Proposals are presented in the Audit Report)

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

ENVIRONMENT AUDIT CERTIFICATE

RAM KALAM/SSMCET/ENA/December/2023/02

This is to certify that, we have conducted a detailed *ENVIRONMENT AUDIT* in SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India on 20 December 2023. The college has upholding excellent Balance of CO_2 emission & reduction, providing quality water, preserving great environment system and also educating the same to all the students.

Audit conducted and verified by

Dr. S.R. SIVARASU
BEE Certified Energy Auditor (EA-27299)
Lead Auditor – ISO 14001: EMS; IGBC AP, GRIHA CP
CII Certified Professional in SWM
ISO-14064: Implementor & Auditor - Carbon Footprint Management

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

ENVIRONMENT AUDIT CERTIFICATE

RAM KALAM/SSMCET/ENA/December/2023/02

AUDIT SUMMARY

S. No.	Annual Energy Consumption & CO_2 Emission			Annual CO_2 Neutralization		
	Description	Energy Quantity	CO_2 Emission (Tons)	Description	Parameters	CO_2 Neutralized (Tons)
1.	Electricity	3,48,104 kWh	285.4	Electricity (DG)	65,520 kWh	53.7
2.	Diesel	75,751 Litres	200.0	Mature Tree	651 Nos	14.2
3.	LPG	2,736 kg	8.2	Solar Thermal [1]	7,240 kWh	5.9
Total Emission			493.6	Total-Neutralized		73.9
Balance CO_2 to be Neutralized = 419.8 Tons/Annum						

([1] Electrical equivalent is being considered)

SSM Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

GREEN AUDIT CERTIFICATE

RAM KALAM/SSMCET/GA/December/2023/03

This is to certify that, we have conducted a detailed *GREEN AUDIT* in SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India on 20 December 2023. The college has exemplary greenery, transportation system with Pollution Control Certificates, effective waste management and rich collection of Flora & Fauna.

Audit conducted and verified by

Dr. S.R. SIVARASU
BEE Certified Energy Auditor (EA-27299)
Lead Auditor – ISO 14001: EMS; IGBC AP, GRIHA CP
CII Certified Professional in SWM
ISO-14064: Implementor & Auditor - Carbon Footprint Management

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,
Principal
SSM Institute of Engineering and Tec
Kuttathupatti Village, Sindalagunc
Palani Road, Dindigul - 624 00

RAM KALAM CENTRE FOR ENERGY CONSULTANCY & TRAINING
No.8, VPK Garden, Mylampatti, Coimbatore – 641 062
GSTIN: 33AAZFR8890A1ZN

GREEN AUDIT CERTIFICATE

RAM KALAM/SSMCET/GA/December/2023/03

AUDIT SUMMARY

- ❖Assessment of Mature trees, bushes & shrubs (nearly 651 No's)
- ❖Investigation of Solar Hot Water System (1,000 Litres)
- ❖Assessment of Rain Water Harvesting (RWH)
- ❖Pollution certificates for all transport vehicles
- ❖Study on effective Solid Waste Management (SWM) system
- ❖Best Operating Practices on Battery Management
- ❖Maintaining excellent Bio-diversity & Ecology

Institute of Engineering and Technology DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (IETE)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

CRITERION VII
INSTITUTIONAL VALUES AND BEST PRACTICES

Key Indicator	7.1. Institutional Values and Social Responsibilities
Metric	7.1.3 Quality audits on environment and energy regularly undertaken by the Institution

REPORTS ON ENVIRONMENT AND ENERGY AUDITS SUBMITTED BY THE AUDITING AGENCY

S. No.	Description
1.	Environment Energy and Green Audit Report

Environment Energy and Green Audit Report

A copy of the report for Environment Energy and Green audit undertaken by the institution is attached below.

Principal

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

AUDIT CONDUCTED FOR

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India.

DATE OF AUDIT

20 DECEMBER 2023

AUDIT CONDUCTED BY

RAM-KALAM CENTRE FOR ENERGY CONSULTANCY AND TRAINING

(Chennai ♦ Coimbatore ♦ Erode)

Mobile: +91- 80567 19372, 99420 14544 (WhatsApp) E-mail: ramkalamcect@gmail.com

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

1. ACKNOWLEDGEMENT

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ACKNOWLEDGEMENT

The audit team of RAM-KALAM CENTRE FOR ENERGY CONSULTANCY AND TRAINING, Coimbatore – 641 062 is thankful to the Management, Principal, Faculty and Technical team members of **M/s. SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY,** Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India for providing an opportunity to conduct a detailed Energy, Environment and Green Audit process in the college premises.

It is our great pleasure which must be recorded here that the Management of **M/s. SSM Institute of Engineering and Technology** extended all possible support and assistance resulting in thorough completion of the audit process. The audit team appreciates the cooperation and guidance extended during the course of site visit and measurements. We are also thankful to all those who gave us the necessary inputs and information to carry out this very vital exercise.

Finally, we offer our sincere thanks to all the members in the engineering division/ technical / non-technical divisions and office members who were directly and indirectly involved with us during collection of data and while conducting field measurements.

Management Team Members	
Shri. K. SHANMUGAVEL	Chairperson and Managing Trustee
Shri. C. KANDASWAMY	Managing Trustee
Shri. S. SRIRAM SIDDARTH	Chief Executive Officer
Dr. D. SENTHIL KUMARAN	Principal

Audit Team Members	
Dr. S.R. SIVARASU, Ph.D.,	**BEE Certified Energy Auditor (EA-27299)** Lead Auditor-ISO-14001:2015 (EMS), IGBC AP, GRIHA CP, CII CP in SWM Carbon Footprint Auditor & Implementor **Mobile: +91- 80567 19372, 99420 29372**
Er. P. PRABAKARAN, M.E.,	**Audit Associate**
Er. R. MARIMUTHU, B.E.,	**Junior Engineer**

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM Institute of Engineering and Technology DINDIGUL-624 002

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

2. INTRODUCTION

TO

ENERGY-ENVIRONMENT-GREEN AUDIT

SSM Institute of Engineering and Technology DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

2.1: Preface about the Institution:

- **Sri Shanmugavel Mills (SSM)** is one of the leading business houses in Textile industry in Dindigul District for over 30 years. SSM Group's strong desire to offer world-class high-quality Engineering Education has led to the launch of SSM Institute of Engineering and Technology at Dindigul from the academic year 2011-2012. The Trustees are optimistic about SSMIET to be a great landmark in the history of higher education in the district of Dindigul.

2.2: Vision:

- ✓ To inculcate strong knowledge of engineering among the students to excel in their domain through a standard of excellence in learning, research and transform them to face challenges and cater to the needs of the society by imparting competent technical and entrepreneurial skills with human values and ethics.

2.3: Mission:

- ☞ To encourage students to become self-disciplined individuals through appropriate teaching learning process.
- ☞ To empower students by providing conducive environment to develop them as best professionals and responsible citizens.
- ☞ To provide conceptual knowledge that supports design and development of new products and sustainable development.
- ☞ To maintain a healthy relationship with industries by establishing centres of excellence for technological training and product development.

2.4: Scope of the Audit Process:

- **Energy Audit:** To conduct a detailed energy audit in the college campus with a main focus to identify judicious usage of electrical and thermal energy (where, when, why and how energy is being utilized).
- **Environmental Audit:** Identification of history of activities, present environmental practices followed, monitoring records and known sources of environmental issues inside the college.
- **Green Audit:** Assessment on Campus greenery in terms of mature trees, flowering shrubs, bushes, medicinal plants, adoption of green energy generation and utilization, reduction of CO_2 due to green energy system and identification of possible implementation and enhancement of current greenery practices.

2.5: Outcomes of the Audit Process:

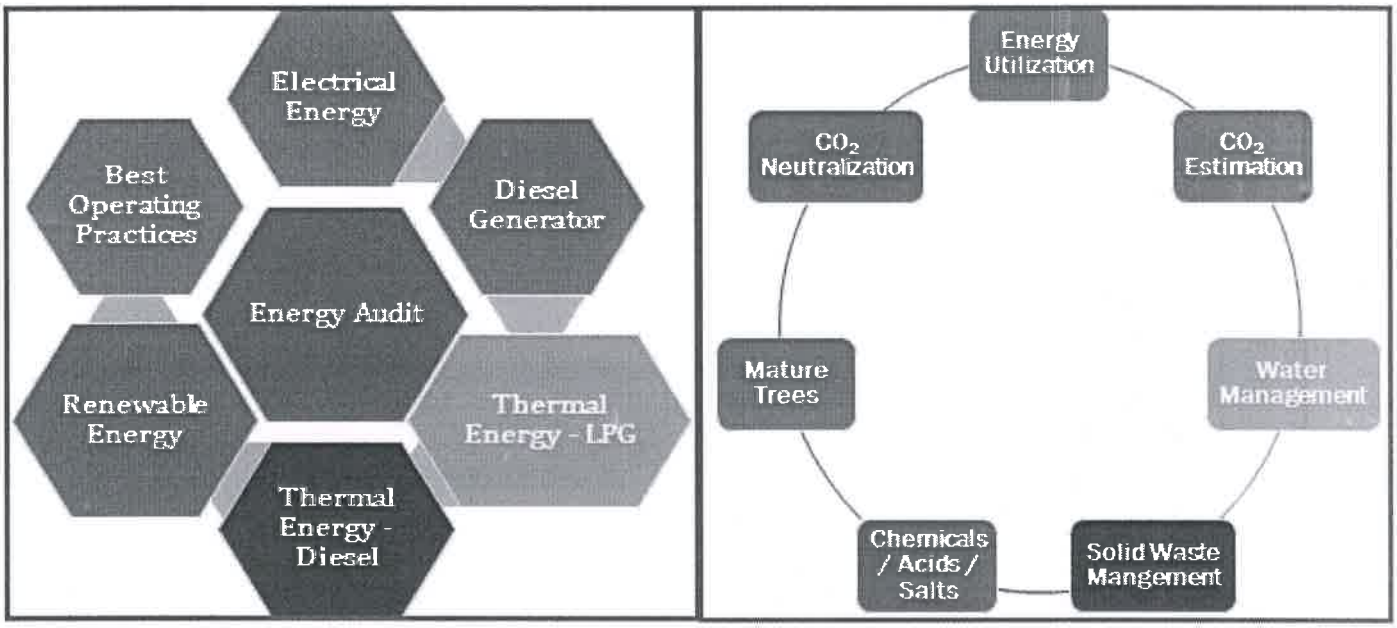
- Recommendations based on field measurement with achievable **Energy Conservation** (ENCON) proposals under **No cost/Low cost and Cost investment categories**
- **Minimization of present energy cost** by adjusting and optimizing energy usage and reduction of energy wastage without affecting the regular activities
- **Identification of possible cost and energy saving from energy conservation, waste reduction, reuse and recycling**
- Formation of methodology for long term road map for maintaining green environment within the campus and encourage the stakeholders for continuous improvements

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

2.6: *Audit Approach:*

The audit team completed the assessment of energy consumption in the factory premises and operating hours of each machines (system) using two approaches namely **I) Objective Approach** in which a detailed measurement was taken and **II) Subjective Approach** in which field data is collected from the maintenance department.

2.7: *Coverage in Energy- Environment & Green Audit Process:*



2.8: *List of Faculties assisted the Audit Process: & Data Collection:*

S. No.	Faculty Details	Contribution
1.	**Mr. D. MANOJ** Assistant professor, Department of EEE	Data collection of Electrical Energy Consumption, Details of EB Utility, Details of Units Generated using DG.
2.	**Dr. K. RAJESH** Associate professor, Department of ECE	Data collection regarding AC Loads
3.	**Dr. M.P. KARTHICK** Assistant professor, Department of Civil Engg.,	Data collection about RO & Sewage Treatment Plant (STP)
4.	**Mr J. CHRISTHU RAJA** Technician, Department of EEE	Data collection on LPG
5.	**Mr. K. KUMARESAN** Electrician, SSMIET	Details of UPS/Inverters, Details of Interior Lightings & Fan system
6.	**Mr. G. SELVAMANI** PRO	Details about Toilet Flushing System, List of Fuel Consumption for Transport Vehicles.
7.	**Mr. C. RAGURAM** Supervisor (Maintenance)	Data collection regarding List of Matured Trees & Flowering Shrubs in the College Campus

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

3. EXECUTIVE SUMMARY

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624002.

SSM Institute of Engineering and Technology

EXECUTIVE SUMMARY

Energy Analysis:

→ A detailed audit was conducted **M/S. SSM Institute of Engineering and Technology,** Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India.

→ The audit team has come out with ***Energy Conservation Proposals (ENCONs)*** and the summary of all the ENCONs are given below:

S. No.	Description	Parameters		
		Present	After	Savings
1.	Annual Energy System	3,19,219kWh + 2,736 kg LPG	2,96,623 kWh + 1,750 kg LPG	**51,481 kWh + 986 kg LPG**
2.	Annual Financial Terms	**Rs. 45.9 Lakhs**	**Rs. 38.5 Lakhs**	**Rs. 7.4 Lakhs**
3.	Initial Investment	**Rs.7.7 Lakhs**		
4.	Simple Payback Period	**Nearly 01 Years (12.5 Months)**		
5.	Overall Energy Reduction	**14.8 % Electricity + 36.0 % LPG**		

Note:

- Apart from the Energy Conservation, the audit team proposes ***many technical recommendations*** focusing on energy, equipment's life improvement, safety and best operating practices.
- All types of energy carriers (like **Electricity & LPG**) used for regular applications are considered for this audit process.

Audit Conducted & Verified by

(Dr. S.R. SIVARASU)

Dr. S.R. SIVARASU, Ph.D.,
BEE Certified Energy Auditor (EA-27299)
Lead Auditor - ISO 14001: EMS
IGBC - AP, GRIHA - CP
Mobile: 80567 19372, 99420 29372
E-Mail: ramkalamcect@gmail.com

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Table-1: Energy Conservation Proposal (ENCON) along with Annual Energy and Financial Savings

S. No.	Proposed Energy Conservation Measures	% Saving & Source	Estimated Savings		Initial Investment (Rs.)	Payback Period
			Annual Energy Savings	Monetary Savings (Rs.)		
1.	Replacement of Fluorescent Lamps with Energy Efficient Lamps (Considering only **50 Nos of Lamps** in Phase-I Implementation swapping to LED Lamps)	50 % on Lighting	3,000 kWh	37,200	30,000	0.8 Years
2.	Reduction of Belt & Pulley Losses from Motor to Machine in STP Aerator Blower	8 % on STP Blower	3,200 kWh	39,680	20,000	0.5 Years
3.	Reduction of Cable Losses and Active Power Consumption using Capacitor Compensation	1 % on Electrical	3,481 kWh	43,164	20,000	0.5 Years
4.	Reduction of Energy Consumption through retrofitting VFD in One of the Aerator Blower	20 % on STP Motor	10,000 kWh	1,24,000	60,000	0.5 Years
5.	Replacement of Existing Water Pumps into BEE Star Labelled EE Pumps	20 % STP Pump	10,800 kWh	1,33,920	80,000	0.6 Years
6.	Replacement of Existing Convention Ceiling Fans into EC BLDC Fans Considering only **200 Nos of fans** in Phase-I Implementation swapping to BLDC Fans)	50 % on Fans Load	21,000 kWh	2,60,400	3,60,000	1.4 Years
7.	Reduction of LPG Consumption using Burner Cleaning and Swapping of Active Burners.	5 % of LPG for Stoves	137 kg	14,563	10,000	0.7 Years
8.	Reduction of Heat Energy Exposed in the Boiler Outer Side + Steam Pipes Lines using TCC	5 % of Boiler	137 kg	14,563	20,000	1.4 Years
9.	Reduction of LPG Consumption by converting VOT system in to Liquid Off-Take System	Technology Substitution	164 kg	17,433	25,000	1.4 Years
10.	Reduction of LPG Consumption in Dosa making Stove with Radiant Burners.	20 % LPG on Dosa Stove	274 kg	29,126	60,000	2.1 Years
11.	Reduction of LPG Consumption in Boiler Feed Water Pre-heating using Solar Thermal Energy	Fuel Substitution	274 kg	29,126	80,000	2.7 Years
Total		**51,481 kWh + 986 kg LPG**		**7,43,176**	**7,65,000**	–

SSM Institute of Engineering and Technology * DINDIGUL-624 002 *

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART-A: ENERGY AUDIT REPORT

4. STUDY ON ENERGY CONSUMPTION PATTERN

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (IIT)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

4.1: Assessment of Existing Electrical and Thermal Energy Systems:

<table>
<tr><th>S. No.</th><th>Description</th><th colspan="4">Details</th></tr>
<tr><td colspan="6">Electrical Energy Usage</td></tr>
<tr><td>1.</td><td>Name of the customer</td><td colspan="4">SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY</td></tr>
<tr><td>2.</td><td>Communication Address</td><td colspan="4">Dindigul – Palani Highway, Dindigul - 624 002, Tamilnadu, India</td></tr>
<tr><td>3.</td><td>Service Number Type of Supply & Tariff</td><td colspan="4">SC No 05-909-450-0382; High Tension; Tariff-IIB</td></tr>
<tr><td rowspan="6">4.</td><td rowspan="6">Tariff Structure:
↗ Old: Before July 2023
↗ New: From July 2023</td><td>ToD</td><td>Up to Aug-2022</td><td>Up to June-23</td><td>From July-23</td></tr>
<tr><td>Industrial</td><td>Rs. 6.35/kWh</td><td>Rs. 7.50/kWh</td><td>Rs. 7.65/kWh</td></tr>
<tr><td>Peak Hour</td><td>Rs. 1.27/kWh</td><td>Rs. 1.69/kWh</td><td>Rs. 1.90/kWh</td></tr>
<tr><td>Night Rebate</td><td>Rs.0.3175/kWh</td><td>Rs.0.3375/kWh</td><td>Rs.0.4125/kWh</td></tr>
<tr><td>Fixed Charge</td><td>Rs. 350/kVA</td><td>Rs. 550/kVA</td><td>Rs. 562/kVA</td></tr>
<tr><td colspan="4">90 % of the Permitted PD</td></tr>
<tr><td>5.</td><td>Energy Suppliers</td><td colspan="4">Tamilnadu Generation & Distribution Corporation (TANGEDCO)</td></tr>
<tr><td>6.</td><td>Generator Details</td><td colspan="4">250 kVA (Inbuilt fuel tank – 460 L)</td></tr>
<tr><td>7.</td><td>DG Operation</td><td colspan="4">Manual Operation only</td></tr>
<tr><td colspan="6">Annual Electrical Energy Consumption, Electricity Consumption from DG & Diesel Consumption</td></tr>
<tr><td colspan="2">Electricity</td><td>3,19,219 kWh</td><td>Diesel for DG</td><td>9,828 Litres</td><td>Units Generated</td><td>65,520 kWh</td></tr>
<tr><td colspan="6">Thermal Energy Used</td></tr>
<tr><td rowspan="2">8.</td><td colspan="3">Liquified Petroleum Gas (LPG)</td><td colspan="2">Cooking</td></tr>
<tr><td colspan="3">Diesel (Ordinary)</td><td colspan="2">Transport+ DG</td></tr>
<tr><td colspan="6">Annual Energy Consumption of Thermal System</td></tr>
<tr><td colspan="2">LPG</td><td>2,736 kg</td><td>Diesel for Transport</td><td colspan="2">65,923 Litres</td></tr>
<tr><td colspan="6">General Loads (Both Electrical and Thermal)</td></tr>
<tr><td rowspan="2">9.</td><td rowspan="2">Lighting System</td><td colspan="4">❖ Indoor lighting: The management is now committed to convert the existing FTL into LED in a phased manner</td></tr>
<tr><td colspan="4">❖ Outdoor lighting: All the street lightings are LED based energy efficient lamps
❖ Requested to retrofit timer based ON-OFF control in the existing street lighting system</td></tr>
<tr><td>10.</td><td>Fan Loads (Ceiling)</td><td colspan="4">❖ All the ceiling fans are conventional type only which consumes nearly 60-70 W/fan at maximum position.</td></tr>
</table>

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

		❖ The audit team requested to change the conventional fans into **BLDC based Electronically Commutated fans** in a phased manner. The average power consumption will be **35 W/fan** at maximum position (**More than 50 % reduction**)
11.	Air Conditioning System	• Mostly **BEE star rated** ACs and the outdoor units are mostly placed in shaded area of the respective building
12.	Motors and Pump loads	• Mainly used for water distribution, purification and waste water treatment • Small motors are used in hotel kitchen equipment's & in the canteen
13.	Uninterrupted Power System (UPS)	• All the computers, servers, surveillance systems, projectors, telephonic units are connected with UPS with nominal back up time of **15-30 min.** • Total capacity of the UPS is nearly **220 kVA.**

Table-2: Annual Energy Consumption and Energy Generation (2022-23)

S. No.	Month	Electricity Consumption (kWh)	LPG Consumed (kg)	Diesel Consumed (L)		
				DG	Transport	Total
1.	Jun-22	28,637	228	660	4,153	4,813
2.	Jul-22	26,535	228	954	3,667	4,621
3.	Aug-22	28,936	228	681	3,947	4,628
4.	Sep-22	32,094	228	1,200	4,795	5,995
5.	Oct-22	29,487	228	1,218	4,823	6,041
6.	Nov-22	31,611	228	999	6,150	7,149
7.	Dec-22	28,691	228	717	6,401	7,118
8.	Jan-23	24,601	228	795	6,322	7,117
9.	Feb-23	29,230	228	645	6,230	6,875
10.	Mar-23	32,165	228	648	7,427	8,075
11.	Apr-23	27,111	228	585	4,743	5,328
12.	May-23	29,006	228	726	7,265	7,991
Total		3,48,104	2,736	9,828	65,923	75,751

- The cost of the electricity is Rs. 12.40/kWh.
- The cost of the LPG is Rs.106.30 /kg

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART-B: ENVIRONMENT AUDIT REPORT

5. ESTIMATION

OF

CO_2 EMISSION & NEUTRALIZATION

(ELECTRICITY, LPG, DIESEL & MATURE TREES)

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NIOS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu(Po),
Palani Road, Dindigul - 624 002.

5.1: Assessment of Annual Energy Usage:

Table-3 shows the types of energy carriers used for their regular operation in the college campus along with application area and their source.

Table-3: Energy Carriers, Application area and their sources used for College Operation

S. No.	Type of Energy Carrier	Application Area	Source of Procurement
1.	Electricity (HT Service)	Powering to all electrical / electronic / HVAC equipment's	From TANGEDCO
2.	Diesel	Transport vehicles and Diesel Generator (Captive Generation)	From authorised distributor
3.	Liquified Petroleum Gas (LPG)	Used only for cooking	
4.	Mature Trees, Bushes & shrubs	The college has nearly **651 mature trees** of different varieties which are more than **10 years old.**	

5.2: Environmental System: CO_2 Balance Sheet:

→ CO_2 Balance sheet is the indicator on the carbon emission and their neutralization in a year

→ As per the Environmental Management System (EMS); only Scope-1 & Scope-2 based energy consumption is accounted.

→ The following tables provide the balance sheet indicating various energy carriers associated with the regular activities and their CO_2 mapping.

Table-4: Environmental System: CO_2 Balance Sheet (2022-23)

S. No.	Annual Energy Consumption & CO_2 Emission			Annual CO_2 Neutralization		
	Description	Energy Quantity	CO_2 Emission (Tons)	Description	Parameters	CO_2 Neutralized (Tons)
1.	Electricity	3,48,104 kWh	285.4	Electricity (DG)	65,520 kWh	53.7
2.	Diesel	75,751 Litres	200.0	Mature Tree	651 Nos	14.2
3.	LPG	2,736 kg	8.2	Solar Thermal [1]	7,240 kWh	5.9
Total Emission			493.6	Total-Neutralized		73.9
Balance CO_2 to be Neutralized = 419.8 Tons/Annum						

([1] Electrical equivalent is being considered)

5.3: Calculation Table:

For Electricity = $\left[\text{kWh} \times \frac{0.82 \text{ kg of CO2 emission}}{\text{kWh}}\right]$
For Diesel = $\left[\text{Diesel Consumption (Litre)} \times \frac{2.64 \text{ kg of CO2 emission}}{\text{Litre of Fuel Consumption}}\right]$
For LPG = $\left[\text{LPG Consumption (kg)} \times \frac{3.0 \text{ kg of CO2 emission}}{\text{kg of LPG Consumption}}\right]$
A mature tree is able to absorb nearly CO_2 at a rate of 21.8 kg/annum; $\frac{(21.8 \times 651)}{1,000} = 14.2 \frac{\text{Tons}}{\text{Annum}}$

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

5.4: Recommendations:

From the above discussion points; it is evident that activities taken forward to neutralize the CO_2 is predominant and to become a **Net-Zero Carbon Emission** buildings. The management has to plan several activities achieve the target.

- Increase the foot print of trees planted inside the college campus.
- Encourage the students to plant more trees and account them all.
- It is a right time to install considerable amount of roof top solar PV plant and generate the electricity. This must reduce the utility supply and hence reduce the direct CO_2 reduction.
- **As per the Solar Policy-2019** from Government of Tamilnadu; for any educational institutions have to implement substantiate a minimum of **6 % of its energy generation from renewable energy source.**
- Convert existing convention street lightings into solar based battery-operated lightings.
- Identify higher fuel consuming vehicle and either rework or replace it.
- Conduct training programmes for the transport staffs at regular interval and encourage them to maintain the vehicles at good condition throughout the year.

5.5: References:

[1] https://ecoscore.be/en/info/ecoscore/co2

[3]http://www.tenmillliontrees.org/trees/#:~:text=A%20mature%20tree%20absorbs%20carbon,the%20average%20car's%20annual%20mileage

CO_2 Emission:

493.6 Tons/Annum

Planned CO_2 Reduction

73.9 Tons/Annum

CO_2 to be Neutralized

419.8 Tons/Annum

Institute of Engineering and Technology • WSS • DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART-B: ENVIRONMENT AUDIT REPORT

6. TRANSPORT & REFRIGERANT GASES IN AC SYSTEM

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

6.1: List of Transport Vehicles:

Pollution level of all vehicles are regularly monitored and are maintained within the prescribed limit since the college is committed to provide green environment for better atmosphere. The list of transporting vehicles along with their type of engine are represented in Table-5.

Table-5: List of Transporting Vehicles available in the College

S. No.	Type of Vehicle	Fuel used	No. of vehicles	Pollution certified (Y/N)
1.	Bus	Diesel	20	Yes
2.	Jeep	Diesel	02	Yes
Total No. of Vehicles			**22**	Yes

6.2: Details of Pollution Free Transport Vehicles & Copy of Pollution Certificate:

- The college is committed to green environment not only in the campus; but also, to the entire atmosphere. In order to commute the students and staff; the management is operating vehicle services from various places to the college.
- These vehicles are well maintained by a set of dedicated bus operators and are continuously monitored by the management officials.
- No history of accidents (either major and/or minor) for the past five years. Maintaining best performance on the engine, tyre and other accessories.
- Maintaining proper records on each trip, fuel consumption, distance travelled, no. of passengers and mileage (kmpl)
- All the drives and helpers are well experienced with good track records on i) fuel economy, ii) maintenance free operation, iii) accident free and iv) student friendly.
- All the vehicles are checked periodically and are having valid pollution certificate and certificate of insurance. These vehicles are fitted with Bharat Standard (BS)-IV type engines. However, the management has a commitment to convert the vehicles to BS-VI; once the life time of the vehicles are ended.
- The college administration is also providing skill development training to the bus operator through renowned experts and improve their productivity. Further the management is also conducting regular medical camps for all the bus operator through which i) complete body check-up, ii) blood pressure, iii) blood sugar level, iv) vision check-up and v) other general medical examination are carried out.
- High Speed Diesel (HSD) is used as fuel for all the vehicles; which emits less CO_2 in the atmosphere than compared to conventional fuel. Further; the fuel is procured from a single consumer and hence it maintains the quality and provides good engine life.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM Institute of Engineering and Technology - DINDIGUL-624 002 -

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By
State Transport Department

Date	:	25/07/2023
Time	:	14:55:53 PM
Validity upto	:	24/01/2024

Test Validity

Certificate SL No	:	
Registration No	:	TN05700050015194
Date of Registration	:	TN57AL3722
Month & Year of Manufacturing	:	08/Aug/2014
Valid Mobile Number	:	June-2014
Emission Norms	:	******0215
Fuel	:	BHARAT STAGE III
PUC Code	:	DIESEL
GSTIN	:	TN0570005
Fees	:	
	:	Rs.110.00 (GST to be paid extra as applicable)
MIL observation	:	No

Vehicle Photo with Registration plate
60 mm x 30 mm

Vehicle Number

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	2.45	1.16

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://puc.parivahan.gov.in

Authorised Signature with stamp of PUC operator
60mm x 20 mm

Fig.1: Sample Pollution Certificate for a Transport Vehicle

6.3: List of Air Conditioning System along with its Refrigerant:

Most of the AC system has both R-22 as refrigerant which has different Global Warning Potential (GWP) and Ozone Depletion Potential (ODP).

Table-6: List of Multi-variant AC System available in the SSM CET

S. No.	Location	Quantity	Refrigerant Type	Global Warning Potential (GWP)	Ozone Depletion Potential (ODP)
1.	A-Block Principal Cabin	1	R-22	1810	Medium
2.	Office –AO cabin	1	R-22	1810	Medium
3.	Principal Cabin	1	R-22	1810	Medium
4.	M.D. Cabin	1	R-22	1810	Medium
5.	B-Block Second Floor VLSI Lab	1	R-22	1810	Medium
6.	B-Block Second Floor CAD	1	R-22	1810	Medium
7.	Server room	1	R-22	1810	Medium
8.	Seminar Hall-1	Centralized	Not Available Clearly		
9.	Seminar Hall-II	Centralized	Not Available Clearly		
10.	Video Conference Hall	Centralized	Not Available Clearly		
11.	Placement Cell	Centralized	Not Available Clearly		
12.	IQAC Cell	1	R-22	1810	Medium

- **Note:** The most environment-friendly refrigerants that are available in Indian market currently are "R-290" and "R-600A". They are Hydrocarbons and their chemical names are "Propane" for R-290 and "Iso-Butane" for R-600A.
- They are completely halogen free, have no ozone depletion potential and are lowest in terms of global warming potential. They also have high-energy efficiency but are highly flammable as they are hydrocarbons. (Kindly refer: https://www.bijlibachao.com/air-conditioners/comparison-of-various-refrigerants-r-410a-r-22-r-290-r-134a-used-for-air-conditioners-and-refrigerators.html).

Refrigerant	Global Warming Potential	Ozone Depletion Potential
R-22	1810	Medium
R-410A	2088	Zero
R-32	675	Zero
R-134A	1430	Zero
R-290	3	Zero
R-600A	3	Zero

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART-B: ENVIRONMENT AUDIT REPORT

7. USAGE OF CHEMICALS, SALTS & ACIDS

(STORAGE, HANDLING & BEST OPERATING PRACTICES)

7.1: Handling of Chemicals/Salts/Acids used in the Laboratories:

The science departments & **Department of S & H and Civil Engineering** use chemicals for experimental applications and are having strict safety rules as follows;

- Well trained faculty and lab assistants who have knowledge about the hazardous nature of each and every chemical are only allowed to handle the chemicals safely
- Strictly follow the manufacturer's instruction on the container in order to preventaccidents
- Volatile or highly odorous chemicals, fuming acids are stored in a ventilated area
- Chemicals are stored in eye level and never on the top shelf of storage unit
- All stored chemicals; especially flammable liquids are kept away from heat and direct sunlight. Reactive chemicals are not stored closely
- Hazardous and corrosive chemicals are kept on sand platform to avoid corrosion
- First aid box and fire extinguishers are readily available in the laboratory

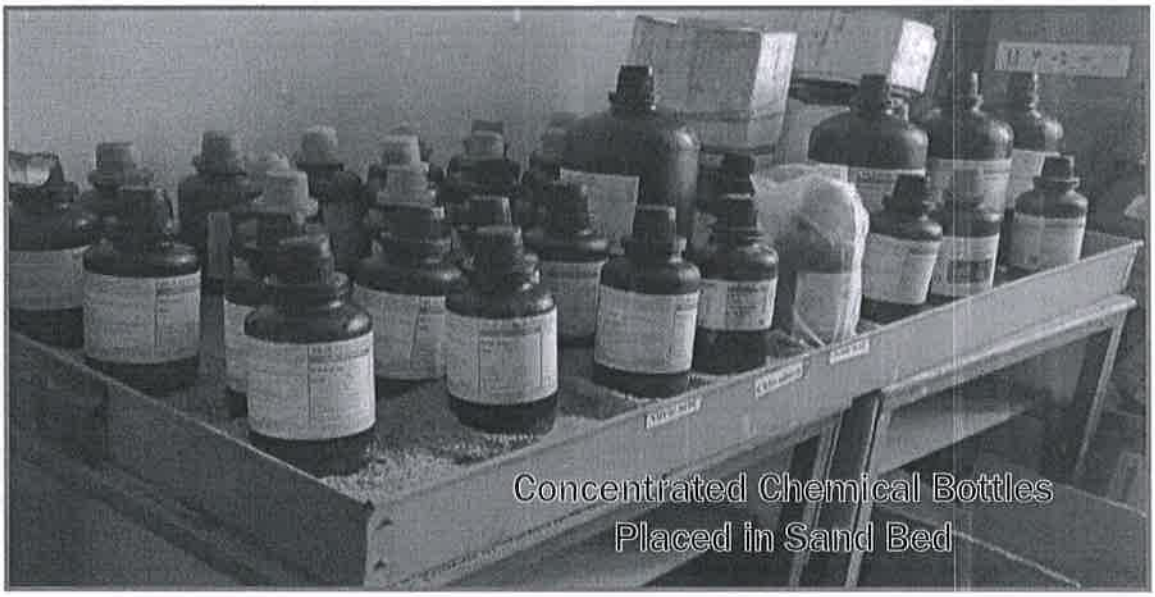
7.2: Storage of Chemicals/Salts/Acids:

Less concentrated chemicals, salts and acids are stored in proper racks, cupboards and high concentrated acids are stored in separate area filled with sand.

- Most of the chemicals, salts and acids used in the science departments are inorganic in nature and no harmful effects are created during the experiment process
- However, after completion of each experiment, the wastes are washed in the water sink and are rooted to common choke pit.
- Only trained teaching and non-teaching staffs are handling the chemicals and also, they are well trained to handle any abnormal laboratories with chemicals are well ventilated with proper emergency exits. Adequate and correct sequence of fire extinguishers are placed near all the laboratories

Chemical Storage in the Rack

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.



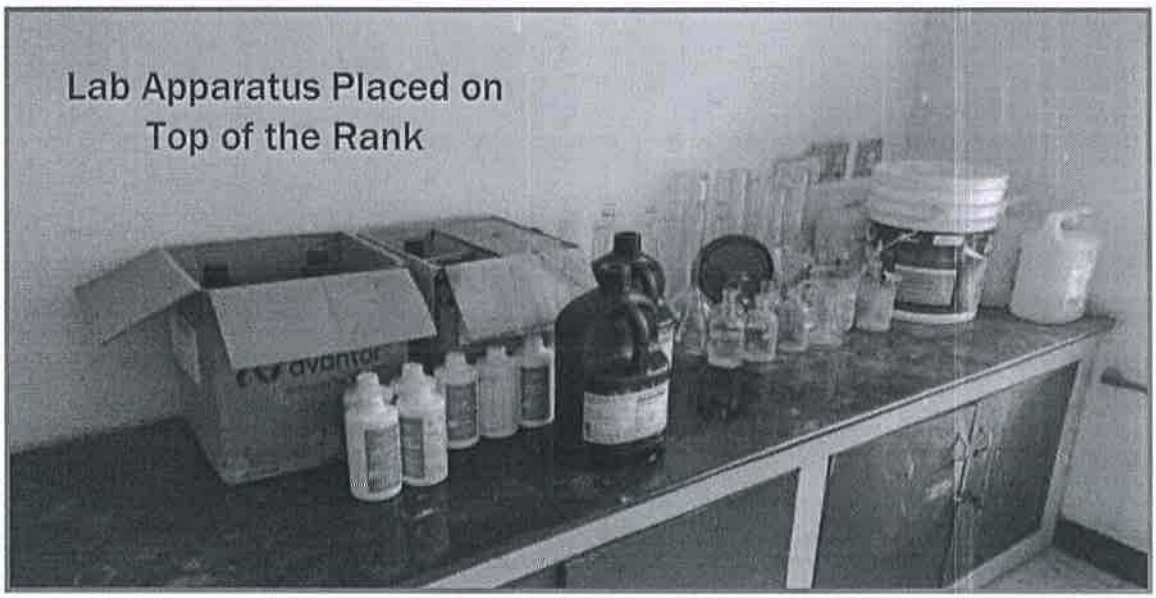


Fig.2: Storage of Chemicals/Salts/Acids Storage

7.3: Recommendations:

- ⇒ Display the Dos and Don'ts inside the laboratory
- ⇒ Print the Dos & Don'ts in the Students laboratory manual
- ⇒ During the first class, demonstrate a PPT presentation and explain the safety procedures
- ⇒ Provide training to the teaching and technical staffs member on latest updates on chemical storage, handling, and safe disposal
- ⇒ Also encourage to conduct such type of training programmes by the faculty member to nearby schools and college (as an outreach programme)
- ⇒ Fix the First Aid Box (with all necessary medicines)
- ⇒ Place the names (along with their photo and mobile number) of the professionals training to handle fire extinguishers
- ⇒ Prepare & adopt a Chemical Policy (including procurement, storage, handling, distribution, & disposal

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

7.4: Use of Chemical for Vessels & Floor Cleaning:

In order to maintain hygiene in the College campus; the administration regularly clean the floors and restrooms. In addition to this, the hostel management has to monitor i) the cleaning of vessels, kitchen floor, dining hall, store room and gas station. Table-7 shows the cleaning agents used to clean the above-mentioned area;

Table-7: Cleaning Agents used for Floor and Vessel Cleaning

S. No.	Cleaning Agent	Application
1.	Vessel Cleaning Soap	Vessel Cleaning
2.	Soap Oil & Bleaching Powder	Floor Cleaning

Fig.3: Protecting Equipments & Cleaning Agents used for Vessel & Floor Cleaning

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

7.5: Recommendations: Eco Friendly – Green Cleaning Agents:

- It is recommended to use natural ingredients like orange peel extract & vinegar. It leaves a mild and pleasant fragrance after use. The formula is free from all harmful chemicals & toxins. It is pH-neutral, gentle on the skin as well as on the surface where it is used
- Also, these products are **IGBC GreenPro** certified. GreenPro is a mark of guarantee that the product is environment friendly throughout its life cycle

Fig.4: Green Pro Certified Eco-Friendly Cleaning Agents (ZERODER)

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART- C: GREEN AUDIT REPORT

8. WATER UTILIZATION, CONSERVATION & WATER MANAGEMENT

Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

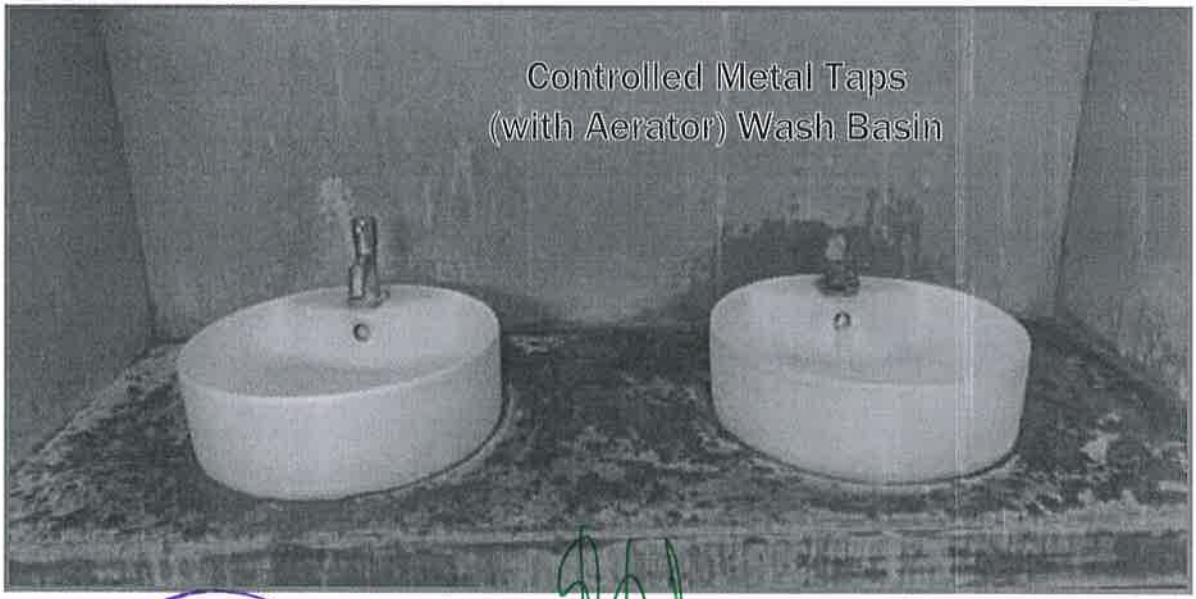
						12,000 L x 1 No	
7.						RO Plant – 2; (HDPE Tank) 2,000 L x 1 No	
8.	Main Auditorium	–	5.5 kW	Open well	5.5 kW	Boys Hostel; 12,000 L x 1 No	
						Girls Hostel; 12,000 L x 1 No	
9.	RO Plant - 1	–	0.7 kW	RO plant nearby sump (6,000 L)	3.7 kW	HDPE Tank 1000 L x 2 Nos	A, B, C – Block, Office
10.	RO Plant - 2	–	0.7 kW	Nearby Mess sump (2,000 L)	3.7 kW	HDPE Tank 1000 L x 1 No	Mess, Boys Hostel, Girls Hostel

Note:

- All the Over Head (OH) tanks are made using cement construction.
- The maintenance team ensure to clean the tank for every six months (Twice in an year)
- Bleaching power is mostly used to clean the inside tank.

8.3: Treated Water for Drinking Application:

- The college management is keen on providing uninterrupted, safe and healthy drinking water to all; throughout the year.
- Water dispenser are provided at appropriate places offering the treated water for the students (Both Normal and Hot temperature)
- The overhead tanks storing the well water are cleaned at regular intervals and the water management team has been maintaining a cleaning schedule Utensil Cleaning, Bathing & Cloth Washing.



Dr.D.SENTHIL KUMAR
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

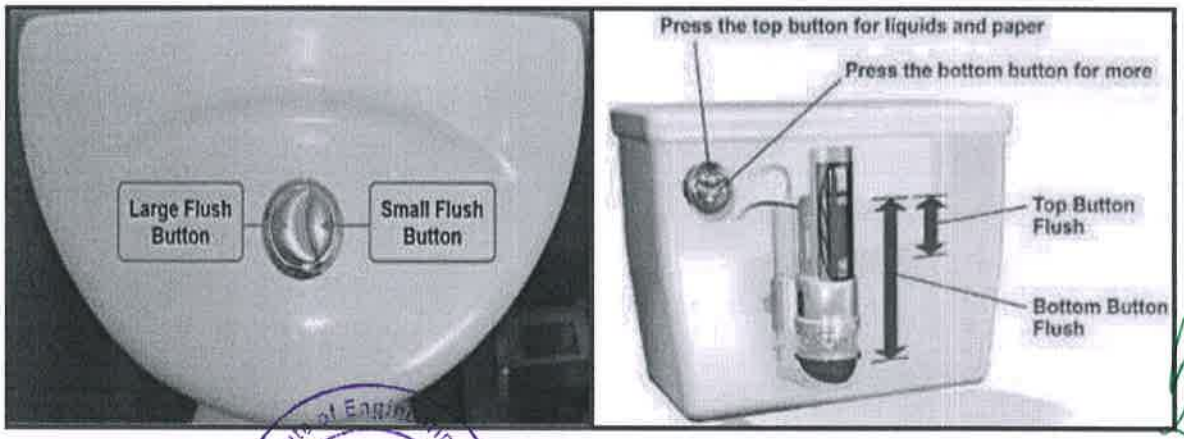
8.4: Water Savings in Foreign Toilets:

- The list of availability of Indian & Foreign style toilets are presented in the below Table-10.

Table-10: List of Indian & Foreign Style Toilets

S. No.	Location	Description (Quantity)	
		Indian	Foreign
1.	B-Block Ground Floor	12	6
2.	B-Block First Floor	0	14
3.	B-Block Second Floor	0	12
4.	B-Block Third Floor	0	12
5.	C-Block Ground Floor	0	12
6.	C-Block First Floor	0	12
7.	C-Block Second Floor	0	12
Total		**12**	**80**

- In general, the flush tank capacity may be 8 to 10 Litres (depends on make and model). Water savings also leads to power saving it saves the operating duration of the water pumps directly.



Dr.D.SENTHIL KUMARAN M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul

8.5: Rain Water Harvesting (RWH) – from Building Roof Area & Run-off Area:

- The audit team appreciates the effects taken by the management of **SSM Institute of Engineering and Technology** for harvesting the rain water almost in all buildings.
- The roof area is so arranged to collect the rainwater and then passed through proper piping system, and then bring back to the RWH pits which are located close to each pit
- The building run off are collected through each pit mostly located in each building. Common area and road run-off are properly collected and routed to nearby water body.
- The specifications of the integrated Rain Water Harvesting (RWH) system is given below;

S. No.	Description	Data
1.	Size of the tank	→ Length: 100 feet → Breadth: 60 feet → Depth: 13 feet
2.	Volume of the tank	2,207.6 m^3
3.	Average Annual Rainfall	700 mm
4.	Area	557.47 m^2
5.	Installation	2018

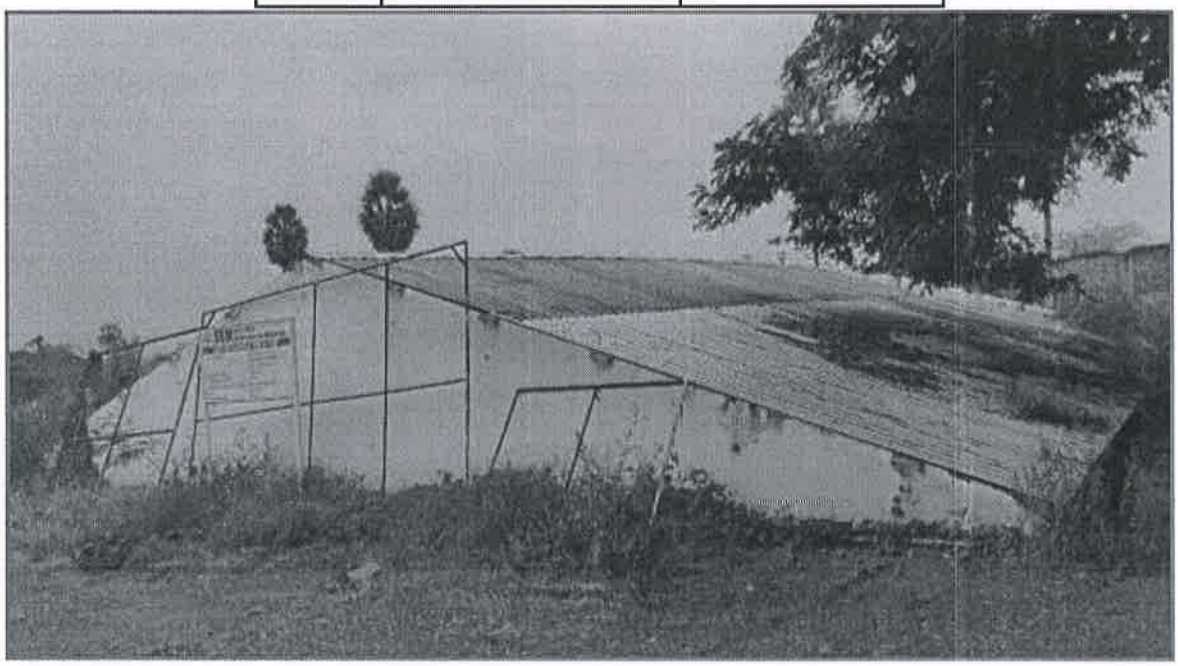


Fig.5: Based Rain Water Harvesting System

8.6: General Recommendations for Rain Water Harvesting:

- RWH has been fitted with their specifications indicating their I) year of installation, II) approximate average rainfall and duration in the RWH location and III) filter cleaning schedule (if any).
- Conduct a GIS based study on the improvement of ground water table especially before the rainy session and after rainy session. Compare the data and ensure that the water table improves due to percolation of rain water.
- Similar study must be conducted (in future) before installing an RWH and after RWH.
- Increase the no. of RWH pits and may be developed to place at least 2 per building.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

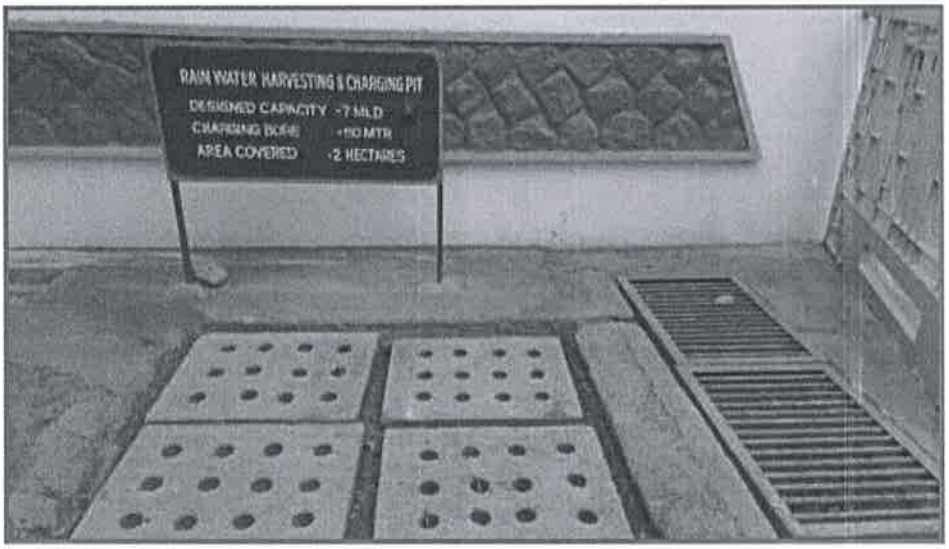
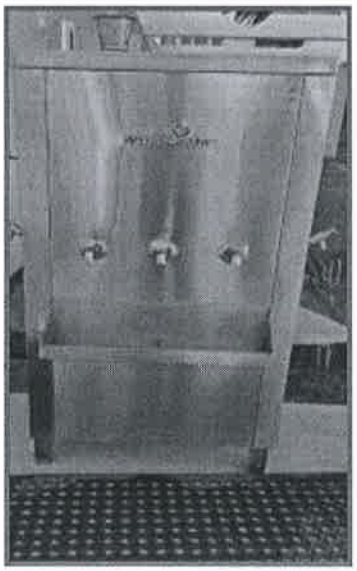


Fig.6: Sample Name Board in front a Rain Water Harvesting System

8.7: Recommendations - Water Saving Boards:

It is recommended to place **SAVE Water** boards at appropriate places and ensure that, this will be done as a student movement.



8.10: Sewage Treatment Plant:

- It must be appreciated that the management of SSM-IET has implemented conventional wastewater treatment (with a capacity of 160 kLs/day).
- All the sewage waters are collected in main tank with a capacity of 120 & 60 kL. It is then agitated using raw sewage pump (2 HP motor of two no's are used) for specified period of time and then let it out to filter tank.
- From the main tank; the treated water is then passed to Aerator tank having 5.5 kW/7.5 HP blower used to deliver dissolved oxygen at 4-6 bar pressure. However, this motor is operated based on the quantity of the sewage collected. If the quantity is less (during lean period of college operation), this motor is turned off manually.
- Urea + TFA (Trifluoroacetic Acid) urea acts as an effective catalyst for sludge removal and processing is being added at regular interval.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

- **Sludge Treatment and Usage:** All the sludges are settled in the tank and pumped back to main tank. Once the quantity of the sludge is appreciable; then it will be taken out and used as manure for gardening.
- The detailed specifications of the STP plants located inside the college is being represented below:

Table-JJ: Specification of the Sewage Treatment Plant (STP) to treat the Sewage

Location	Main Plant	Near Ladies Hostel
Collection Tank	120 kL	60 kL
Aeration – I Tank	200 kL	100 kL
Bar Screen Chamber	8 kL	6 kL
Deep Settler - I & II	60 kL	40 kL
Water Cleaning Sump	60 kL	30 kL
Treated Water Tank	60 kL	30 kL
No. of Sludge Bed	6 Nos (1.5 m x 1.5 m x 1.3 m)	6 Nos (1.2 m x 1.2 m x 1.3 m)
Application of sludge	Used as Manure	

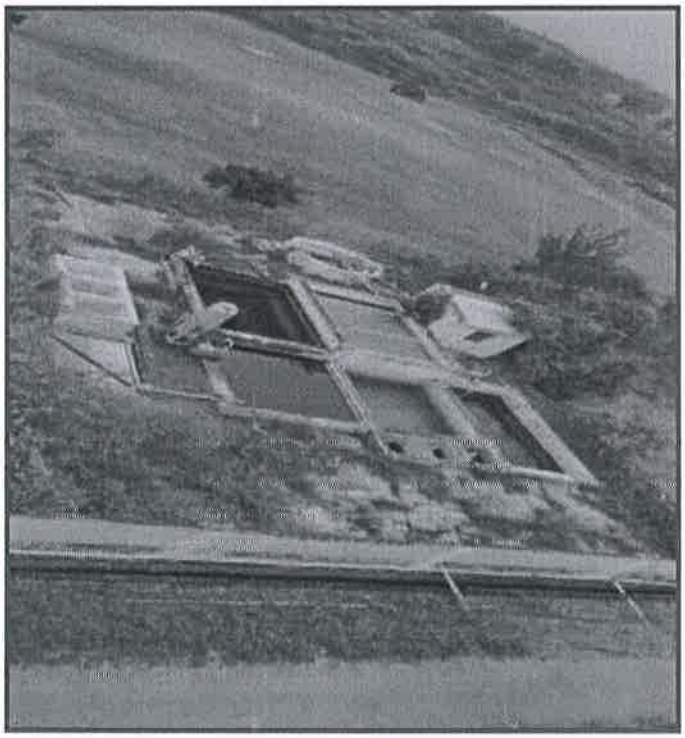


Fig:JJ: Location of the Sewage Treatment Plant (STP) of 180 kL/day Capacity

8.8: General Recommendations:

→ It is advisable to replace all the old taps without aerator into aerator-based taps in a phased manner.

→ Aerators helps to reduce and regulate water flow and also offer the following benefits;

- ✓ Lower Water Bills & Improved Water Pressure
- ✓ Increased Filtration & Minimized Splashing

- All the pump motor must be fitted and controlled by floating sensor and hence the motors are automatically ON and OFF. It avoids the overflow; saves water and electrical energy.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

- All the buildings are fitted with water flow meters & hence the water utilization must be properly accounted. Similar to the water flow meter; energy consumption of all pumping motors is recorded using panel board meters.
- Fault and leakage in the water distribution line will be promptly informed by the respective in-charges to the maintenance team and immediately arrested.

8.9: Installation on Fire extinguishers:

- The college has installed Fire extinguishers at all the vulnerable points.
- They are also refilled and in good condition (with adequate pressure indicated in the meter)

Fig.7: Sample Fire extinguishers & First Aid Kit Placed in the College

SSM Institute of Engineering and Technology DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(
Principal
SSM Institute of Engineering and Technol
Kuttathupatti Village, Sindalagundu (Po
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART – C: GREEN AUDIT REPORT

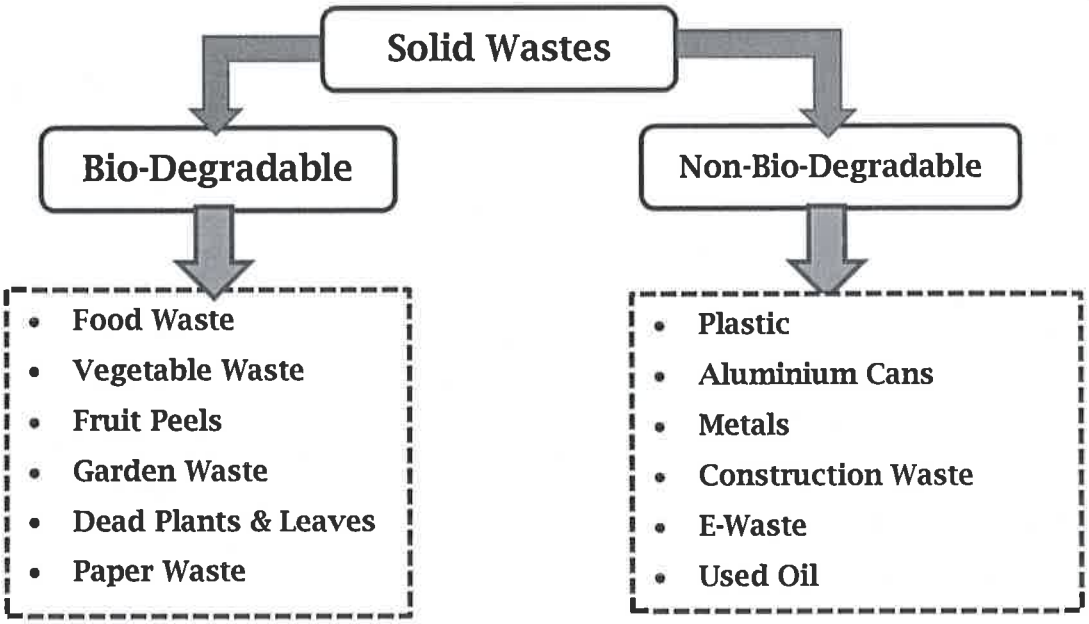
9. WASTE HANDLING

&

MANAGEMENT

9.1: Solid Waste Management System:

Different types of wastes generated inside the college premises are represented in the block diagram given below.



9.2: Process of Waste Management:

The college management practised some methods to treat the waste generated and Table-11 shows the process of treating the solid waste generated inside the college campus.

Table-11: Process of Waste Management

S. No.	Waste Type	Waste Treatment
Bio-Degradable Waste Management		
1.	Food and Vegetable Waste	• Collected and given to nearby fam
2.	Garden Wastes and Plant Leaves	• Daily collected and dumped in a yard
3.	Paper Waste	• Collected and stored in a separate place
		• Sold to third party for recycling
		• Daily paper waste stored in a yard
Non-Bio-Degradable Waste Management		
4.	Plastics	• Banned in the college campus **(Welcome step).** • The chemical/salt storage containers are disposed to third party
5.	Construction Waste	Mostly used by their own construction and used for internal land filling
6.	Metals	Construction metals or metals from any other sources are stored & sale to third party for recycling
7.	Transport Oil + Tyres	Stored in a separate place and sold to third party
8.	DG Engine oil & Coolant	Stored in a separate place and sold to Construction Purpose Only

Dr. D. SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

9.	Vehicle& Computer Batteries	Procuring new batteries with buyback offer (old battery replacement)
10.	Used edible oil	Almost zero waste. Mostly used for internal cooking and frying.
11.	E-Waste Management	Used for sale to third party for recycling

9.3: Standards Followed for Waste Handling & Management:

1. Solid Waste Management Rules – 2016
2. E-Waste Management Rules – 2016
3. Hazardous Waste Management Rules – 2016 (Management & Transboundary)
4. Battery Management Rules – 2001 (Management & Handling)

9.4: General Note:

- Prepare a flow chart for collection of E-waste from Generation to Disposal and paste it on appropriate places
- An electronic weighing scale (with suitable capacity) must be installed in the storage yard and should be properly calibrated
- One emergency lamp (with UPS supply) must be installed along with suitable fire extinguisher. Ensure proper ventilation in the yard
- Form rule for declaring the waste as E-Waste & Assign the singing authorities
- Identify a third-party vendor to procure the E-waste from the college
- Establish MoU with that party. Disseminate the following information at appropriate places I) E-Waste Policy, II) Process Methodology, III) Copy of MoU with third party vendor, Iv) Contact persons mobile number and E-mail.
- Identify certain vehicle to carry the waste from generation to storage yard
- Provide training to the man power who are handling the waste
- Maintain separate Delivery Challan, Billing, weighing mechanism for handling the E-Waste
- Update the status of E-waste (through digital circular) to all the concerned management representatives, faculty members and staff at regular intervals (month wise is good)

Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

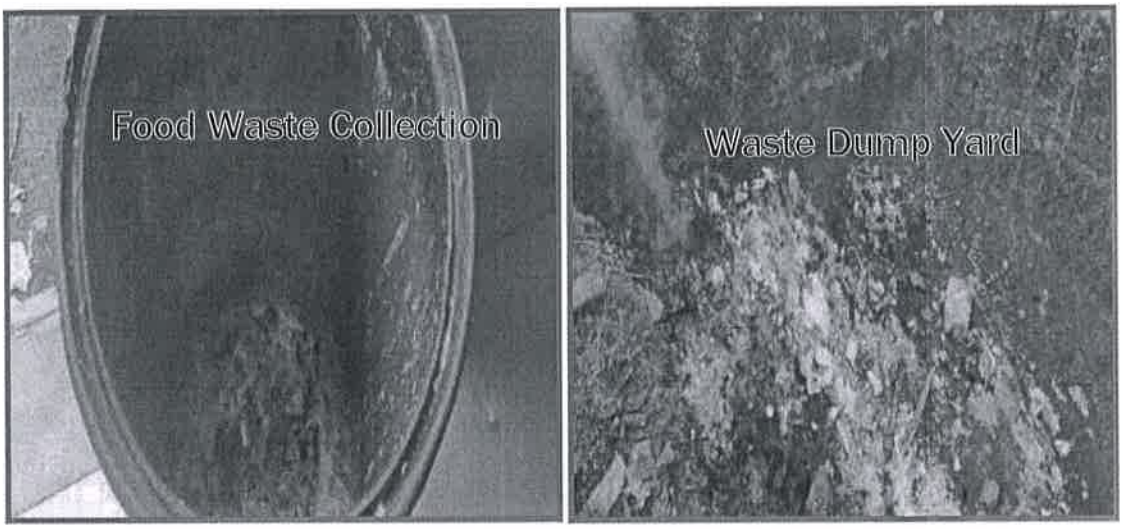


Fig.8: Solid Waste Management (Collection, Segregation, Storage & Safe Disposal)

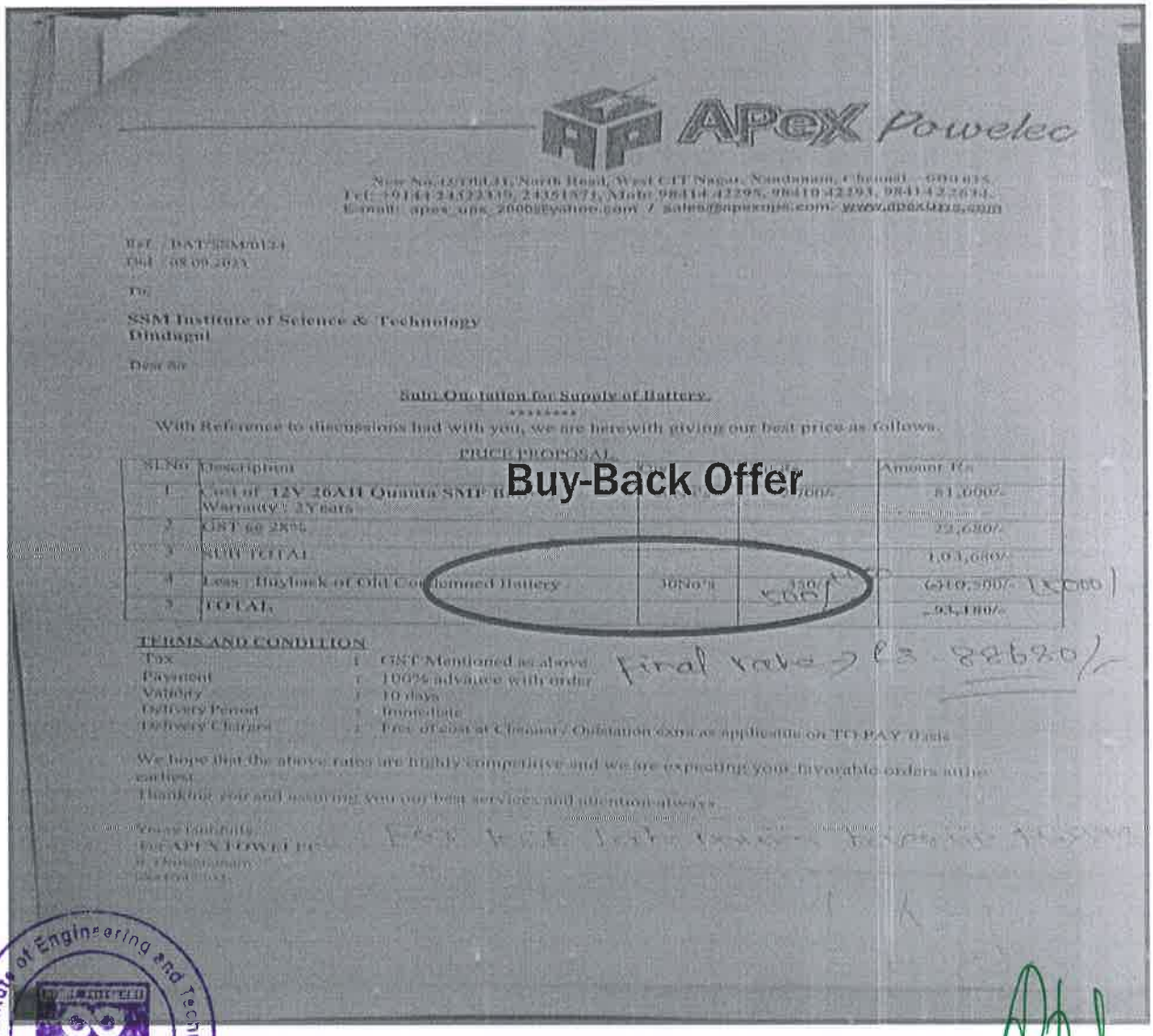


Fig.9: Sample Invoice copy for Old Battery Replacement with Buy-Back Offer (Effective Battery Management)

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, DINDIGUL

GATE PASS

Date: 26-02-2022

From

System administrator,

SSMIET,

Dindigul-624002.

To

The Principal

SSMIET

Dindigul-624002

Respected Sir,

(Sub: Requisition to gatepass for scrap -Reg.)

S.NO	MATERIALS	COUNT	PRICE
1	Monitor CRT	12 x 100	1200
2	Monitor LCD	12 x 50	600
3	SMPS	28 x 30	840
4	Cabinet	14 x 20	280
5	Harddisc	3 x 50	150
6	Mother Board	11 (2kg)	640
7	Cisco Switch	2 x 40	80
		Total	3790

The above Mentioned Scrap materials are Taken from Department of CSE Hardwate Lab, and Server room and Its given to (Sai Scraps Madurai +91 8610204299) Kindly provide a permission and gate pass to the same.

Non Returnable

Thank you

DoRqn 26/02/22

System administrator

Administrative Officer

Principal

verified 26/2/22

SSM Institute of Engineering and Technology DINDIGUL-624 002

Dr. SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuthilnthpatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Fig.9: Sample Gate Pass to dispose the Old E-Waste Generated Inside the College

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

PART - C: GREEN AUDIT REPORT

10. ASSESSMENT ON MATURE TREES, & BIO-DIVERSITY

10.1: Campus Greenery:

The college is completely covered with mature trees grown for more than 10 years. The total number of mature trees available in the college campus is ***20 with many varieties of trees.***

Table-12: List of Mature Trees available in the College Campus

S. No.	Location	Name of the Tree	Quantity
1.0	Entire Campus Location	Variety of Mature Trees	**651**

Total No. of Mature Trees available in the college campus is **651** which contributes for reduction of **14.2 Tons of CO_2 emission/Annum**

14.5: Hot Water Generation using Solar Thermal System:

- In order to promote more green generation; the management has installed Solar Thermal system in the staff quarter's roof top and generates hot waters for bathing application
- It is a good practice to use renewable energy-based system for hot water generation by avoiding conventional heating methods (electricity or wood based)
- The specifications of the existing solar thermal hot water system are shown in Table-24.

Table-24: Specifications of the Solar Thermal Hot Water System

Total Capacity (LPD)	500 Litre x 2 Nos
Make and Model	GOODSUN
Location	Boys hostel
Panel Orientation	North - South face
Source of Water	Bore & Open Well
Application	Bathing only
Year of Installation	2016
Total Capacity	**1,000**

Energy Calculation:

S. No	Description	Parameters
1.	Assuming 70 % of the total capacity is being utilized	= (0.8 * 1,000) = 800 Litres/Day
2.	Energy required to heat the water from ambient (25^{0}C) to maximum of 60^{0}C (Normal bathing temperature)	= m x C_P x Δt = 800 x 1 x (60-25) **= 28, 000 kcal/Day**

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(MUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

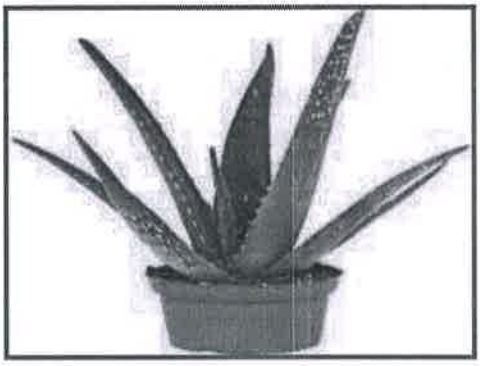
3.	Considering 10 % cumulative losses in the electric heating element + electrical network; then energy input to the heater is given by,	$= \frac{28,000}{0.9}$ **= 61,111 kcal/day**
4.	Electrical energy required to heat up the same quantity of water for the same condition is given by;	$= \frac{62,222}{860}$ **= 36.2 kWh/Day**
5.	If the college is running for nearly 200 full working day; then annual energy savings will be;	**7,240 kWh/Annum**

Annual energy saved from the solar hot water system used for bathing is 7,240 kWh which reduces 5.9 Tons of CO_2 Emission/Annum.

10.2: Recommendations to Grow Indoor Plants as Natural Air Purifier:

- Indoor plants not only do plants look good while bringing life to our living space, they also help purify the air, according to a NASA study that explains that even a small plant inside the workspace can help remove at least three household toxins (benzene, formaldehyde, and trichloroethylene)

TULSI: Generates more oxygen per day

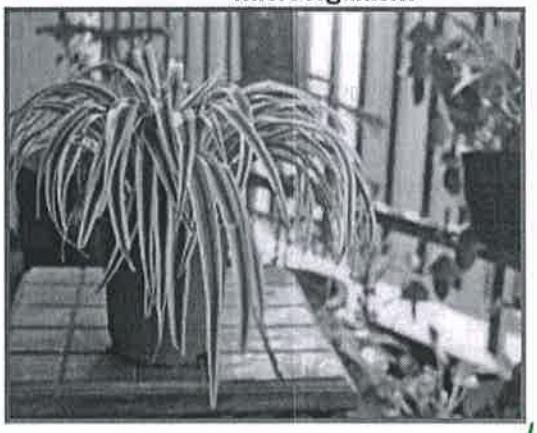


Aloe Vera:

- **Removes benzene and formaldehyde**
- **Eliminate harmful microorganism and absorb dust**

Snake Plant:

- **Removes Xylene, Benzene, Formaldehyde, Trichloroethylene toxins.**

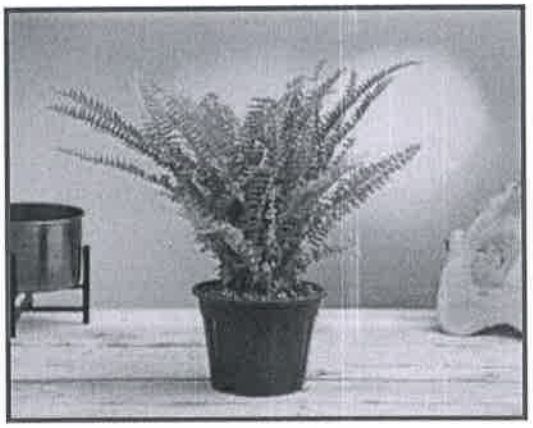


Spider Plant:

- **Removes CO and Formaldehyde**
- **Absorbs Nicotine**

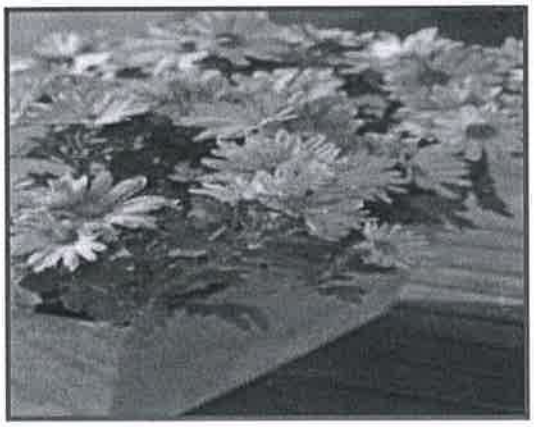
Money Plant (Devil IVY):

- **Best air purifying plant**
- **Remove benzene & Formaldehyde**



Bosten Fern:

- **High humidity application**
- **Remove xylene & Formaldehyde**



Chrysanthemum:

- **Removes Ammonia, Xylene, Benzene & Formaldehyde**

Kimberly Queen Fern:

- **Works well in carriage**
- **Absorb vehicular exhaust**

10.3: Recommendations for Miyawaki Forest:

Miyawaki is a technique (also called *Potted Seedling Method*) as that helps build dense, native, multi-layered forests. The approach is supposed to ensure that plant growth is 10 times faster and the resulting plantation is 30 times denser than usual. It involves planting dozens of native species in the same area, and becomes maintenance-free after the first three years. The overall density of the forest is beneficial in lowering temperature, making soil nutritious, supporting local wildlife and sequestration of carbon.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

10.4: Bio-Diversity in the Campus:

- **Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world.**
- **Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life.**

Fig. 11: Presence of Open Well inside the College Campus

10.5: Recommendations to maintain Bio-Diversity:

- **Bird Sighting and Survey:** Conduct a dedicated bird sighting and identify the list of birds both residing birds and migratory birds available in the college campus
- Prepare the list of birds with their local name, scientific name, their average life time, nesting facility created by the bird and photo of the bird. Show case the result to all the stake holder and inculcate a habit of friendly environment
- Discuss with the ornithologists and facilitate the environment with more birds coming to the campus and especially migratory birds.
- **Reptile & Amphibian survey:** Similar to bird survey; conduct a survey to list the amphibians available in the campus
- Amphibian and reptile surveys are often performed as part of the Green Audit process or terrestrial survey. These surveys are effective at detecting the presence of even the most elusive species.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuthilanthi Village, Sindalagundu (Po),
Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

11. AUDIT SUMMARY & CONCLUSION

SSM Institute of Engineering and Technology DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

I. Energy Conservation & Management – Electrical Energy:

- In a phased manner, ceiling fans must be changed from conventional fans into BLDC fans. Also change FTL into LED with adequate illumination levels
- Implement Energy Management System (EMS) to accurately measure & monitor energy flow
- Prepare a policy plan to convert the distributed UPS layout into centralized UPS and save energy. This step also saves the maintenance time due to reduction in number of batteries
- Implement automatic street light controller to turn on and off based on different time in a day. Use astrological timer for better results and energy savings
- Diesel flow meter must be fitted with each DG and calculate the UPL accurately
- Prepare suitable formats for all energy consumption and regularly follow the records. At regular intervals conduct internal audits to assess the effectiveness of the practice. Make proper corrections; if it deviates from the standard operating procedure
- Regularly conduct i) Illumination study, ii) Thermal comfort study, iii) Flue gas study on DG, and Boiler, iv) Water quality assessment (for all types of water utilized) and v) Indoor and ambient air quality study.
- Regularly clean the stove burners and ensure that the flame should be in light bluish colour

II. Water Conservation & Management:

- Utilize more amount of treated water; since most of the approving agencies like AICTE, UGC etc., are now requesting to utilize the treated water
- To check the quantity of water utilized by each building by connecting digital water flow meter and optimize the water usage
- Prepare and maintain a Single Line Diagram (SLD) for water distribution network.
- Try to reduce water tapped from the ground water source since it is not environmentally friendly
- Paste water and energy saving slogans at appropriate places
- Generate your own power and water for regular activities and move towards Net Zero Energy and Net Zero Water Building
- Retrofit aerator-based water taps for good water savings. For hand washing applications, all the pipes must be fitted with aerators
- Captures almost 100 % rain water harvesting through i) Recharging pits and ii) Open well type storage pits
- Properly follow scientific method of handling chemicals/Acids/Salts and safe disposal through 3rd party
- Water treatment log must be maintained indicating the water inlet, treated and outlet water quantity
- Install **sensor-based water controller** in each Over Head Tanks and reduce the water waste and power required to operate the pump
- With the advent of smart technologies, it is possible to have centralized monitoring in real-time using Internet of Things (IoT), Geographic Information System (GIS) software, etc. as per **Jal Jeevan Mission,** Department of Drinking Water & Sanitation **Ministry of Jal Shakti**
- Awareness campus must be conducted to all the stakeholders at regular interval. Through this initiative; Painting, Photography, Slogan and Poster making contest are conducted to create consciousness among the students and faculties

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

III. Impart Training to Faculty and Technical Staffs:

- **Energy Conservation and Management**
- **Environmental Impact and assessment**
- **Fire and Safety (Operation and Handling)**
- **Electrical maintenance, AC, Battery Maintenance & Safety**
- **Emergency Preparedness**
- **E-Waste, Chemicals Handling & Solid Waste Management**
- **Training for Transport employees**
- **Training for Faculty and Students on Vehicle Operation**
- **Training for Kitchen Employees**
- **General Medical Camps for Employees**
- **Training on Stress Management and Yoga**

IV. Way Forward towards Energy & Environmental Sustainability:

- Prepare an exclusive **Energy and Environment Policy** based on the energy and environment practices followed in the campus. This must reflect the i) Present energy consumption & generation, ii) Projection of energy need, iii) Commitment by the college to conserve energy (in terms of percentage), iv) Road map to achieve the commitment, v) Facilities needed to achieve the same, vi) Roles and responsibilities of all stake holders, vii) Interim and final review mechanism, viii) Corrective measures, if the results deviates from the committed value and ix) Benchmarking, Case study preparation, Knowledge sharing and rewards
- Practice appropriate ISO standards for System Management. The audit team highly recommend to follow **i) ISO-9001 (Quality Management System), ISO-14001 (Environmental Management System) and ISO-50001 (Energy Management System)**
- Working towards Net Zero Energy and Net Zero Water Campus and achieve **Platinum rated Global Leadership campus (as per IGBC rating)** and/or **5-star rated campus** (as per GRIHA rating) and/or **GEM-5 rated campus** (as per ASSOCHEM GEM rating)

COMPLETION OF THE REPORT

This report is prepared as a part of the Energy, Environment and Green Audit process conducted at **SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY,** Dindigul – Palani Highway, Dindigul -624 002, Tamilnadu, India. by **RAM-KALAM CENTRE FOR ENERGY CONSULTANCY AND TRAINING,** Coimbatore-641 109 Tamil Nadu, India.

SSM Institute of Engineering and Technology DINDIGUL - 624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ENERGY, ENVIRONMENT & GREEN AUDIT REPORT

ANNEXURE:

AUTHORISED CERTIFICATES OF THE AUDITOR

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Trichy Road, Dindigul - 624 002

Reg No.: EA-27299

Certificate No.: 9645/19

National Productivity Council

(National Certifying Agency)

PROVISIONAL CERTIFICATE

This is to certify that Mr./Mrs./Ms. **SIVARASU SULUR RATHINAVELU**

son / daughter of Mr. **P RATHINAVELU** *has passed the National certification Examination for Energy Auditors held in September 2018, conducted on behalf of the Bureau of Energy Efficiency, Ministry of Power, Government of India. He / She is qualified as* ***Certified Energy Manager*** *as well as* ***Certified Energy Auditor.***

He / She shall be entitled to practice as Energy Auditor under the Energy Conservation Act 2001, subject to the fulfillment of qualifications for Accredited Energy Auditor and issuance of certificate of Accreditation by the Bureau of Energy Efficiency under the said Act.

This certificate is valid till the Bureau of Energy Efficiency issues an official certificate.

Digitally Signed by K V R RAJU
Mon Apr 22 16:22:42 IST 2019
Controller of Examination, NPC All Chennai

Place : Chennai, India
Date : 22nd April, 2019

Controller of Examination

TÜV NORD

ISO 14001:2015 Lead Auditor
(Environmental Management Systems)
Training course

It is hereby certified that

Dr. S. R. Sivarasu

has successfully completed the above mentioned course and examination

08th - 12th December 2017
Coimbatore, India

Certificate No. 3521 2002 02
Delegate No. 71958

for TÜV NORD CERT GmbH

Essen, 2018-01-11

Course 18125 is certified by CQI/IRCA and meets the training requirements for lead auditor certification under the IRCA EMS auditor certification scheme.

TÜV NORD CERT GmbH | Langemarckstraße 20 | 45141 Essen | www.tuev-nord-cert.com

CQI | IRCA CERTIFIED COURSE

CQI | IRCA APPROVED TRAINING PARTNER

SSM Institute of Engineering and Technology DINDIGUL-624 002

SSM-IET DINDIGUL

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NU
Principal
SSM Institute of Engineering and Technolog
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

IGBC

CII
Confederation of Indian Industry

The Indian Green Building Council

hereby certifies that

Sivarasu S R

has successfully demonstrated knowledge on the Green Building Design & Construction, Building Standards & Codes, IGBC Resources & Processes and Green Design Strategies & their Impacts, required to be awarded the title of

IGBC Accredited Professional

K S Venkatagiri
Executive Director
CII-Godrej GBC

V Suresh
Chairman
Indian Green Building Council

Gurmit Singh Arora
Vice-Chairman
Indian Green Building Council

200239

20 June 2020

GRIHA

GREEN RATING FOR INTEGRATED HABITAT ASSESSMENT

GRIHA CERTIFIED PROFESSIONAL CERTIFICATE

This is to certify that

Sivarasu sr

has qualified as a **GRIHA** Certified Professional For V. 2015

Date of Issue: 15th September 2020

Note : This certification is valid only for GRIHA version 2015.

Chief Executive Officer
GRIHA Council

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

CII

Confederation of Indian Industry

This is to certify that

SIVARASU S R

is a

CII Certified Professional in Sustainable Waste Management

K S Venkatagiri
Executive Director
CII - Godrej GBC

Pradeep Bhargava
Chairman
CII GreenCo Council

IGBC

e-Learning

HSSERisk Academy

CERTIFICATE

OF APPRECIATION

POWERING PEOPLE THROUGH KNOWLEDGE EXCHANGE

THIS CERTIFICATE IS AWARDED TO

Sivarasu Rathinavelu

FOR SUCCESSFUL COMPLETION OF TRAINING COURSE ON

ISO 14064-1:2018
ISO 14064-2:2019
ISO 14064-3:2019
ISO 14066:2011
ISO 14067:2018

AND CERTIFY HIM/ HER AS

IMPLEMENTOR & AUDITOR
CARBON FOOTPRINT MANAGEMENT

This certificate is awarded for successful completion of Global Virtual Training course conducted from August 27, 2021 to September 01, 2021. It serves as a proof of his/her knowledge, competence and ability to implement, verify and validate carbon footprint as per above mentioned standards and methods. This certificate was awarded on August 01, 2021

01.09.21
DATE

SIGNATURE

0100800211006

HSSE Risk
MANAGEMENT SERVICES
www.hsserisk.com

SSM Institute of Engineering and Technology
DINDIGUL - 624 002

SSM-IET DINDIGUL

Dr. D. SENTHIL KUMARAN, M.E., Ph.D., [illegible]
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

CRITERION VII
INSTITUTIONAL VALUES AND BEST PRACTICES

Key Indicator	7.1. Institutional Values and Social Responsibilities
Metric	7.1.3 Quality audits on environment and energy regularly undertaken by the Institution

Awards and Recognition for Clean and Green Campus

The institution's implementation of various green initiatives has led to the reception of numerous awards and acknowledgments for maintaining a clean and environmentally friendly campus. Consistently achieving top rankings in the UI GreenMetric World University Ranking, as assessed by Universitas Indonesia, highlights the institution's ongoing commitment to sustainability.

S.No	Year	Name of the award	Ranking
1	2023	UI GreenMetric World University Ranking	349
2	2022		289
3	2021		319

SSM Institute of Engineering and Technology • DINDIGUL-624 002 •

Principal
Dr.D.SENTHIL KUMARAN, M.E.,
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

SSM Institute of Engineering and Technology
DINDIGUL-624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D.,(NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po)
Palani Road, Dindigul - 624 002

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

UNIVERSITAS INDONESIA

UI GreenMetric World University Rankings

Certificate

This certificate is awarded to

SSM Institute of Engineering and Technology

as The 319th World's Most Sustainable University
in 2021 UI GreenMetric World University Rankings

Jakarta, 14 December 2021

Prof. Ari Kuncoro, S.E., M.A., Ph.D
Rector of Universitas Indonesia

Prof. Riri Fitri Sari, M.M., M.Sc
Chairperson of UI GreenMetric
World University Rankings

Institute of Engineering and Technology

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.