

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

KEY INDICATOR: 7.1

7.1.6: Quality audits on environment and energy are regularly undertaken by the institution:

Certified that the following are the green / environmental audit and energy audit reports, clean and green campus recognition/awards and beyond the campus environmental promotion and sustainability activities.

1

Tamiinadu Physical Education and Sports University Chennai - 600 127.



IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization Environmental Testing & Analysis, Calibration of Instruments

No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank, Hasthinapuram Road, Chrompet, Chennai - 44. Regional Office : Pondicherry, Coimbatore & Andra Pradesh Contact: 8778740104, 9384381615 | Email: igniteengg@gmail.com





AMBIENT AIR MONITORING

Report No IES-NO-AR-72-155-2023		2023 Report Date:		30.03.2023		
Customer	Name & Address	Sample Reference No:	Sample Reference No: IES-NO-AR-72-155-20			
		Sample Description:		Ambient Air		
M/s. TAM	ILNADU PHYSICAL EDUCATI	ON Sample Drawn by:		Laboratory 28.03.2023		
AND SPOR	RTS UNIVERSITY	Sample Collected Date:				
CHENNAI		Qty of sample Received:	Filter	Filter Paper(2nos) & Approx 25ml Solution(4nos)		
		Sample Received On:		28.03.2023 28.03.2023 30.03.2023 IES-SOP-ARS-01 to 11		
		Test Commenced On:				
		Test Completed On:				
		Sampling Method:				
		Sample Mark:			Near to Admin Block	
S.No	Name of the Test	Test Method	Units	Results	Max. Annual Average Limits Of NAAQs	
1.	Ammonia (as NH ₃)	CPCB Guidelines,Volume I, NAAQMS/36/2012-13	μg/m ³	<5.0	100	
2.	Arsenic (as As)	CPCB Guidelines,Volume I, NAAQMS/36/2012-13	μg/m ³	<0.1	6.0	
3.	Benzene (as C ₆ H _{6}}	IS 5182 (Part 11): 2006 (Reaffirmed 2017)	μg/m ³	<0.5	5.0	
4,	Benza (α) Pyrene(as C ₂₀ H ₁₂)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	μg/m ³	<0.5	1.0	
5.	Carbon Monoxide (as CO)	Instruments Manual Based SOP No.EL-SOP-ARS-17	μg/m³	<1.2	2.0	
6.	Lead (as Pb)	IS 5182 (Part 22): 2004 (Reaffirmed 2014) Clause No.5	µg/m³	<0.5	0.5	
7.	Nickel (as Nil)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m ³	<1.0	20	
8.	Oxidants (as Ozone O ₃)	IS 5182 (Part IX)- 19747 (Reaffirmed 2014)	μg/m ³	<10.0	100	
9.	Oxidants of Nitrogen (as Ozone NO ₂)	IS 5182 (Part 6): 2006 (Reaffirmed 2017)	µg/m³	18.1	40	
10.	Particulate Matter (as PM ₁₀)	IS 5182 (Part 23): 2006 (Reaffirmed 2017)	µg/m ³	32.1	60	
11.	Particulate Matter (as PM _{2.5})	EPA 40 CFR Part 50- Appendix L	µg/m³	25.1	40	
12.	Sulphur Dioxide (as SO ₂)	IS 5182 (Part 2): 2001 (Reaffirmed 2017)	µg/m³	9.3	50	

NOTES:

NOTES: The Concentrations of the parameters tested in the above Location are within the prescribed annual average limits of NAAQs tolerance limits. **Report Confirmed by** 44 FOR IGNITE ENVIRONMENTAL SERVICES 5 2 0 21 5 < 2 Authorized Signatory 5 0 4 191*



IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization Environmental Testing & Analysis, Calibration of Instruments

No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank, Hasthinapuram Road, Chrompet, Chennai - 44. Regional Office : Pondicherry, Coimbatore & Andra Pradesh Contact : 8778740104, 9384381615 | Email : igniteengg@gmail.com



AMBIENT AIR MONITORING

Report No IES-NO-AR-72-156-2023		Report Date		20 02 2022		
Customer Name & Address		Sample Reference No: Sample Description:		IES-NO-AR-72-155-2023		
M/s TAMILNADU PHYSICAL EDUC	Sample Drawn by:		Ambient Air			
AND SPORTS UNIVERSITY		Sample Collected Date: Qty of sample Received: Sample Received On: Test Commenced On: Test Completed On:		28.03.2023 Filter Paper(2nos) & Approx 25ml Solution(4nos) 28.03.2023 28.03.2023 28.03.2023 28.03.2023 28.03.2023 28.03.2023 28.03.2023		
CHENNAL						
		Sampling Method:		IES-SOP-ARS-01 to 11		
		Sample Mark:		-		Near to Boys Hostel
S.No Name of the Test		Test Method		nits	Results	Max. Annual Average
1. Ammonia (as NH ₃)	CPO	CPCB Guidelines, Volume I, NAAQMS/36/2012-13		/m ³	6.3	100
2. Arsenic (as As)	CPC	CB Guidelines, Volume I, IAAQMS/36/2012-13	μg	/m ³	<0.1	6.0
3. Benzene (as C ₆ H ₆₎	IS	IS 5182 (Part 11): 2006 (Reaffirmed 2017)		/m ³	<0.5	5.0
4. Benza (α) Pyrene(as $C_{20}H_{12}$)	CPC	CPCB Guidelines, Volume I, NAAOMS/36/2012-13		/m ³	<0.5	1.0
5. Carbon Monoxide (as CO)	- Inst SC	Instruments Manual Based		/m ³	<1.1	2.0
6. Lead (as Pb)	IS (Reaff	IS 5182 (Part 22): 2004 eaffirmed 2014) Clause No 5		/m³	<0.5	0.5
7. Nickel (as Nil)	CPC	CPCB Guidelines,Volume I, NAAOMS/36/2012-13		/m³	<1.0	20
8. Oxidants (as Ozone O ₃) IS	IS 5182 (Part IX)- 19747 (Reaffirmed 2014)		/m³	<10.0	100
9. Oxidants of Nitrogen (as Ozone NO ₂)	15	IS 5182 (Part 6): 2006 (Reaffirmed 2017)		/m ³	24.2	40
10. Particulate Matter (as PM ₁₀)	15	IS 5182 (Part 23): 2006 (Reaffirmed 2017)		/m³	42.1	60
11. Particulate Matter (as PM _{2.5})	E	EPA 40 CFR Part 50- Appendix L		/m ³	21.0	40
12. Sulphur Dioxide (as SO ₂)	IS	5182 (Part 2): 2001 (Reaffirmed 2017)	μg/	/m³	12.3	50

NOTES:

The Concentrations of the parameters tested in the above Location are within the prescribed annual average limits of NAAQs tolerance limits. LER + **Report Confirmed by** HS FOR GNITE ENVIRONMENTAL ST "CES 5

0

~

5

0

Authorized Signato

2

5

2 w

>

LINDI

3



Report Confirmed by

10.

IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization Environmental Testing & Analysis, Calibration of Instruments

No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank, Hasthinapuram Road, Chrompet, Chennai - 44. Regional Office : Pondicherry, Coimbatore & Andra Pradesh Contact : 8778740104, 9384381615 | Email : igniteengg@gmail.com



NOISE MONITORING

Report No EL-NO-NE-26-755-2023		Report Date	•		20 02 202		
Customer Name & Address			Sample of Reference No:		IFS	IES-NO-IN-26-755 202	
M/s. T	AMILNADU PHYSICAL	EDUCATION AND	Sample Description:		123	Light	
SPORTS UNIVERSITY CHENNAI-127			Monitoring By: Monitoring Date:			Laboratory 30.03.2023	
			Data receive	Data received On: Sampling Method: Monitoring unit:		30.03.202 30.03.202 IS:9989- 1981 (Reaffirmed 2001	
			Sampling Me				
			Monitoring u				
S.no	Name of the Locatio	n Monitoring	Monitoring	Day Time (6.0	Day Time (6.00 a.m -10.00 p.m)		
		Distance in m	Time	Minimum	Maximum	L Equivalent	
1.	Central Library	Site	11 AM -12PM	58.9	59.3	57.3	
2.	Office	Site	11 AM -12PM	60.9	65.3	62.1	
3.	VC Room	Site	11 AM -12PM	57.0	59.0	55.6	
4.	Canteen	Site	11 AM -12PM	59.2	61.5	60.0	
5.	Computer Lab	Site	11 AM -12PM	55.1	62.1		
Permissible Limit For Noise as Per The Eactories Pula			les 1950	55.1	02.1	57.3	
			Fed of D		Maximum 90.0	0	
IOTEC.		<	End of Report	>			
OTES:	nd levels tested in the ab	<	End of Report	>			

Authors are within the prescribed limits of Factories

0

0

LINDI*

FOR IGNITE ENVIRONMENTAL SERVICES Authorized Signatory



IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization Environmental Testing & Analysis, Calibration of Instruments

No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank, Hasthinapuram Road, Chrompet, Chennai - 44. Regional Office : Pondicherry, Coimbatore & Andra Pradesh Contact : 8778740104, 9384381615 | Email : igniteengg@gmail.com





ILLUMINATION MONITORING

Report	port No IES-NO-IN-26-756-2023		Report Date:		30.03.2023		
Customer Name & Address M/s. TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY			Sample of Reference No:		IES-NO-IN-26-756-2023		
			Sample Description: Monitoring By:		Light Laboratory		
							CHENN
			Data Received On:		30.03.2023		
			Sampling Method:		IS:9989- 1981 (Reaffirmed 2001)		
		Monitoring unit:			Db (A)		
S.no	Name of the Locati	cation Monitoring	Monitoring	Day Time (6.0	Day Time (6.00 a.m -10.00 p.m)		
		Distance in m	Time	Minimum	Maximum	L Equivalent	
1.	Central Library	0.9	11 AM -12PM	349	431	409	
2.	Office	0.9	11 AM -12PM	228	239	242	
3.	VC Room	0.9	11 AM -12PM	304	322	320	
4.	Canteen	0.9	11 AM -12PM	561	567	212	
5.	Computer Lab	0.9	11 AM -12PM	423	446	434	
Permi	ssible Limit For Light	as Per The Factories Rule	s, 1950		Maximum 65		
		<	End of Report-	>			
NOTES:		1	~				
The abo	ove Location Light levels	are fulfill the necessities of	Factories Rules 1950	standard.			
Donort	Confirmed by		- 4 - 1	EODICN	TE ENIVIDONINAENIT	AL CEDVICEC	

The above Location Light levels are fulling the necessities of Factories-Rules 1950 standard.

Report Confirmed by

Image: Colspan="2">FOR IGNITE ENVIRONMENTAL SERVICES

Image: Colspan="2">Image: Colspan="2">Colspan="2">FOR IGNITE ENVIRONMENTAL SERVICES

Image: Colspan="2">Image: Colspan="2">Colspan="2"

Image: Colspan="2">Colspan="2"
FOR IGNITE ENVIRONMENTAL SERVICES

Image: Colspan="2">Colspan="2"
Image: Colspan="2">Colspan="2"

Image: Colspan="2">Colspan="2"
Image: Colspan="2">Colspan="2"

Image: Colspan="2">Colspan="2"
Image: Colspan="2">Colspan="2"

Image: Colspan="2">Colspan="2"
Image: Colspan="2"

Image: Colspan="2">Colspan="2"
Image: Colspan="2"

Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Colspan="2"
Image: Co



IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization Environmental Testing & Analysis, Calibration of Instruments

No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank, Hasthinapuram Road, Chrompet, Chennai - 44. Regional Office : Pondicherry, Coimbatore & Andra Pradesh





Contact: 8778740104, 9384381615 | Email: igniteengg@gmail.com

	TE	STREPORT		
Sample Ref No: EES	AS/544/2023	Date of Sampling: 28.03.2023		
Issued To:		Report Date/Report No: 30.03.2023		
M/s. TAMILNA Melakottaiyur Ch	DU PHYSICAL EDUC ennai-600127	ATION AND SPORTS UNIVERSITY		
Group Discipline Sample Description Sampling Method	:Atmospheric Pollution : Chemical Testing : Indoor Air Quality : IS 5182, NIOSH & SOP	Sample Drawn By/Date : IES/28.03.2023 Received On : 28.03.2023 Analysis Commenced On : 28.03.2023 Analysis Completed On : 30.03.2023		

SI.	Sampling Location	UNIT	RESULT Carbon-di-oxide (CO ₂)	ASHRAE LIMITS
	Central Library	ppm	385	
)	Office	ppm	415	
2	Principal Room	ppm	488	
,	Canteen	ppm	414	
	Computer Lab	ppm	377	1000
2	Biomechanics	ppm	471	

ASHRAE- American Society of Hearing Refrigerating and Air-Conditioning uyiii



Authorized Signatory

S

57

0

<

C)

1. Test result shown in this test report relate only to the items tested Note

2. This test Report shall not be reproduce anywhere except in full and in same format without the approval of the Laboratory



GREEN & ENVIRONMENT AUDIT REPORT

TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY MELAKOTTAIYUR,CHENNAI-600127





MARCH 2023 QRO CERTIFICATIONS CHENNAI

TABLE OF CONTENTS

Topic	Page No.
Executive Summary	1
Introduction	1
About the College	2
Objectives of the study	3
Benefits of Green Audit	
	3
Methodology	4
Observation and Recommendations	4
Water Use	4
Waste Management	8
E Waste Management	11
Green Area Management	14
Sanitation and hygiene	22
Green initiatives and best practices	23
Environmental Monitoring	24
Conclusions	28
Acknowledgement	29
Annexure- I	30
Annexure-II	31
Annexure-III	32
Annexure-IV	33

Executive Summary

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will pave way for sustainable development.

TNPESU believes that there is an urgent need to address these fundamental environmental problems and reverse the trends. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution.

It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, and Alternative Energy. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit were based on the identified risks.

Introduction

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It is known as the systematic identification, quantification, recording, reporting and analysis of components of environmental diversity.

It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade a, Grade B or Grade C according to the scores assigned at the time of accreditation. The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

About the College

The Tamil Nadu Physical Education and Sports University established by an Act of the Government of Tamil Nadu in 2004, is unique and the first of its kind in India as an affiliatory University, exclusively for Physical Education and Sports Accredited with ISO 9001 – 2015 Certification for Quality Management System It has been recognized as a premier institution of higher learning for job-oriented courses.



The campus is spread over an area of 127 acres of land with Huge built up area .The college offers Under Graduate Courses and Post Graduate and Research courses in Sports and Allied Fields & There are 421 students and 30 teaching faculty in the college which is promising to grow rapidly.

The College offers job-oriented courses, extra-curricular activities and technologically advanced facilities accessible to the faculty, the students and the support staff. Here, each individual is encouraged to step beyond the confines of academic and administrative disciplines to explore and intervene in the larger interests of the TNPESU community that thrives on participation and the desire to venture into newer vistas.

Objectives of the Study

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its
- Sustainability.
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.
- To establish a baseline data to assess future sustainability by avoiding the
- Interruptions in environment that are more difficult to handle and their corrections requiring high cost.
- To bring out a status report on environmental compliance.

Benefits of green audit

- Green auditing should become a valuable tool in the management and monitoring of environmental and sustainable development programs of the college.
- Impart environmental education through systematic environmental Management approach and Improving environmental standards
- ➢ To create a green campus.
- To enable waste management through reduction of waste generation, solid- waste and water recycling.

3

Methodology

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- Water management
- Energy Conservation
- Waste management
- E-waste management
- Green area management
- Environment Monitoring

Observations and Recommendations

Water Use

The study observed that the main source of water for the institute is received from two bore wells. Water is used for drinking purpose, toilets and gardening. The waste water from the RO water purifier is used for gardening purpose. During the survey, no loss of water is observed, neither by any leakages, or by over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 30,000 L/day, which include 23,000 L/day for domestic, 5,000 L/day for gardening purposes and 2,000 L/day for drinking purpose.



Pond inside the Campus



5

Rain water harvesting units are also functional for recharging ground water level. The rain water collected from all floors of the building and Harvested in the recharge well available inside the campus .



Rain Water Harvesting Implemented inside the campus



Recommendations

- There is a need for monitoring and controlling overflow and periodically supervision drills should be arranged.
- Minimize wastage of water and use of electricity during the reverse osmosis process and ensure that the equipment used are regularly serviced and in good condition.
- The cleaning products used by staff should have a minimal detrimental impact on the environment. They should be biodegradable and non-toxic.
- Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. they are biodegradable and nontoxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations.
- Gardens should be watered by using drip/sprinkler irrigation system to minimize water use.

Waste Management

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus.

Observations

Liquid waste management

They have a **Mini RO plant** in all the blocks which is easily access to all the students &staffs to provide water for drinking and Cooking Purpose in Mess & Canteen





Purified Water in all the Blocks

Solid waste management

Waste generated from tree droppings and lawn management is major solid waste generated in the campus. Separate dustbins are provided for Bio-degradable and Plastic waste in order to segregate them at the source itself. Single sided used papers are reused for writing and printing in all the departments to minimize the usage of papers. Important and confidential reports/ papers are sent for pulping and recycling after completion of their preservation period.

Chemical waste generated in laboratories that are potentially hazardous are segregated. Very less plastic waste (0.1Kg/day) is generated by some departments, office, garden etc Metal waste and wooden waste is stored and sent to authorized scrap agents for further processing. Glass bottles are reused in the laboratories.

The college had Placed separate bins to collect biodegradable and nonbiodegradablewaste generated in the campus.



Separate Bins for Degradable & Non Bio Degradable



Plastic Free Campus

Recommendations

- The amount of waste generated from classrooms and staff rooms can be minimized.
- Full use of all recycling facilities provided by City Municipality and private suppliers can be utilized for waste disposal.
- Sufficient, accessible and well-publicized collection points can be made available for recyclable waste, with responsibility for recycling clearly allocated.
- If Biomedical Waste Accumulated Ensure to Proper Government Authorized Vendor to collect it.
- Solid Waste Management awareness Training Recommended for all the works one who are Involved in Gardening & Sweeping Work

E-waste Management

E-waste is a consumer and business electronic equipment that is near or at the end of its useful life. This waste makes up about 5% of all municipal solid waste worldwide. It is hazardous than other waste because electronic components contain cadmium, lead, mercury, and Polychlorinated biphenyls (PCBs) that can damage human health and the environment.

Observations

E-waste generated in the campus is of minimal quantity. It is being effectively managed, keeping in mind the environmental hazards that may arise if not disposed properly.

The cartridges of laser printers are refilled outside the college campus. Administration Awareness programmes are being conducted regarding E-waste Management in various departments. The E- wastes and defective items from computer laboratories are being stored properly.

The dismantled hardware of personal computers are used in PC trouble shooting lab. This is put to use to conduct practical courses for Students and The dismantled electronic spare parts are immediately sold for reuse. The minimal amount of e-waste that is generated after reusing is sent to recycler at specific intervals.



E-Waste is Properly Collected in the campus





E-Waste is Properly Collected and Disposed Frequently

Recommendations

- Use reusable resources and containers and avoid unnecessary packaging wherever possible.
- The management should take an initiative to purchase recycled resources when they are available.
- Recycle or safely dispose of white goods, computers and electrical appliances.
- The Management engage proper Vendor to dispose the E Waste frequently.

Green Area Management

This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy enacted, enforced and reviewed using various environmental awareness programmes.

Observations

Campus is located in the vicinity of many trees (species) to maintain the biodiversity. Various tree plantation programs are being organized at college campus and surrounding villages through NSS (National Service Scheme) unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various type of indigenous species of ornamental and medicinal wild plant species.

The college cultivates vegetables for its own use through organic farming initiatives.



Green Area Management Inside The campus

14





15



Green Belt Across The campus



MIYAWAKI FOREST

A Miyawaki forest has been planted in the north-east corner of the campus Miyawaki is a technique pioneered by the Japanese botanist, Akira Miyawaki that helps build dense, native forests. The approach ensures plants to grow 10 times faster and the resulting plantation will be 30times denser than usual. It involves planting dozens of native species in the same area, and becomes maintenance-free after the first three years.





Miyawaki Forest Inside The campus





World Environment Day Celebrated Inside The campus



Sanitary Napkin Incinerator

To educate and create awareness of use of Sanitary Napkins and provide easy access to Sanitary Napkins by installation Simple Vending Machines in our girls toilet so that Girls/Women get habituated to use this Sanitary Napkins for their better health care. Secondly, to solve the problem of sanitary napkin disposal by installing incinerators which shall reduce spread of infection due to unhygienic disposal of sanitary napkins, reduce environmental pollution due to non-biodegradable sanitary napkins and reduce clogging of public drainage system due to spongy nature of napkins.



Sanitary Napkin Incinerator inside The Campus

Recommendations

- Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Assign scientific names to the trees.
- Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
- Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The
- Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy.
- Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- Indoor plantation to inculcate interest in students, Bonsai can planted in corridor to bond a relation with nature.
- ➢ Green library should be established.

Sanitation and Hygiene

Unsafe operation of educational institution can lead to transmission of diseases. It can cause negative impacts to students, their families, institute reputation and overall development. Therefore, good health and sanitation practices are very important especially considering the ongoing Covid'19 pandemic.

The provision of safe water and sanitation facilities is a first step towards a healthy physical learning environment. However, the mere provision of facilities does not make them sustainable or ensure the desired impact. Hygiene practices are employed as preventative measures to reduce the incidence and spreading of disease. Hygiene education aims to promote those practices that will help prevent water and sanitationrelated diseases as well as inculcating healthy behaviours in the future generation of

adults. Therefore, the combination of facilities, correct behavioural practices and education are meant to have a positive impact on the health and hygiene conditions of the community as a whole, both now and in the future.

1.Drinking water: Clean water as per drinking water standards have been ensured to students through Reverse Osmosis plant. RO plants of different capacity (6 nos.) have been installed.

2.Water Supply: Adequate and clean water supply through Public Water Supply and borewell system has been ensured.

3.Sanitation: Adequate number of urinals/toilets have been operational in main Campus, Hostel, and Other areas. No open and flowing latrines were noticed. Sanitation facilities are found to be proper and adequate.

4.Waste Management: Waste management bins are placed at each block to store and dispose through municipality. During audit, no unattended waste dumping was noticed.

5.Awareness: Hygiene awareness posters especially related to Covid'19 is displayed atvarious locations in the campus. Overall, campus follows very good sanitation practices.

Green & Environment Audit Report - 2023 TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Green Initiatives and Best Practices

The list of few important green initiatives and good environmental practices adopted by the campus is given below.

- Rainwater harvesting pits are constructed at appropriate locations to improve local ground water table.
- Installed solar Plant to meet partial power requirement of the Campus
- Replaced 60% of CFL lights with LED lights as part of energy conservation measures. Also, some of the old fans were replaced with energy efficient super fans.
- Engagement of authorized paper recycling vendor to manage bulk paper waste generated.
- Establishment of Organic Cultivation
- Celebration Of World Environment Day and creating Environment Awareness to all Students & Staffs
- Restricted movement of vehicles inside the campus. Parking space inside campus is provided for vehicles, however, no movement of vehicles inside campus is encouraged.
- Awareness posters on resource conservation, good sanitation and hygiene drive.
- Strictly follow the Plastic Free zone inside the campus is Encouraged.

Green & Environment Audit Report - 2023 TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Environmental Monitoring

As part of green audit of campus, the Green Audit Assessment Team has carried out the environmental monitoring of campus. This includes Illumination, Noise level, ventilation and indoor Air quality of the class rooms. It was observed that Illumination and Ventilation is adequate considering natural light and air velocity present. Noise level in the campus is well below the limit.

The following surveys were conducted:

- 1. Ambient air quality by NABL approved air sampler
- 2. Lux monitoring
- 3. Noise monitoring
- 4. Co2 Monitoring

Ambient Air Quality Monitoring

Ambient air quality monitoring can help in providing a strategic solution towards air purification and help lead a safer life. Also, air quality monitoring in the college campus not only develops trust among the parents but ensures that the administration cares about their Students and Staff.



Ambient Air Quality Monitoring Inside the Campus



Lux&Noise Monitoring

Illumination is one of the most important environmental factors in the classroom. Many Doctors have discovered that lighting settings have significant impact on students' performance. So Lux monitoring can help in providing a Comfort Vision Environment to Students.

When assessing noise exposure in campus environments, it can be difficult to determine whether the level of sound has reached a point where it interferes with student learning and staff productivity, or worse, becomes a threat to their health and well-being.



Lux & Noise Monitoring Inside The Campus



C02 Monitoring

CO2 levels can provide a direct indication of the CFM per person ventilation rate in College classrooms and can provide an ongoing indication if code required ventilation rates are being maintained. It is important to Maintain that CO2 levels a contaminant or pollutant at the levels normally measured in buildings (400 to 2000 ppm). Measurement Based On ASHRAE Standards



Co2 Monitoring Inside The Campus

Conclusion

Green audit is a systematic approach to understand the existing environmental practices and identify areas of improvement for attaining an eco-friendly approach to the sustainable development of the college. The report is prepared based on the site visit observations and information provided by the campus.

Overall, TNPESU has taken many environmentally friendly approaches and campaigns in the area of energy, water, solid waste, sanitation and green cover, which is highly commendable.

The environmental awareness initiatives taken by the management are substantial. The installation of water recycling plants, paperless work system and Solar & Biogas Plant practices are remarkable. Besides, environmental awareness programmes initiated by the administration prove the campus is going green. Few recommendations are added for waste management and waste reduction using alternate eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus and thus aid in a sustainable environment and community development.
Green & Environment Audit Report - 2023 TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Acknowledgement

We are grateful to the management and committee members of Tamilnadu Physical Education and Sports University to award this prestigious project on green auditing. Further we sincerely thank the college staff for providing us the necessary facilities and co-operation during the audit. This ample co-operation helped us a lotin making this audit possible and successful.

FOR IGNITE ENGINEERING

FOR IGNITE ENGINEERING

ER.P.VIVEK M.E LEAD GREEN ASSOCIATE CHARTERED ENGINEER

ER.S.KARTHIGA M.E(Ph.d) LEAD AUDITOR-ENVIRONMENT

ENERGY AUDIT REPORT



TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

March 2023

Report by

QRO CERTIFICATIONS

38/2, F1 Ranga Flats, Chrompet, Chennai - 600044 e-mail:qrocertifications@gmail.com mobile number: 8438218994

TABLE OF CONTENTS

S.No	Торіс	Page
1	About the college	2
2	Introduction	3
3	Objectives of Energy Audit	4
4	Benefits of Energy Audit	5
5	Stages of Energy Audit	6
6	Energy Management	8
7	Observations	8
7.1	Solar Panels	9
7.2	Diesel Generator	10
7.3	Biogas Plant	11
8	Carbon Foot Printing	13
9	Power analysis & Audit	16
11	Recommendations	23
12	Conclusion	23
13	Acknowledgement	24

1

1. ABOUT THE COLLEGE

The Tamil Nadu Physical Education and Sports University established by an Act of the Government of Tamil Nadu in 2004, is unique and the first of its kind in India as an affiliatory University, exclusively for Physical Education and Sports. After obtaining the accent from his Excellency the president of India on 5th August 2005, the said act came into force with effect from 15th September 2005. Accredited with ISO 9001 – 2015 Certification for Quality Management System It has been recognized as a premier institution of higher learning for job-oriented courses The College maintains high standards of excellence in the academic sphere and in the physical amenities and facilities intended to implement the educational programme. The College endeavours to enroll students who hold high standards of performance, discipline and achievement.

VISION

"To engage in relentless pursuit of Excellence in the promotion and development of Physical Education and Sports through innovative programmes in teaching, coaching, research and outreach activities and evolve a holistic approach to the betterment of human resources through a harmonious blend of body, mind and spirit" "

MISSION

- 1. To create an ideal academic environment for Learning, Scholarship, Professionalism, and Collaboration that fosters Excellence in active student learning and professional growth.
- 2. To design and introduce innovative, integrated, inter-disciplinary curriculum in Physical Education and various Sports and games and allied areas and provide Leadership to the Profession.
- 3. To offer unique graduate, Post-graduate and research Programmes in Physical Education, Sports and allied fields.
- 4. To produce competent health conscious Physical Education teachers at various levels, who will be fully equipped to impart instruction in Physical Education and undertake physical activity programmes for children and youth.
- 5. To develop High-Tech research facilities and contribute to the body to knowledge through scholarly work and publications, and disseminate the findings to the professionals, faculty and students.

2. INTRODUCTION

The Energy Conservation Act, 2001 defines Energy Audit as "the verification, monitoring, and analysis of the use of energy including submission of technical report containing recommendations for improving energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption".

It is an analysis of energy flows for energy conservation and to find energy losses. It is a process of collection of detailed data related to energy usage and comparison of collected results. It is a process by which we can reduce the amount of energy input to the system without a negative impact on the output.

It includes Inspection, Survey and Analysis of energy flows for energy conservation in a building, a process, or a system to reduce the amount of energy input into the system without negatively affecting the output(s) plugged. It is the quickest, cheapest, and cleanest way to reduce energy consumption.

An energy audit, sometimes referred to as an energy survey or an energy inventory, is an examination of the total energy used in a particular property. The analysis is designed to provide a relatively quick and simple method of determining not only how much energy is being consumed but where and when.

The energy audit will also identify deficiencies in operating procedures and in physical facilities. Once these deficiencies have been identified, it will be apparent where to concentrate efforts to save energy. The energy audit is the beginning of and the basis for an effective energy-management programme.

Increasingly in the last several decades, the demand to lower increasingly expensive energy costs and move towards a sustainable future has made energy audits greatly important.

3. OBJECTIVES OF ENERGY AUDIT



Δ

4. BENEFITS OF ENERGY AUDIT

- Energy audits will evaluate your facility "as a whole", their goal is not to evaluate single measures but to consider a wide range of available alternatives (Electrical, Mechanical, Envelope and Water).
- It will analyse your historical energy use and find potential issues using statistical methods.
- The audit will not only inform you of opportunities but provide you with financial analysis. This will enable prioritization based on financial benefit and return on investment.
- Provide you with solid, easy-to-understand technical information regarding the proposed energy conservation measures
- Provide you with benchmark information to help you understand your energy use performance compared to others in your field and area.
- Provide you with an emissions analysis to help you understand the benefits of your decisions from an environmental standpoint.
- Understand where energy is used, and which areas are worth focusing on the most (energy hogs).
- The cost-benefit analysis of the audit report would help decision-makers prioritize opportunities and evaluate them as investments.
- These indicators would include, rate of return, net present value, cash flow analysis, and payback.

5. STAGES OF ENERGY AUDIT

A structured methodology to carry out an energy audit is necessary for efficient working. An initial study of the site should always be carried out, as the planning of the procedures necessary for an audit is most important.

The stages of an energy audit are:

- Phase I Pre-audit phase
- Phase II Audit phase
- Phase III Post-audit phase

Phase – I Pre-audit phase

An initial site visit may take one day and gives the Energy Auditor/Engineer an opportunity to meet the personnel concerned, familiarize him with the site, and assess the procedures necessary to carry out the energy audit.

During the initial site visit, the Energy Auditor/Engineer should carry out the following actions:-

- Discuss with the site's senior management the aims of the energy audit.
- Discuss economic guidelines associated with the recommendations of the audit.
- Analyse the major energy consumption data with the relevant personnel.
- Obtain site drawings where available building layout, steam distribution, compressed air distribution, electricity distribution etc. the site accompanied by engineering/production.

The main aims of this visit are: -

- To finalise the Energy Audit team
- To identify the main energy-consuming areas/plant items to be surveyed during the audit.
- To identify any existing instrumentation/ additional metering required.
- To decide whether any meters will have to be installed prior to the audit eg. kWh, steam, oil, or gas meters.
- To identify the instrumentation required for carrying out the audit.
- To plan with time frame
- To collect macro data on plant energy resources, major energy consuming centers
- To create awareness through meetings/ programme

Phase – II Audit phase

The information to be collected during this audit phase includes:

- Energy consumption by type of energy, by department, by major items of process equipment, by end-use
- Material balance data (raw materials, intermediate and final products, recycled materials, use of scrap or waste products, production of by-products for re-use in other industries, etc.)
- Energy cost and tariff data
- Process and material flow diagrams
- Generation and distribution of site services (eg.compressed air, steam).
- Sources of energy supply (e.g. electricity from the grid or self-generation)
- Potential for fuel substitution, process modifications, and the use of co-generation systems (combined heat and power generation).
- Energy Management procedures and energy awareness training programs within the establishment.

Phase - III Post-audit phase

- Plan and schedule an action plan for implementing the corrective measures.
- Follow-up and periodic review.

6. ENERGY MANAGEMENT

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas, and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. The study carried out also analyzed the use of alternate energy resources that are eco-friendly.

7. OBSERVATIONS

The source of energy for all the buildings within the campus is electricity only. The institution consumes about **1800kW/Month**. However, **20KW** of the daily electricity requirement is supplied from **solar energy**.

The campus contains Lights and fans in use. The entire campus including common facility centers are equipped with LED lamps and LED tube lights, except at few locations. Besides this, photovoltaic cells are also installed in the campus as an alternate renewable source of energy.

Computers are set to automatic power saving mode when not in use. Solar water heaters are installed in hostel buildings and staff quarters as to promote renewable energy. Also, campus administration runs switch–off drill on regular basis. Equipment like Computers is used in power saving mode.

7.1 Solar panels

Solar panel systems are extremely durable and require little to no maintenance over their productive lifetime, which can span 25 years or more. Solar systems are also extremely easy to maintain. The main maintenance that these panels require is an occasional dusting to remove dirt, leaves, or any other fragments. Each kilowatt-hour (kWh) of solar that is generated will substantially reduce greenhouse gas emissions like CO₂, as well as other dangerous pollutants such as sulfur oxides, nitrogen oxides, and particulate matter.



Solar panels in the campus





Photo voltaic cells control unit

7.2 Diesel generator

The college campus is Equipped With Diesel Generators for power backup. The generators were tested for their efficiency, and physical and operating conditions and found to be fit.



Diesel Generator Inside the Campus

7.3 Biogas Plant

In TNPESU, kitchen waste is used to generate thermal energy for cooking and heating. The biogas produced from food waste, decomposable organic material, and kitchen waste, consisting of methane and a little amount of carbon dioxide is an alternative fuel for cooking gas (LPG).

Kitchen waste is processed and moistened to produce a suspension that subsequently undergoes a fermentation process. Fermentation produces biogas – a valuable energy source – that is desulphurised by biological means. Also, the waste materials can be disposed of efficiently without any odour or flies and the digested slurry from the bio-gas unit can be used as organic manure in the garden.

The major components of the bio-gas plant are a digester tank, an inlet for feeding the kitchen waste, a gas holder tank, an outlet for the digested slurry, and the gas delivery system for taking out and utilizing the produced gas.

The College campus is equipped With 1m³ Capacity Biogas Plant to promote the use of alternate energy.Eco-friendly technology allows to produce renewable natural gas in the form of biomethane.The facility processes about10kg of kitchen waste every day. The major waste is organic waste from College hostels, as well as leftover food from campus canteens and expired food.



Biogas production



Biogas Plant Installed inside the Campus

8.Carbon Foot Printing

Carbon Footprint refers to the potential climatic impact (Global Warming) of the Greenhouse Gases (GHG) emitted directly or indirectly due to an organization's activities. A Carbon Footprint Disclosure of any educational institution is very important to understand such that its key emission sources can be identified and necessary mitigation measures can be adopted for carbon reduction. In today's date, very few colleges disclose their carbon emissions. TNPESU has taken a initiative to compute its carbon footprint and set a benchmark for other Colleges/Universities. The college has adopted a carbon reduction strategy to undertake this project.

8.1 Objectives Of Carbon Foot Printing

- Identify key emission sources of GHG at the campus
- Compute Scopes of emissions for operations carried out at TNPESU Campus
- Analyze the results and provide cost effective & efficient measures for reducing the GHG emissions.

8.2 CARBON FOOT SURVEY & ESTIMATION INSIDE THE CAMPUS

Sl.No	Mode of Transport	No of	Travellers	To & Fro
		Vehicles		Km/Per
1	Two Wheelers (Single/Shared)	15	20	20
2	Own Car (Single/Shared)	25	20	15
3	Mini Bus / Private Van	3	200	30
4	Public Transportation / College Bus	-	3000	30

Sl.No	Description	Emission Rate	Annual	Eqt.Co ₂
			Consumption/Quantity	Tonnes/Year
	Electrical Energy	0.80 kg/kwh	12884kwh	103.91
	consumption			
Ι	Diesel consumption	2.653 kg of Co ₂ /litre	6000litres	15.92
	LPG	2.983 kg of Co ₂ /kg	1786kg	5.33
	Fire Wood	1.65-1.80 kg of	28 T	46.2
		Co ₂ /kg		
	Food Waste	1.9 kg of Co ₂ /kg	3.75 T	7.125
	Paper Waste	1.725 kg of Co ₂ /kg	5.85 T	10.09
II	Water Waste	0.298 kg of Co ₂ /kl	1760kl	0.524
	Plastic Waste	6 kg of Co ₂ /kg	200 kg	1.2
	Glass/Other	0.77 kg of Co ₂ /kg	10	0.065
	Sanitary Napkin	0.5 kg of Co ₂ /kg	2275 kg	1.1375
	Two Wheelers	2.38 kg of Co ₂ /L	10000*250/50=50000	103
	Own Car	2.653 kg of Co ₂ /L	800*250/20=10000	26.52
III	Mini Bus / Van	2.653 kg of Co ₂ /L	90*250/8=2812	7.46
IV	Events	Approx	500*8*1.5=6000kg	15.91
	Total			

Recommendations

- Regular maintenance of the air conditioners and refrigerators should be done and records should be maintained
- > Reheating of food can be done on induction / microwave minimizing the use of LPG.
- ➤ sub-metering system for electricity usage may help to identify high energy consumption areas.
- The systems (computers, laptops, air conditioners, refrigerators etc.) should be procured for the college considering the latest energy efficient technologies in the markets. (For ex All in One Units etc.)
- > Occupancy sensors should be installed in the classrooms and offices.

9. POWER CONSUMPTION ANALYSIS

The power consumed by the college for a year on a monthly basis is depicted below:

S.No	Month/year	Units consumed (kw/h)	Bill
			amount
1	03/2023	38430	269010
2	02/2023	42569	297983
3	01/2023	43037	301259
4	12/2022	33615	213988
5	11/2022	34604	242228
6	10/2022	42557	289600
7	09/2022	33797	214610
8	08/2022	23879	151631
9	07/2022	30425	193198
10	06/2022	34580	219583
11	05/2022	43441	275850
12	04/2022	36157	229596





9.1 POWER QUALITY AUDIT

A power quality audit checks the reliability, efficiency, and safety of an organization's electrical system. The audit verifies the following aspects:

The continuity of the power supply: It checks if the power in the network is available on a regular basis and can ensure the efficient operation of the equipment.

The quality of the voltage: It checks if there are no low or high-frequency disturbances in the network capable of damaging the system components.

Benefits Of Power Quality Analysis

- Assist in preventative and predictive maintenance
- Identify source and frequency of events
- Establish precise location and timing of events
- Develop maintenance schedules
- Monitor and trend conditions
- Analyse harmonics, Flicker, Transients frequency variation, voltage variations (sag & swell).
- Ensure equipment performance
- Assess the sensitivity of process equipment to disturbances
- Evaluate performance against specifications

Observations

TRANSFORMER LT SIDE

Voltage profile



Current profile



Load Profile



19

Power Factor Profile



Frequency



Total Harmonic Distortion



Individual Harmonics

Individual Harmonics							
As per IEEE-519,	Order of	Voltage Current					
2014, permissible %	Harmonics	R	Y	В	R	Y	В
of individual	3	0.21	0.36	0.41	2.18	3.16	2.04
voltage harmonics	5	0.38	0.84	1.01	0.57	0.74	1.6
is 5 %	7	1.45	1.2	1.23	0.47	1.17	1.44
Current harmonics	9	0.22	0.23	0.42	0.67	0.66	0.56
for <11 order is 10	11	0.34	0.27	0.55	0.47	0.59	0.20
/0		0.34	0.27	0.55	0.47	0.39	0.29

Summary:

S. No	Description	Remarks		
1	Location	INCOMING MAIN POWER HOUSE		
2	Voltage	Incoming voltage is varying from 379.3 V to 387.7 V.		
3	Load Current, A	Varying from 10	1.3A A to 127.18 A.	
4	Power, Kw	Varying from 98.	45 kW to 101.257 kW.	
5	Power, kVA	Varying from 98.	23 kVA to 101.885 kVA.	
		R	1.8	
6	THD Voltage (%)	Y	2.2	
		В	2.6	
	THD current (%)	R	2.8	
7		Y	3.8	
		В	2.8	
8	Power Factor	Varying from -0.	99 to 0.99	
9	Frequency, Hz	Varying from 49.	8 Hz to 50.13 Hz.	
10	Any Interruption	Yes. Power cut F	rom 13:04:15 to 13:06:45 and	
	observed. if yes details	13:12:30 to 13:15:30		
11	Voltage Sags	No		
12	Over voltage	No		
13	Voltage unbalance, %	Varying from 0.5 % to 1.4 %.		
14	Current unbalance, %	Varying from 0.1	% to 12.8 %.	

Remarks:

• Current unbalance is slightly higher than acceptable level.

11. RECOMMENDATIONS

- The management should support more of renewable and carbon-neutral electricity options in any energy- purchasing consortium, with the aim of supplying all college properties with electricity that can be attributed to renewable and carbon-neutral sources.
- The campus administration should run switch–off drills on regular basis.
- 5-star rated Air Conditioners, Fans and CFLs should be used.

12. CONCLUSION

Energy Rating

After the complete survey and analysis of the campus as per ISO 50001:2018 energy management system standards, we rate the campus **Score 4/5**.

Energy Conservation is the wave of the future. The world is quickly moving towards Energy sustainability. An energy-efficient organization is a step toward the direction of renewable energy, environmental protection, and sustainable living. Thus, concluded that by energy auditing we identify cost-effective ways to improve the comfort and efficiency of buildings.

13. ACKNOWLEDGEMENT

We are grateful to the management and committee members of Tamilnadu Physical Education and Sports University to award this prestigious project on energy auditing. Further, we sincerely thank the college staff for providing us with the necessary facilities and cooperation during the audit. This ample co-operation helped us a lot in making this audit possible and successful.

FOR QRO CERTIFICATIONS

ER.P.VIVEK M.E CHARTERED ENGINEER &COMPETENT PERSON



Registered & Head Office : TUV INDIA PRIVATE LIMITED 827, 2nd floor, Dhun Building Anna Salai, Chennai 600 002, India CIN : U74140MH1989PTC052930 Phone : (044) 28528875 / 1052 Toll Free : 1800-209-0902 Fax : (044) 28521676 Email : chennai@tuv-nord.com Website : www.tuv-nord.com/in

Date: 4th March 2021

Certification

This is to certify that the **Tamil Nadu Physical Education & Sports University** has successfully completed **Energy, Environment and Green Audit** as per **NAAC criterion 7** located at Melakottaiyur, Chennai.

Audit Month: February 2021

Period of study: 2019-20 & 2020-21

a. faspla



N Pradeep Kumar

Associate Vice President – Certification, Tamil Nadu Region

GREEN AUDIT REPORT For

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Melakottaiyur, Chennai.



By



TÜV INDIA PRIVATE LIMITED,

TÜV NORD GROUP 2nd floor, Dhun Building, 827, Anna Salai, Mount Road, Chennai – 600 002

March 2021





ACKNOWLEDGEMENT

TUV India Pvt Ltd wishes to thank all the staff and Management of **Tamil Nadu Physical Education and Sports University (TNPESU)**, Chennai Management & Technical Team for the kind cooperation and assistance extended to our Auditors during the course of the Green audit.

Auditors

S Prabhu Kiran Prakash G





Table of Contents

1.	EXECUTIVE SUMMARY
2.	LIST OF PERFORMANCE IMPROVEMENT MEASURES AT TAMIL NADU PHYSICAL EDUCATION AND SPORT UNIVERSITY, CHENNAI
3.	PROJECT BACKGROUND
4.	GREEN AUDIT
5.	ELECTRICAL SYSTEM
	5.1 ELECTRICAL BILL ANALYSIS
	5.2 UNIT COST ANALYSIS 12
	5.3 LIGHTING ANALYSIS
	5.4 LIGHTING ANALYSIS
	5.5 LIGHTING POWER DENSITY
6.	HEATING VENTILATING & AIR CONDITIONING (HVAC)
	6.1 PERFORMANCE ANALYSIS OF SPLIT UNITS
	6.2 INDOOR AIR QUALITY
7	WATER
	7.1 PERFORMANCE ANALYSIS OF WATER FAUCETS
	7.2 PERFORMANCE ANALYSIS OF DOMESTIC WATER PUMPS
	7.3 WATER NEUTRALITY





	7.4 WATER QUALITY ANALYSIS	24
	7.5 WATER BALANCE CHART	25
	7.6 RAINWATER HARVESTING SYSTEM	25
8	WASTE MANAGEMENT SYSTEM	26
9	GREEN HOUSE GAS EMISSION	28
10	SITE OBSERVATION REPORT	29
11	PERFORMANCE IMPROVEMENT MEASURES (PIM'S)	38
12	GOOD PRACTICES AT TNPESU CAMPUS	44





1. EXECUTIVE SUMMARY

Green Audit of Tamil Nadu Physical Education and Sports University was carried out by TUV India Pvt Ltd team during Feb 2021.

The approach taken in this facility included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and associated systems & equipment, including the electrical, lighting & AC systems, and operational & maintenance procedures. Sample measurements were taken using various instruments like ALM Power Analyzer, clamp meter, Infrared Thermometer, Lux meter, Humidity meter, CO₂ meter, etc. Operational Data were also collected from the past records. The study covered the following areas to summarize the present status of environment management in the campus:

- Water management
- Energy Conservation
- Waste management
- Green area management

The report accounts for the energy consumption patterns of the Tamil Nadu Physical Education and Sports University based on actual assessment. The report compiles a list of possible actions to conserve and efficiently access the available scarce resources and their saving potential was also identified.

The overall annual energy consumption is 21,82,442 kWh/annum. The annual greenhouse gas emissions equivalent for electricity is **1855 tons of CO**₂ (0.85kg of CO₂ emits /kWh of unit generation).

S.No	GHG source	Tonnes of CO2 Equivalent
1	Road Transport	1.77
2	Electricity	1855
3	HVAC System	1.2
4	DG Operation	2.24
	Total GHG Emission	1860.21

Total Global Warming Impact in CO2 Equivalent





Overall 31% i.e. 6,77.081.6 kWh unit's savings identified on above mentioned categories with average payback of 53 months and reduced annual greenhouse gas emissions equivalent to 575.5 tons of CO₂.

2. LIST OF PERFORMANCE IMPROVEMENT MEASURES AT TAMIL NADU PHYSICAL EDUCATION AND SPORT UNIVERSITY, CHENNAI.

S No	ECM Description	Annual Energy savings kWh	Annual savings, Lacs.	Cost of Measure, Lac.	Payback Months
1	PIM 1: Water saving through the efficient dual flush water closet	1281.6 L/Annum	0.11	0.05	6
2	PIM 2: Tube light lamps to be changed with appropriate LED lamps to reduce power consumption	2520	0.25	0.5	24
3	PIM 3: Replacing old celling fan to Super fans	16,128	1.64	4.8	35
4	PIM 4: Install Solar PV in roof top to reduce overall power consumption	6,57,100	67	300	53
Total		6,77,081.6	69	305.35	53





3. PROJECT BACKGROUND

The Tamil Nadu Physical Education and Sports University (TNPESU) is India's first state university for Physical Education and Sports located at Melakottaiyur, Chennai. It was established by an Act of the Government of Tamil Nadu in 2004. The University is UGC approved and offers regular and distance learning UG, PG, Diploma, Certificate and PG Diploma programmes in the fields of Physical Education, Yoga, Exercise Physiology, Bio-Mechanics, Sports Management, Sports Psychology and Sociology, Advanced Sports Training and Sports Technology. Tamil Nadu Physical Education and Sports University has a "B++" grade accreditation by the National Assessment and Accreditation Council [NAAC]. Tamil Nadu Physical Education and Sports University has an area of 125 acres which is spread in the outer of Chennai city.

Tamil Nadu Physical Education and Sport University major facilities: -

- Indoor & Outdoor stadium
- Health Centre
- Food Court
- Recreational Center
- Sports Pavilion and Gymnasium





4. GREEN AUDIT

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its sustainability
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use on the campus.
- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requires high cost.

Green Audit also includes the preliminary analysis and more detailed energy calculationsfinancial analysis of proposed Performance Improvement Measures (PIM). The financial analysis provides the facility team the understanding of the financial benefits in implementing specific Performance Improvement Measures. Utility bills were collected for three months' period to allow the auditor to evaluate the facility's energy/demand rate structures and energy usage profiles. A detailed financial analysis is performed for each measure based on implementation cost estimates; site-specific operating cost savings, and the customer's investment criteria. Sufficient detail is provided to justify project implementation.





5. ELECTRICAL SYSTEM

The electrical power is availed from Telangana Southern Power Distribution Company Limited (TSSPDCL). The power is distributed through LT panel located in the Facility Area. The power is distributed to the college through transformer of loading position 11KV/433V, 315kVA distribution transformer.

There is 1 No. of 45 kVA & 1 Nos. of 160 kVA DG set for the backup to handle any grid power interruption.






5.1 ELECTRICAL BILL ANALYSIS

The Energy bill data were analyzed from Jan 2020 to Dec 2020, the total electricity bill for the year 2020 is Rs.21,82,442 and energy unit consumption is 2,19,190 kWh.

Month	Energy Consumption kWh	Energy Cost Rs	Unit Cost Rs/kWh
Jan-20	29,630	2,54,219	8.58
Feb-20	23,147	2,13,051	9.20
Mar-20	21,979	2,05,635	9.36
Apr-20	11,098	1,36,540	12.30
May-20	14,638	1,59,019	10.86
Jun-20	14,800	1,60,048	10.81
Jul-20	13,937	1,54,568	11.09
Aug-20	16,138	1,68,544	10.44
Sep-20	18,948	1,84,108	9.72
Oct-20	18,974	1,86,603	9.83
Nov-20	15,920	1,67,160	10.50
Dec-20	19,981	1,92,947	9.66
Total	219,190	21,82,442	10.20

Table: Energy Bill Analysis Jan'20 to Dec'20





Chart: kWh Consumption analysis - During Jan 2020 energy consumption is high







Chart: Monthly Energy Cost Analysis – During Jan 2020 energy cost is high

5.2 UNIT COST ANALYSIS

The Energy bill data from Jan 2020 to Dec 2020 were analyzed. Per unit cost for the period of study was calculated to be Rs 10.20/kWh.

Month	Energy Consumption kWh	Energy Cost Rs	Unit Cost Rs/kWh
Jan-20	29,630	2,54,219	8.58
Feb-20	23,147	2,13,051	9.20
Mar-20	21,979	2,05,635	9.36
Apr-20	11,098	1,36,540	12.30
May-20	14,638	1,59,019	10.86
Jun-20	14,800	1,60,048	10.81
Jul-20	13,937	1,54,568	11.09
Aug-20	16,138	1,68,544	10.44
Sep-20	18,948	1,84,108	9.72
Oct-20	18,974	1,86,603	9.83
Nov-20	15,920	1,67,160	10.50
Dec-20	19,981	1,92,947	9.66
Total	219,190	21,82,442	10.20





Chart: Monthly Unit Cost – During Apr 2020 Unit Cost Rate is high.





5.3 LIGHTING ANALYSIS

Good lighting is necessary to enable work to be done well and in comfort. A facility with bad lighting is an inefficient one, though it may look attractive. Poor lighting can be combated by good eyesight and by keenness on work but at the eventual expenses of efficiency, wellbeing and comfort. Hence, the designer of the building should pay sufficient attention to the need for good lighting.

The lighting details of the facility were studied. The various type of light fitting used are 15W LED, 20W LED, 30W LED & 36W TL lamps.

5.4 LIGHTING ANALYSIS

S. No	Description	LUX Level	Baseline Lux Level as per NBC	Remarks
1	Principal Room	170, 195, 210, 280,324	300	Ok
2	Library Hall	200, 260, 230, 162,290,332	300	Ok
3	Auditorium	117, 135, 180, 190, 210, 340	300	Ok
4	Server Room	120, 140, 280,320	200	Ok
5	Gents Mess Hall	210,280,320,440	200	Ok
6	Ladies Mess Hall	230,260,310,460	200	Ok
7	Gents Hostel Room	210,280,260,320	50	Ok
8	Ladies Hostel Room	265, 285, 330	50	Ok
11	Lecture Hall 1	250,320,380	300	Ok
12	Lecture Hall 2	230,260,340	300	Ok
13	Lecture Hall 3	220,250,330	300	Ok
14	Lecture Hall 4	250,275,315	300	Ok
15	Lecture Hall 5	235,285,350	300	Ok
16	Lecture Hall 6	270,290,340	300	Ok

Comments:

Lux level is measured during day light availability and it is very good level compared to NBC standards.





5.5 LIGHTING POWER DENSITY

S No	Description	Fixture Details	Fixture Wattage	No. of fixtures	Total Wattage	Area Sq.ft	Actual LPD W/sq.ft	ASHRAE LPD W/sq.ft
1	Gents Mess Hall	36 W TL	36	15	540	2064	0.26	1.21
2	Ladies Mess Hall	36 W TL	36	15	540	1160	0.47	1.21
3	Library Reading Hall	36 W TL	36	48	1728	2760	0.63	0.93
4	Ladies Hostel room 1	36 W TL	36	15	540	1456	0.37	1.21
5	Ladies Hostel room 2	36 W TL	36	15	540	1456	0.37	1.21
6	Ladies Hostel room 3	36 W TL	36	15	540	1456	0.37	1.21
7	Gents Hostel Room 1	36 W TL	36	15	540	1456	0.37	1.21
8	Gents Hostel Room 2	36 W TL	36	15	540	1456	0.37	1.21
9	Gents Hostel Room 3	36 W TL	36	15	540	1456	0.37	1.21
10	Class Room G15	20 W LED	20	12	240	520	0.46	1.24
11	Class Room G16	20 W LED	20	12	240	520	0.46	1.24
12	Class Room G17	20 W LED	20	12	240	520	0.46	1.24
13	Class Room G18	20 W LED	20	12	240	520	0.46	1.24
14	Academic Block Lobby 1	36 W TL	36	4	144	220	0.65	0.9
15	Academic Block Lobby 2	36 W TL	36	4	144	220	0.65	0.9
16	Admin Block Lobby	36 W TL	36	2	72	140	0.51	0.9

Comments:

LPD is within in the ASHRAE limit. We recommended to replace the 36 W TL to 20 W LED for better energy savings.





6. HEATING VENTILATING & AIR CONDITIONING (HVAC)

In College campus for human thermal comfort, sum of 152 TR capacities of split units installed, in Library computer lab, Admin Block and Academic Block are installed in the campus to meet the cooling requirement. Along with this, for ventilation in the facility, ceiling and exhaust fans are installed.

6.1 **PERFORMANCE ANALYSIS OF SPLIT UNITS**

Admin Block Server Room AC 1				
Description	Nam	e Plate Details		
Make	Voltas			
Motor Power, kW		1.77		
Rated Current, A		7.9		
Refrigerant & Charge	R-	22, 1.13 kg		
Capacity, TR		2		
Star Rated	5 Star			
Inside Air Flow, CMH		1080		
Perfo	rmance Analysis			
Description	Actual	Units		
Description Motor running current	Actual 5.8	Units A		
Description Motor running current Voltage	Actual 5.8 227.2	Units A V		
Description Motor running current Voltage PF	Actual 5.8 227.2 0.91	Units A V		
Description Motor running current Voltage PF Motor power	Actual 5.8 227.2 0.91 1.51	Units A V kW		
Description Motor running current Voltage PF Motor power Supply air quantity	Actual 5.8 227.2 0.91 1.51 110	Units A V kW CFM		
DescriptionMotor running currentVoltagePFMotor powerSupply air quantitySupply air temperature	Actual 5.8 227.2 0.91 1.51 110 19.3	Units A V V kW CFM °C		
DescriptionMotor running currentVoltagePFMotor powerSupply air quantitySupply air temperatureRelative humidity	Actual 5.8 227.2 0.91 1.51 110 19.3 62	Units A V V kW CFM °C %		
DescriptionMotor running currentVoltagePFMotor powerSupply air quantitySupply air temperatureRelative humidityReturn air temperature	Actual 5.8 227.2 0.91 1.51 110 19.3 62 21.8	Units A V V KW CFM °C % °C		

Comments:

Power consumption is within the design limit and CO_2 level is within limits.





Admin Block Server Room AC 2				
Description	Nam	e Plate Details		
Make	Voltas			
Motor Power, kW		1.77		
Rated Current, A		7.9		
Refrigerant & Charge	R-	22, 1.13 kg		
Capacity, TR		2		
Star Rated		5 Star		
Inside Air Flow, CMH		1080		
Performance Analysis				
Description	Actual	Units		
Motor running current	5.6	A		
Voltage	221.9	V		
PF	0.9			
Motor power	1.48	kW		
Supply air quantity	105	CFM		
Supply air temperature	21.1	°C		
Relative humidity	61	%		
Return air temperature	22.7	°C		
CO ₂ Level	756	PPM		

Comments:

Power consumption is within the design limit and CO_2 level is within limits.





Academic Block Health Care Room AC 1				
Description	Nam	e Plate Details		
Make	LLOYD			
Motor Power, kW		1.59		
Rated Current, A		7.0		
Refrigerant & Charge	R-	22, 1.08 kg		
Capacity, TR		1.5		
Star Rated		3 Star		
Performance Analysis				
Description	Actual	Units		
Motor running current	6.7	A		
Voltage	223.7	V		
PF	0.9			
Motor power	1.5	kW		
Supply air quantity	96	CFM		
Supply air temperature	21.5	°C		
Relative humidity	65	%		
Return air temperature	22.9	°C		
CO ₂ Level	670	PPM		

Comments:

Power consumption is within the design limit and CO_2 level is within limits.





6.2 INDOOR AIR QUALITY

Indoor air quality (IAQ) is a term which refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants. IAQ can be affected by various gases, volatile organic compounds etc. Source control, filtration and the use of ventilation to dilute contaminants are the primary methods for improving indoor air quality in most buildings. Determination of IAQ involves the collection of air samples at various locations of the building.

During the course of audit, the Indoor air quality survey was carried out at various locations in the building.

S.No	Area	Temperature	CO ₂ ppm	Relative Humidity %
1	Auditorium	21.6	640	61
2	Library Computer Lab - 1	23.4	810	60
3	Health Care room	20.8	670	65
4	Admin Block Server room	19.9	765	61

Comments:

On an overall observation, the occupant comfort temperature shall be maintained at 24°C, & Humidity needs to be maintained at < 60%. CO2 level is good.





7 WATER

Drinking Water for the entire college is taken from quarry and it treated by proper RO system. RO water system are installed in each block to meet the drinking water requirement. For flushing, irrigation and cleaning purpose water is taken from the same quarry, water is pumped to the raw water sump then the OHT at terrace levels.

7.1 PERFORMANCE ANALYSIS OF WATER FAUCETS

S. No.	Description	NBC Baseline (LPM)	Actual (LPM)
1	First floor gents toilet wash basin 1	1.5	7.1
2	First floor gents toilet wash basin 2	1.5	6.8
3	Ground Floor ladies toilet tap 1	3	17.0
4	Ground Floor ladies toilet tap 2	3	18.9
5	Wash basin tap 1	1.5	11.0
6	Wash basin tap 2	1.5	13.0
7	Water Closets	6	6.0
8	Academic Block first floor Wash basin tap 1	1.5	7.5
9	Academic Block first floor water closet 1	6	6.0
10	Academic Block first floor water closet 2	6	6.0
11	Admin Block ground floor Wash basin tap 1	1.5	5.5
12	Admin Block ground floor water closet 1	6	6.0

Water flow is measured in faucets of College toilets wash basin, urinals & water closets.

Comments: Water flow in the faucets and tap are high in above highlighted area comparing to the NBC standard. The baseline standards are as per the NBC 2016 part no: 9 section 1 table – 2.





7.2 PERFORMANCE ANALYSIS OF DOMESTIC WATER PUMPS

Water Pump-1

Description	Bore Well Water Pump -1
Installed motor power, kW	3.75
No. of Phase	3
Description	Readings
Voltage, V	404.8
Current, A	4.8
Power Factor, PF	0.943
Power consumption, kW	3.17

Comments:

Power consumption is within the design limit. Water meter shall be installed in outlet of the quarry motor pipe to measure the water consumption from the quarry and consumption in each block. Quarry water Consumption Record shall be maintained on daily, monthly basis to arrive at the water balancing.

Sump Water Pump-1

Description	Sump Water Pump -1
Make	CRI
Capacity, m ³ /hr	9
Motor current, A	3.0
Motor RPM	2880
Installed motor power, kW	1.1
Head, m	32
Description	Readings
Voltage, V	421
Current, A	2.1
Power Factor, PF	0.787
Power consumption, kW	0.9

Comments:

Power consumption is within the design limit. Water meter shall be installed at the overhead tank outlet to measure the water consumption from the terrace tank. Water Consumption Record shall be maintained on daily, monthly basis to arrive at the Water balancing.





Sump Water Pump -2

Description	Sump Water Pump -1
Make	CRI
Capacity, m ³ /hr	9
Motor current, A	3.0
Motor RPM	2880
Installed motor power, kW	1.1
Head, m	32
Description	Readings
Voltage, V	421
Current, A	2.8
Power Factor, PF	0.823
Power consumption, kW	1.69

Comments:

Power consumption is within the design limit. Water meter shall be installed at the overhead tank outlet to measure the water consumption from the terrace tank. Water Consumption Record shall be maintained on daily, monthly basis to arrive at the Water balancing.

7.3 WATER NEUTRALITY

Presently quarry water is used to meet the entire buildings water requirement.

Strategies for Water Neutrality: -

a. Low flow aerators.

To reduce the fresh water consumption, by installing the aerators for faucets in all common area restrooms, landscape irrigation, canteen etc. This measure reduces the water consumption by 40% from the baseline of NBC.







b. Sewage Treatment Plant

To reduce the potable water consumption by installing the sewage treatment plant (STP). In the college campus 2 hostel blocks are there and totally per day water consumption is 120 KL per day. So the waste water generation will be around 120 KL per day. So the recommended STP plant size will be 120 KLD. This treated water will be used for landscape irrigation & toilet flushing purpose.

c. Dual Plumbing System.

To reduce the potable water consumption by installing the dual flush system (3/6 LPF). To further reduce the fresh water consumption, use the STP treated water as mentioned above.



d. Native Plant Species.

For landscape irrigation, fresh potable water is being used. To reduce water consumption for landscape, in some places drip irrigation method is being used. However, in some places hose pipe irrigation is being used and this result in more water consumption. It is recommended to install drip irrigation for all shrubs & tree type species and sprinkler irrigation for turf area. To reduce the water consumption by replacing the drought tolerant/xeriscape species.







7.4 WATER QUALITY ANALYSIS

In College campus, drinking water is taken from tanker lorry (Costly) and municipal corporation water. Normally, for drinking water daily consumption of lorry water - 8000 liters and municipal water - 250 liters, so totally 8250 liters per day is consumed. For landscape irrigation, floor cleaning & toilet flushing water is taken from two bore well and the total dissolved solid (TDS) level is given below.

Location	Water TDS level	Temperature in ° C
Quarry Water	640	31.4
Ground Floor Water Cooler	260	27.6
Second Floor Water Cooler	253	25.6

Comments:

As per the WHO recommended drinking water TDS level is < 300. In our campus drinking water TDS level is within the limit. For quarry, water treatment system is required to reduce the TDS level.





7.5 WATER BALANCE CHART

Source of drinking water is from the quarry water, to underground reservoir, it is transferred to Overhead tank and supplying the water with the help RO systems. And same quarry water is in usage to meet the landscape irrigation, cleaning & toilet purpose. There is no sewage plant installed in this plant, sewage is connected through the municipal sewerage line.



7.6 RAINWATER HARVESTING SYSTEM

In college campus rainwater is collected and recharge the ground with the help of a quarry water reservoir and Melakottaiyur Lake and the lake and reservoir is located near to the college campus. Rainwater trenches are built according to the slope of the surface level and it connect the roof and non-roof rainwater to rainwater harvesting system.







8 WASTE MANAGEMENT SYSTEM

In college campus, separate dry waste and wet waste type of waste collection bins are provided for collection of waste. All waste generated from the building operation was analyzed. A waste audit was performed on 28/02/2021 at Tamil Nadu Physical Education and Sports University, Chennai to identify opportunities to divert waste streams from landfills and to determine further source reduction opportunities.

Waste Treatment:

Different types of waste are collected from the hostel mess & other places are sent to Municipal. In the college campus is the common solid waste management center for segregation and effective management of waste generated in the college premises. The unit has specific sections where solid waste is segregated as 'wet' and 'dry'. The dry waste such as plastics, papers, cartons, e-waste and scrap are separated and sent to 'recycle vendor' for recycling. The organic waste such as dried leaves and kitchen refuse from the canteen are used for composting.

Month	Cardboard Waste, Kg	Paper Waste, Kg	Plastic Waste, Kg	Bottle Kg	Total Waste, Kg
Mar-19	-	338	-	_	338
Apr-19	-	338	-	-	338
May-19	-	2082	-	-	2082
Jun-19	-	1106	-	-	1106
Sep-19	133	6697	108	16	6954





Waste Audit Procedure:

- Waste auditing was carried out by sorting and measuring the building's waste over a given time period, i.e. 24 hours' time. And Audit team selected a time period of 16th Feb 2021.
- The Audit Team was equipped with all necessary safety and personal protective devices including safety glasses, respirator masks, coveralls and gloves.
- The Audit team has taken the waste audit form and marked the following types:
 - Papers
 - o Tissue paper
 - Pet bottles
 - Plastic covers
 - Printed hard paper
 - \circ Food waste
- Each waste type was separated and measured for the weight through a weighing scale. The values were entered in the waste audit form and compared against the total weight of all wastes.





9 GREEN HOUSE GAS EMISSION

Climate change resulting from human activities is now recognised as one of the most pressing environmental issues facing the world's population. In addressing this problem, governments, the international community and industry are moving to control emissions of greenhouse gases (GHGs), setting targets such as those agreed at the Kyoto Conference in 1997. These moves will continue in the future and, inevitably, businesses and other organizations will increasingly have to account for and report on GHG emissions.

In the college campus total occupants is 847 (approx..) and 367 students are stay in the college hostel and we consider the total travel distance per day is 20 km(approx..) and GHG emission for per kilo meter is 0.000185 tCO_2 / Km. So per day CO₂ emission level is 1.77 tCO_2 for travelling. The total energy unit consumption is 21,82,442 kWh per year and CO₂ emission factor for electricity is 0.85. It is equivalent to 1855 tons of CO₂. For HVAC system installed capacity is 152 TR and charged refrigerant quantity is 60.5 GWP tons and standard refrigerant gas leakage is 2%, It is equivalent to 1.2 tons of CO₂. For Diesel operated 63 KVA DG is installed in site and one-year fuel consumption is 839 liters and CO₂ emission factor for diesel is 0.00268 tCO₂/liter. So one year CO₂ emission from DG is 2.24 tCO₂.

S No	GHG source	Tonnes of CO2 Equivalent
1	Road Transport	1.77
2	Electricity	1855
3	HVAC System	1.2
4	DG Operation	2.24
	Total GHG Emission	1860.21

Total Global Warming Impact in CO2 Equivalent





10 SITE OBSERVATION REPORT

Site Observation Report (SOR)				
Report No.	C&A/SOR/01	Date	28.02.2021	
Location	College Campus			
Observation Images				
<section-header></section-header>				
Treated drinking water is provided for the whole campus.				
Potential Sustainability Meas	ures			
Purified drinking water dispen	ser is kept at each floor level.			





Site Observation Report (SOR)				
Report No.	C&A/SOR/02	C&A/SOR/02 Date 28.02.2021		
ocation	Hostel Mess			
Observation Images				
Description n hostel canteen 20 m3 bio g	<image/>			





Potential Sustainability Measures

It is recommended to use the cattle dung use in the bio gas plant.

Site Observation Report (SOR)				
Report No.	C&A/SOR/03	Date	28.02.2021	
Location	HVAC System		-	
Observation Images				
	<image/> <section-header></section-header>	3/1 11:58		





Description

High Efficient AC System.

Potential Sustainability Measures

It reduces the power consumption and it is highly efficient.

Site Observation Report (SOR)				
Report No. C&A/SOR/04 Date 28.02.2021				
Location	Dust Bin			

Observation Images







Description

Different type waste collection bins are kept for the collection of waste.

Potential Sustainability Measures

This measure helps in reducing the segregation of waste at source.

Site Observation Report (SOR)				
Report No.	C&A/SOR/05	Date	28.02.2021	
Location	Hostel Mess			
Observation Images				



Description





Potential Sustainability Measures

In the hostel mess good daylight and ventilation are available, it gives good atmosphere to the students have their food.

Site Observation Report (SOR)				
Report No.	C&A/SOR/06	Date	28.02.2021	
Location Academic Block Terrace				
Observation Images				







Description

Cooling tiles are installed in the academic block terrace area

Potential Sustainability Measures

This helps in reducing the HVAC consumptions and maintain the good thermal comfort.

Site Observation Report (SOR)			
Report No.	C&A/SOR/07	Date	28.02.2021











Location Roof Top Solar PV **Observation Images**

Description

Work Order is released for Roof top solar PV.

Potential Sustainability Measures

20kVA solar photovoltaic energy plant is going to install in the roof top and it is connecting with net metering.





11 PERFORMANCE IMPROVEMENT MEASURES (PIM'S)

PIM 1: Water saving through the efficient dual flush water closet

Annual Water Savings	1281.6 L/annum
Recurring Annual Savings Potential	Rs. 0.11 Lakhs
One-time Cost of Implementation	Rs.0.05 Lakhs
Payback period	6 Months

Present System:

Presently average water flow in the faucets is 8 LPM it is high compared to the NBC Standards. This leads to lot of water consumption.

Proposed System:

It is recommended to install low flow aerator based faucets in the flow rate of 2.4 LPM as per the standards in common/lavatory rooms. This saves huge of water consumption.

Description	Value	Units	Formula
Average measured flow	8	LPM	A
Average usage per day	60	min/day	В
No of taps	60	Nos.	С
Annual water consumption	8,640	KL/yr	D =(AxBxCx300)/1000
Water consumption cost (Approx)	9	Rs/KL	E
Present Water Consumption cost	77,760	Rs/Yr	F=ExD
After installing aerators 70% water reduction	2.4	LPM	G
Annual water Savings	7358.4	KL/yr	H =((A- G)xBxCx365))/1000
Annual Saving, Rs	0.11	Lakhs	I=HxE
Investment, Rs	0.05	Lakhs	J
Payback period	6	Months	K=J/Ix12









PIM 2: Tube light lamps to be changed with appropriate LED lamps to reduce power consumption

Annual Energy Savings	2520 kWh/annum
Recurring Annual Savings Potential	Rs. 0.25 Lacs
One-time Cost of Implementation	Rs. 0.5 Lacs
Payback period	24 months

Present System

During the survey, it is observed that some class room and exterior lights are 36W tube lamps are installed with electronic/electromagnetic ballast. These lamps are outdated and power consumption is higher with low lumens output.

Proposed System

It is recommended to replace 15W LED lamps. It gives more lumens and reduces power consumption.

Description	Value	Units	Formula
Total power consumption in Exterior Lighting	1	kW	А
Present Annual Operating Hours	4,200	hrs	В
Present Annual Energy Consumption	4,200	kWh	C=AxB
Proposed Power consumption after installing LED lamps (considering 40% reduction)	0.4	kW	D = (A- (A*40%))
Proposed Energy Consumption	1680	kWh	E=DxB
Proposed Energy savings in Units	2520	kWh	F=C-D
Power cost	10.2	Rs/kWh	G
Annual Power cost savings	0.25	Rs	H =FXG
One-time cost of implementation	0.5	Rs	Ι
Payback period	24	Months	J=I/H x12









PIM 3: Replacing old celling fan to Super fans

Annual Energy Savings	16,128 kWh/annum
Recurring Annual Savings Potential	Rs. 1.64 Lakhs
One-time Cost of Implementation	Rs. 4.8 Lakhs
Payback period	35 Months

Present System:

Presently there is old model high energy consumption fans are installed at campus; it is consuming more energy.

Proposed System:

It is recommended to install super fans to reduce the power consumption and armature coil failure.

Description	Value	Units	Formula
Annual Energy Consumption	53760	kWh∕yr	A
Proposed Fan Annual Energy Consumption	30	%	В
Annual Energy Savings	16128	kWh/yr	C =BX10%
Unit power cost	10.2	Rs/kWh	D
Annual Cost Savings	1.64	Rs Lakhs	E
One time implementation cost	4.8	Rs lakhs	F
Payback	35	Months	G=F/E x 12





Annual Energy Savings	657, 000 kWh/annum
Recurring Annual Savings Potential	Rs 67 Lakhs
One-time Cost of Implementation	Rs 300.0 Lakhs
Payback period	53 Months

PIM 4: Install Solar PV in roof top to reduce overall power consumption

Present System:

Presently TNEB power supply is catering to whole building facility, this leads the power consumption.

Proposed System:

To avoid the TNEB power consumption, this can be avoided by installing Solar PV on Roof Top

Description	Value	Units	Formula
Area of the roof required for PV	40000	Sq.ft	A
Area required for 1 kW PV	100	sq.ft	В
Potential of PV panels	400	kW	С
Average Units generation per kW panel	1,800.0	kWh/day	E = C X 4.5 k₩h
Annual Energy Generation	657,000	kWh	F = E X 365
Unit power cost	10.2	Rs/kWh	G
Annual Cost Savings	67	Rs Lakhs	Н
One time implementation	300	Rs lakhs	I
Payback	53	Months	J=I/H x 12





During Conserve's Audit, it is observed that M/s Tamil Nadu Physical Education and Sport University has already adopted the following Performance Improvement Measures in its facility;

12.1 LED Lights in Building facility

LED street light is installed in the college campus is a good replacement of Energy. It reduces the EB energy consumption.

12.2 Solar PV System

Solar PV is installed in the roof top of 20kW is a good replacement of Energy. It reduces the EB energy consumption.

12.3 Bio Gas

Food Waste is converted to bio gas; it is a good example of waste to Energy. It is reducing the hostel mess LPG consumption.

12.4 Green Campus

The college total site is 125 acers and more than 100 acer is complete green vegetation is retained.

12.5 Shuttle Service

College is operating a shuttle service for students and it is connecting Tambaram bus depot to college. It reduces the overall CO2 footprint to a great extent with avoiding individual transport.

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

KEY INDICATOR: 7.1

7.1.6: Quality audits on environment and energy regularly undertaken by the institution:

University has received the following Certificates of Awards received from recognized agencies for environmental promotion and sustainability activities carried out in the University campus.


Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES







Lions Clubs International, District 324 J Proudly Present this Certification to TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY for WATER CONSERVATION IN THE CAMPUS. We herewith present THE WATER CONSERVATION AWARD During the Lions 19th Annual District Convention held at Sri Natarajan Thirumana Mandapam, Redhills, Chennai-52 On 16th April 2023.

MJF Lion B.V.Ravindran (BVR) District Governor

PMJF Lion Er.P.Jeyakodi DCP - Convention



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES









Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

KEY INDICATOR: 7.1

7.1.6: Quality audits on environment and energy regularly undertaken by the institution:

Beyond the Campus Environmental Promotion activities conducted by the of the University.



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

CHENNAI - 600127.

NATIONAL CADET CORPS

1 TAMILNADU BN NCC

REPORT OF THE EVENT

The TNPESU National Cadet Corps (ArmyWing) in Association with 1 TN BATTALION NCC conducted **an extension activity "SWATCHH BHARAT – CLEANING Programme"** on 28th DEC 2022 at KEERAPPAKKAM

All the participants in this Event along with Dr.S.JAYAKUMAR, Associate NCC officer and Public, Staff members students from various department participated in the **"'SWATCH BHARAT – CLEANING Programme"** to promote **SUPPORT TO SOCIETY.** Cleaning Meterial was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of	Date
				Beneficiaries	
	An extension				
	Programme-"				28th
1.	'SWATCH BHARAT –	KEERAPPAKKAM	Dr.S.JAYAKUMAR	60	DEC
	CLEANING Programme				2022
	"				



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



Name of the Attendees

1. Rajendran	2. Nalini	3. Thirumalai	4. Shantha
5. Shanmugavel	6. Suseela	7. Balakrishnan	8. Mangalam
9. Chandrika	10. Ravi Shankar	11. Mythili	12. Venkatachalam
13. Jayashree	14. Gopalakrishnan	15. Karpagam	16. Senthil
17. Anandi	18. Paramasivam	19. Vijaya	20. Raju
21. Arundhati	22. Raghavan	23. Subbulakshmi	24. Aranganathan
25. Sarojini	26. Prabhakaran	27. Rajalakshmi	28. Vasanthi
29. Sundararajan	30. Rajeswari	31. Karthik	32. Kamalamma
33. Rajan	34. Kausalya	35. Nagarajan	
36. Shanmugasundari	37. Ganesh	38. Shobha	39. Mohandas
40. Sujatha	41. Chandrasekar	42. Kalaivani	43. Sankaralingam
44. Radhamani	45. Thirupathi	46. Mangaiyarkarasi	47. Ranganayaki
48. Kannan	49. Shyamala	50. Arunagiri	51. Sarada
52. Kuppuswamy	53. Thenmozhi	54. Sundaramoorthy	55. Banumathi
56. Varadarajan	57. Bhagyalakshmi	58. Viswanathan	59. Maragatham
60.Shanmugam			



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

AN EXTENSION ACTIVITY "COMMUNITY GARDEN"

REPORT OF THE EVENT

The National Cadet Corps (ArmyWing) in Association with 1 TN BATTALION NCC conducted **an extension activity "COMMUNITY GARDEN**" on 18th JULY 2021 at KEERAPAKKAM.

All the participants in this Event along with Dr.S.JAYAKUMAR, Associate NCC officer and Public, Staff members students from various department participated in the **"COMMUNITY GARDEN"** to promote **NATURAL SUSTAINABILITY.** A oath was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiaries	Date
1.	An extension Programme- "COMMUNITY GARDEN "	KEERAPAKKAM	Dr.S.JAYAKUMAR	100	18th JULY 2021





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

KEERAPAKKAM BENEFICIARIES

- 1. Rajendran
- 2. Nalini
- 3. Thirumalai
- 4. Shantha
- 5. Shanmugavel
- 6. Suseela
- 7. Balakrishnan
- 8. Mangalam
- 9. Chandrika
- 10. Ravi Shankar
- 11. Mythili
- 12. Venkatachalam
- 13. Jayashree
- 14. Gopalakrishnan
- 15. Karpagam
- 16. Senthil
- 17. Anandi
- 18. Paramasivam
- 19. Vijaya
- 20. Raju
- 21. Arundhati
- 22. Raghavan
- 23. Subbulakshmi
- 24. Aranganathan
- 25. Sarojini
- 26. Prabhakaran
- 27. Rajalakshmi
- 28. Vasanthi
- 29. Sundararajan
- 30. Rajeswari
- 31. Karthik
- 32. Kamalamma
- 33. Rajan
- 34. Kausalya
- 35. Nagarajan
- 36. Shanmugasundari
- 37. Ganesh

- 38. Shobha
- 39. Mohandas
- 40. Sujatha
- 41. Chandrasekar
- 42. Kalaivani
- 43. Sankaralingam
- 44. Radhamani
- 45. Thirupathi
- 46. Mangaiyarkarasi
- 47. Ranganayaki
- 48. Kannan
- 49. Shyamala
- 50. Arunagiri
- 51. Sarada
- 52. Kuppuswamy
- 53. Thenmozhi
- 54. Sundaramoorthy
- 55. Banumathi
- 56. Varadarajan
- 57. Bhagyalakshmi
- 58. Viswanathan
- 59. Maragatham
- 60. Shanmugam
- 61. Janardhan
- 62. Usha
- 63. Manickam
- 64. Poongodi
- 65. Govindasamy
- 66. Suganthi
- 67. Balasubramaniam
- 68. Kamatchi
- 69. Krishnan
- 70. Chellamma
- 71. Rajendran
- 72. Bhavani
- 73. Ganesan
- 74. Sangeetha
- 75. Ramalingam

118

- 76. Vasuki
- 77. Raman

- 78. Gayathri
- 79. Rajamani
- 80. Vijayalakshmi
- 81. Natarajan
- 82. Mangalam
- 83. Kasthuri
- 84. Venkatraman
- 85. Gomathi
- 86. Karthikeyan
- 87. Vanaja
- 88. Sathyanarayanan
- 89. Rajeswari
- 90. Chandrasekar
- 91. Selvi
- 92. Aravind
- 93. Kalyani

96. Suresh

97. Rukmani

99. Rajeswari

100.

98. Narayanaswamy

Sampath Kumar

- 94. Venkatasubramanian
- 95. Vasumathi

Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

TAMIL NADU PHYSICAL EDUCATION AND



SPORTS UNIVERSITY

CHENNAI-127

NATIONAL SERVICE SCHEME (2021-2022) REGULAR ACTIVITIES

Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Report of NSS Programme

on

PLASTIC AWARENESS RALLY

INDRODUCTION:

Introducing plastic awareness involves highlighting the environmental impact of plastic pollution, emphasizing the need for sustainable alternatives, and advocating for responsible consumption and disposal habits. It's about educating people on the importance of reducing single-use plastics, recycling properly, and supporting initiatives for a cleaner, healthier planet

OBJECTIVES

The objectives of plastic awareness initiatives typically include:

1. **Education**: Increasing public knowledge about the environmental consequences of plastic pollution and its effects on ecosystems, wildlife, and human health.

2. **Behavior Change**: Encouraging individuals and communities to adopt eco-friendly habits such as reducing single-use plastics, recycling correctly, and supporting businesses that prioritize sustainability.



TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

3. ******Policy Advocacy******: Promoting policies and regulations that reduce plastic production, encourage recycling, and promote the use of biodegradable alternatives.

4. ******Innovation and Research******: Supporting research and innovation in sustainable materials and waste management technologies to develop alternatives to plastic and improve recycling processes.

5. **Community Engagement**: Fostering community involvement through cleanup events, awareness campaigns, and grassroots initiatives to tackle plastic pollution at the local level.

6. **Corporate Responsibility**: Holding businesses accountable for their plastic usage and waste management practices, and encouraging them to adopt sustainable packaging and production methods.

7. **Global Collaboration**: Facilitating international cooperation and partnerships to address plastic pollution on a global scale, recognizing that it's a problem that transcends borders.

OUT COME

The outcomes of plastic awareness initiatives ideally include:

1. **Reduced Plastic Pollution**: A decrease in the amount of plastic waste entering the environment, leading to cleaner oceans, rivers, and landscapes.



TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

2. ******Behavioral Shifts******: Changes in consumer behavior towards more sustainable practices, such as using reusable alternatives, reducing plastic consumption, and properly recycling materials.

3. **Policy Changes**: Implementation of new policies and regulations aimed at reducing plastic production, promoting recycling, and encouraging the use of biodegradable materials.

4. **Innovation and Research Advancements**: Increased investment in research and development of sustainable materials and waste management technologies, leading to the discovery of new alternatives to plastic and more efficient recycling methods.

5. **Community Engagement and Empowerment**: Greater community involvement and awareness of environmental issues, leading to grassroots movements and local initiatives to address plastic pollution.

6. **Corporate Responsibility**: Businesses adopting more sustainable practices, including the use of eco-friendly packaging, reducing plastic in their supply chains, and investing in recycling infrastructure.

7. **Improved Ecosystem Health**: Protection of marine life, wildlife, and ecosystems from the harmful effects of plastic pollution, leading to healthier environments and biodiversity conservation.



CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

8. **Global Collaboration**: Strengthened international cooperation and partnerships to tackle plastic pollution collectively, resulting in more effective strategies and initiatives on a global scale.

BENEFICIARIES:

> Students of NSS Volunteers





National Service Scheme Organized plastic awareness rally Inaugurated by NSS Programme Officer **Dr.S.VELKUMAR**., Assistant Professor, Department of Physical Education and NSS Volunteers







Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



BLOCK-164, POLICE QUARTERS TNPHC FLATS, Vengadamangalam, Tamil Nadu 600127, India Lat 12.834695° Long 80.140335° 13/05/22 12:07 PM







Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



600127, India Lat 12.834695° Long 80.140335° 13/05/22 12:01 PM





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



BLOCK-164, POLICE QUARTERS TNPHC FLATS, Vengadamangalam, Tamil Nadu 600127, India Lat 12.834695° Long 80.140335° 13/05/22 11:58 AM





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Number of Participation: 75 Participation Name List

SL No	Name	Father's name	Sex	DOB	Community	Blood group	Class	Mobile number	Address;
1	VIMALA.S	SUBRAMANIYAN	F	05-06- 2000	МВС	B+	B.P.E.S	9344377133	262, KEEZHA STREET,KUVAGAM, UDUYARPALAYAM TALUKA,KUVAGAM ,ARIYAUR PIN:621710
2	VIJAYASHANT HI.S	SHANMUGAM.V	F	02-04- 2001	SC	B+	B.P.E .S	9944547104	5/87, GANGAI NAGAR, KEELASRINIVASAN ALLOR,THOTTIYAM ,TIRUCHIRAPPALLI. PIN: 621209
3	THANGAM.K	KALIYAMOORTHY	F	24-02- 2003	SC	0-	B.P.E .S	8428755128	SOUTH ARISANA STREET, UDAYARPALAYAM, ARIYALUR. PIN:621804
4	DEROSHA.K	KOTHANTAN	F	30-07- 2003	BC	A1+	B.P.E .S	9361679338	26/47 RANI ANNA NAGER,K.K NAGER,VADAPALNI , CHENNAI-78
5									
6	KEERTHANA. D	DEVA KUMAR. K	М	13-01- 2003	MBC	AB+VE	B.P.E .S	9360215545	677/3 Nayagi Street, Bhaktha Nagar, Periyarkuruchi, Neyveli – 607802.
7	TAMILMARAI KUMARAN.T	THAMIZH THIRUVELLUVAN.T	М	14-03- 2001	BC	0+	BSc Exerci se Ph y Nutriti on	6379218998	NO: 231/2/29, SOUTH STREET, T. KALLI KUDI, LALGUDI,TRICHY
8	ANANDA VALLI.B	BALU.T	F	22-03- 2000	МВС	В+	l- B.P.Ed	8300022760	AI-10, NEW BULDING, A.R.LINE,PALAYAM KOTTAI,TIRUNELVE LI-627002
9	SANAKIYAN.S	SELVAKUMAR.S	М	08-09- 1999	SC	В+	l- B.P.Ed	7871679021	273/A, SOKKARAMMAN KADEL,UARNAPUR AM, BHAVANI- 638301
10	DEVAPARAKA SH A.B	BABU.RD	М	02-02- 1997	ВС	0-	l- B.P.Ed	9894443750	2/36 BAJANAI KOVIL, SAMARISHI KUPPAM, MELPATTI(PO),



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

									GUDIYATHAM, VELLORE-635805
11	VAIDHYA NATHAN.A	ARUMUGAM.S	М	19-07- 2000	BC	B+	l- B.P.Ed	9080090379	3-VIVEKANANDA ST. SIVALINGAPURAM, KORATTUR, CHENNAI-76
12	RAGUNATH. M	MURUGAN.M.R	Μ	13-07- 2000	MBC	В+	l- B.P.Ed	6369896976	32/26 GANDHI STREET, L.KALLIPATTI, GOBICHETTI PALAYAM, ERODE - 638452
13	VIJAYA PRABHAKARA N.P	PANDIDURAI.S	М	19-10- 1997	BC	0+	l- B.P.Ed	8608229348	30, FATHIMA NAGER, 2TH STREET, BETHANIYAPURAM , MADURAI-625016
14	TAMILMANI.S	SEKAR.D	Μ	21-11- 1998	BC	0+	l- B.P.Ed	8939008662	50/56 NSC BOSE ST. NEW ANNA NAGER, THIRUMULLAIVOY AI, CHENNAI- 600062
15	SARAVANAN. V	VIJAYAN.P	М	18-01- 2001	SC	B+	l- B.P.Ed	9092670851	NO:21, VOC ST. ORAGADAM, AMBATTUR, CHENNAI-53

(II – B.P.Ed)

SL No	Name	Father's name	Sex	Date of birth	Community	Blood group	Class	Mobile number	Address;
16	M. REVATHY	R. MURUGAN	F	21-05- 1997	вс	В+	B.P.Ed	9940483524	NO : 33, Ganapathy Nagar, 2 nd Street, Madhavaram Milk Colony, Chenni - 51
17	N. AKASH	P.G. NARAYANA SAMY	М	28-11- 1998	SC	0+	B.P.Ed	8110918103	NO : 15, PERUKKARANAI VILLAGE POST CHEYYUR (TK) CHENGALPATTU (DT) - 603309
18	P. SAKTHIVEL	K. PALANI	М	19-07- 1999	вс	O+VE	B.P.Ed	9677353641	NO : 156, ARASAMARAM (ST), ANDHANUR(VILL) PAKKIRIPALAYAM (PO), CHENGAM(TK) TIRUVANNAMALAI (DT) - 606709



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

19	M. PRASANTH	K. MURUGESAN	М	13-02- 1997	SC	A+	B.P.Ed	9025169584	NO : 1/202 AMBEDKAR STREET, ORATHUR, KAVANUR (POST) KANCHIPURAM - 603203
20	A.ALLEN PAUL	M. ABEL	Μ	26-05- 1999	SC	A+	B.P.Ed	7825912318	NO :3/290, BIGSTREET, NARASINGAPURAM (VILL& POST) THIRUVALLUR (DT) - 631402
21	M. BALABHARAT HY	s. munusamy	Μ	09-03- 1998	SC	A1+	B.P.Ed	9176790599	NO : 3/2, MARIYAMMAN KOVIL STREET, PATHRAPATHIYUR, THINDIVANAM, VILLUPURAM - 604304
22	V. LAKSHMANA SAMY	M. VIJAYARAJ	М	29-11- 1999	SC	B+VE	B.P.Ed	8778793611	NO : 142, NORTH STREET, AMBILIKKAI, MBILIKKI (DT) ODDANCHATHRAM (TK), DINDUGAL - 624612
23	C. VISHNUPRAS ATH	S. CHINNAIYAN	М	18-09- 2000	SC	B+	B.P.Ed	9751086317	NO : 205, ATHIDHIRAVIDAR STREET, 92, PULIYAKUDI (POST) PAPANASAM (TK) THANJAUR (DT)
24	V. GOPI	G. VENKATESH	Μ	20-05- 1996	SC	A-	B.P.Ed	8056990068	NO : 82/6, AIR ERNAVOOR, CHENNAI - 57
25	G. DHARANI	N. GOVINDHARAJ	М	03-04- 1999	SC	B+	B.P.Ed	6380614213	NO : 97, THIRUVALLUR STREET, EVR NAGAMMAI NAGAR - 600109
26	T. MOHAMED ALI	A. TAJUDEEN	М	30-08- 1998	BC	B+	B.P.Ed	8248597376	NO : 27/57, THAMBULINE, KALAMANBAM, ROYABURAM, CHENNAI – 600013
27	E. VIGENESH	G. ELUMALAI	М	05-06- 1998	SC	0+	B.P.Ed	8220967191	NO : 49, METTU COLONY, GUMMIDIPOONDI, THIRUVLLUR (DIST) - 601201
28	S. CHYLAS	S. SEKAR	М	30-03- 1995	SC	AB+	B.P.Ed	7418624731	NO : 44, RUHUMANI STREET, SANTHEUS NAGAR, PORUR, CHENNAI - 116
29	K. DEEPAN RAJ	M. KUMAR	М	05-05- 2000	SC	O+VE	B.P.Ed	8939338408	NO : 203, THIRUVALLUR



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

									STREET, KATHIRVEDU, CHENNAI - 66
30	M. MANIKANDA N	s. Munusamy	М	02-12- 1996	SC	B+	B.P.Ed	8870159907	NO : 79, METTU COLONY, GUMMIDIPONDI, THIRUVALLUR DIST - 601201
31	E. VIGNESH	G. ELUMALAI	М	05-06- 1998	SC	O+VE	B.P.Ed	8220967191	NO : 49, METTU COLONY, GUMMIDIPONDI, THIRUVALLUR DIST - 601201
32	S. SANAKIYAN	P. SEVAKUMAR	М	08-09- 1999	SC	B+	B.P.Ed	7871679021	NO : 273/A, SOKKARAMMAN KADAI (EX) VEERAPURAM, BHAVANI, ERODE - 638301
33	R. DHAMODHA RAN	R. RAJA	М	16-04- 2000	МВС	O+VE	B.P.Ed	9500744573	NO: 464, PUNNAI KOTTU ROAD, PUNNAI VILLAGE, VANDHAVASI (TK), THIRUVANAMALAI (DT) - 604405
34	A.ARJUN	R.ARUL MURUGAN	М	11-11- 1999	вс	B-VE	B.P.Ed	9710716075	NO: 463, Ist MAIN ROAD , MMDA COLONY , MATHUR, MANALI , CHENNAI-68.

(II – M.P.Ed)

SL No	Name	Father's name	Sex	Date of birth	Community	Blood group	Class	Mobile number	Address;
35	S. PREETHI	V. SELVAM	F	24-06- 1996	SC	AB+	M.P.Ed	8610885357	No : 27, KANAGARYA THOTTAM DEMELLOWRS ROAD, PATTALAM, CHENNAI - 600012
36	K. PRIYATHARS HINI	K. KAMARAJ	F	09-12- 1996	SC	O+VE	M.P.Ed	7448302655	NO: 1/141, EAST STREET, ELAVANGARGUDI, THIRUVARUR (TK) THIRUVARUR - 610104
37	C. MANIKANDA N	P. CHINNU SAMY	M	03-05- 1997	SC(A)	O+VE	M.P.Ed	9500976794	NO : 17, PONNIGAS, SERVICES, CO-OP – REATIVE COLONY



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

									MOHANUR ROAD,
									637001
			М						NO : 2/114 . NEW
									COLONY,
	5.4			02.00					BDAICHERVOID
38		M. MOOKKAN		1006	SC	A+	M.P.Ed	9962073651	VILLAGE AKKANUR
	MUTHUMANI			1990					POST TITTAGUDI
									(TK) CUDDALORE -
									606106
			F						NO : 1/143, GOPAL
	G.			03-05-					NAGAR,
39	DHAKSHAYA	R. GOVINDHARAM		1997	SC	0+	M.P.Ed	8778595631	VARATHARAJABUR
	NI								AM, MUDHICHUR,
			Г						$\begin{array}{c} NO^{\circ} \ ZZ, \ I^{S^{\circ}} \ CROSS, \\ DOP VAT I A A A I \end{array}$
40	S.	G SIVARAI		12-02-	BC	0+	M P Fd	9994711217	ΤΗΔΜΙΥΗΤΗΔΙ
40	ROOPAVATHI			1998	50	0.		555 17 11217	NAGER.
									VANDRAPET.
									PUDUCHERRY - 1
			М						NO: 4 (B)
									NARAYANA
				20-06-					PURAM,
41	N	B. ANBALAGAN		1989	SC	B+	M.P.Ed	9080135371	NANTHIVARAM,
				1909					GUDUVANCHERY,
									CHENGALPATTU –
									603202
			M						NO : 24,
	R.			15.05					CEDUMALUD
42	VIJAYARAGA	S. RAVICHINDRAN		1998	SC	B+	M.P.Ed	7094920186	
	VAN			1550					POST. NANNILAM
									(TK) THIRUVARUR -
									609302
			М						NO : 5/110, J.J
	Т.			10.06					NAGAR,
43	GOPALAKRIS	P. TAMILSELVAM		10-00-	SC	A+	M.P.Ed	9597692523	ARIYALOOR POST,
	HNAN			1995					SRIRANGAM (TK)
									TRICHY - 620009
			М						NO : 554/A SOUTH
									SUBRAMANIYA
44	К.	V. KALIMUTHU		12-03-	SC	B+	M.P.Ed	7418953384	PURAM, KAYATHAR
	PARTHEEBAN			1997					
									THOOTHUKUDI -
			N.4						
			IVI						STREET
45	Β SATHISH			04-06-	MBC	0+	MPFd	73739580/19	
	1. 3/1111311	7.1.10 07 (GOT 7.2		1998	Wibe	0.	11111.20	/3/3330043	TUTTALORE -
									606106
			М	ĺ					M7/4 PERUMAL
16				15-03-	50	D.		0626161004	KOVIL STREET,
40	S. UNIVAKAK	G. SIVAKUIVIAK		1995	30	B+	IVI.P.Ed	9020101884	MUSARAVAKKAM,
									KANCHIPURM



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

47	S. PARTHIBAN	C. SANKAR	Σ	10-06- 1997	МВС	A+	M.P.Ed	9842866305	SL8/6 POLICE QUATRES, KANDIGAI, MELAKOTTAIYUR - 127
48	C. BRAIN MARISON	C.R.L. CHARLES	Μ	20-04- 1996	вС	B+	M.P.Ed	9566407240	B-62, KAMBAR SALAI, BLOCK – 4, NEYVELI – 1 CUDDALORE - DT, 607801
49	S. KARTHIKYAN	D. SRINIVASAN	Μ	16-03- 1996	SC	0+	M.P.Ed	9500418755	384, FIRST STREET, SOUTH ALAGAPURAM, SALEM – 636004
50	V. KIRUBANAND AN	S. VASUDEVAN	Μ	24-06- 1992	SC	0+	M.P.Ed	9688058764	NO : 83, KOTTAI RAZHOYA COLONY, VANDAVASI, TIRUVANNAMALAI, TAMILNADU – 604408
51	R. SENTHIL KUMAR	K. RAMAMOORTHY	М	27-05- 1986	sc	0+	M.P.Ed	8124161680	NO: 4, BUDDHAR STREET, KAMARAJAPURAM, RAJAKILPAKKAM, CHENNAI – 600073

(II – B.P.Ed)

SL No	Name	Father's name	Sex	Date of birth	Community	Blood group	Class	Mobile number	Address;
52	V. VISHNU PRIYA	V. NEERA VEL	F	25-10- 1999	MBC	0+	B.P.Ed	7502079221	NO : 339, PAPPANKOLLAI, NADUKPPAM (POST) PANRUTI (TK) CUD – 607103
53	A.VIJAYALAKS HMI	V. ARUMUGAM	F	04-06- 2000	MBC (V)	0+	B.P.Ed	8870102978	NO : 162, METTU STREET, MELSITHAMUR, GINGEE (TK) VILLUPURAM (DT)
54	S. SAI MADHURI	GUARDIAN (M.G. RAMESH KUMAR)	F	01-05- 2000	вс	A1+VE	B.P.Ed	7358421480	SOS CHILDREN'S VILLGE, 21, PROSANTH COLONY, EAST TAMBARAM, CHENNAI - 600059
55	V. KOWSALYA	E. VEKATESAN	F	06-03- 1998	МВС	В+	B.P.Ed	8838851141	NO : 2/480 I YER ST, MUDUR, ARAKKONAM (T) RANIPATTAI (D)
56	T. KALAIVANI	G. THIRUMALAI	F	08-04- 2000	вс	B+VE	B.P.Ed	9566881229	NO : 201, PERUML KOVIL STREET,



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

									ELAVUR, THIRUVALLUR - 601201
57	A.VICHITRA	S. AYYADURAI	F	30-07- 2000	SC(A)	O+VE	B.P.Ed	7305688401	NO : 640/20 SOUTH STREET, KALUGACHALAPUR AM (KEELUR) GURUMALAI (P) THOOTHUKKUDI (D) - 628714
58	R. RAMYA KRISHNAN	M. RAJA	F	09-07- 2000	МВС	O+VE	B.P.Ed	6380867053	NO : 262, MAIN ROAD KIZHARUNGUNAM, K.A. NATHM, CUDDLORE - 607105
59	K. DEROSHA	KOTHANTAN	F	30-07- 2003	вС	A+1	B.P.Ed	9361679338	NO : 26/47 RANI ANNA NAGER, K.K. NAGER, VADAPALANI, CHENNAI - 600078
60	S. VIMALA	SUBRAMANIYAN	F	05-06- 2000	МВС	B+	B.P.Ed	9344377133	NO : 262, KEEZHA STREET, KUVAGAM, UDUYAR PLAYAM TLUKA, KUVAGAM, ARIYLUR - 621710
61	K. THANGAM	P. KALIYAMOORTHY	F	24-02- 2003	SC	0-	B.P.Ed		SOUTH ARISANA STREET, UDAYARPALAYAM, ARIYALUR DISTRICK - 621804
CI				Date				Mahila	
No	Name	Father's name	Sex	of birth	Community	Blood group	Class	number	Address;
5L No 62	Name V. VISHNU PRIYA	Father's name V. NEERA VEL	Sex F	of birth 25-10- 1999	Community MBC	Blood group O+	Class B.P.Ed	7502079221	Address; NO : 339, PAPPANKOLLAI, NADUKPPAM (POST) PANRUTI (TK) CUD – 607103
62 63	Name V. VISHNU PRIYA A.VIJAYALAKS HMI	Father's name V. NEERA VEL V. ARUMUGAM	Sex F	of birth 25-10- 1999 04-06- 2000	Community MBC MBC (V)	Blood group O+	Class B.P.Ed B.P.Ed	8870102978	Address; NO : 339, PAPPANKOLLAI, NADUKPPAM (POST) PANRUTI (TK) CUD – 607103 NO : 162, METTU STREET, MELSITHAMUR, GINGEE (TK) VILLUPURAM (DT)
62 63 64	Name V. VISHNU PRIYA A. VIJAYALAKS HMI S. SAI MADHURI	Father's name V. NEERA VEL V. ARUMUGAM GUARDIAN (M.G. RAMESH KUMAR)	Sex F F	of birth 25-10- 1999 04-06- 2000 01-05- 2000	Community MBC MBC (V) BC	Blood group O+ O+	Class B.P.Ed B.P.Ed B.P.Ed	Nobile number 7502079221 8870102978 7358421480	Address; NO : 339, PAPPANKOLLAI, NADUKPPAM (POST) PANRUTI (TK) CUD – 607103 NO : 162, METTU STREET, MELSITHAMUR, GINGEE (TK) VILLUPURAM (DT) SOS CHILDREN'S VILLGE, 21, PROSANTH COLONY, EAST TAMBARAM, CHENNAI - 600059



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

66	T. KALAIVANI	G. THIRUMALAI	F	08-04- 2000	BC	B+VE	B.P.Ed	9566881229	NO : 201, PERUML KOVIL STREET, ELAVUR, THIRUVALLUR - 601201
67	A.VICHITRA	S. AYYADURAI	F	30-07- 2000	SC(A)	O+VE	B.P.Ed	7305688401	NO : 640/20 SOUTH STREET, KALUGACHALAPUR AM (KEELUR) GURUMALAI (P) THOOTHUKKUDI (D) - 628714
68	R. RAMYA KRISHNAN	M. RAJA	F	09-07- 2000	МВС	O+VE	B.P.Ed	6380867053	NO : 262, MAIN ROAD KIZHARUNGUNAM, K.A. NATHM, CUDDLORE - 607105
69	K. DEROSHA	KOTHANTAN	F	30-07- 2003	вс	A+1	B.P.Ed	9361679338	NO : 26/47 RANI ANNA NAGER, K.K. NAGER, VADAPALANI, CHENNAI - 600078
70	S. VIMALA	SUBRAMANIYAN	F	05-06- 2000	MBC	B+	B.P.Ed	9344377133	NO : 262, KEEZHA STREET, KUVAGAM, UDUYAR PLAYAM TLUKA, KUVAGAM, ARIYLUR - 621710
71	K. THANGAM	P. KALIYAMOORTHY	F	24-02- 2003	SC	0-	B.P.Ed		SOUTH ARISANA STREET, UDAYARPALAYAM, ARIYALUR DISTRICK - 621804

72	E. VIGNESH	G. ELUMALAI	М	05-06- 1998	SC	O+VE	B.P.Ed	8220967191	NO : 49, METTU COLONY, GUMMIDIPONDI, THIRUVALLUR DIST - 601201
73	s. sanakiyan	P. SEVAKUMAR	М	08-09- 1999	SC	B+	B.P.Ed	7871679021	NO : 273/A, SOKKARAMMAN KADAI (EX) VEERAPURAM, BHAVANI, ERODE - 638301
74	R. DHAMODHAR AN	R. RAJA	М	16-04- 2000	МВС	O+VE	B.P.Ed	9500744573	NO : 464, PUNNAI KOTTU ROAD, PUNNAI VILLAGE, VANDHAVASI (TK), THIRUVANAMALAI (DT) - 604405
75	A.ARJUN	R.ARUL MURUGAN	М	11-11- 1999	вС	B-VE	B.P.Ed	9710716075	NO: 463, IST MAIN ROAD , MMDA COLONY , MATHUR, MANALI , CHENNAI- 68.



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

(2020-2021)

AN EXTENSION ACTIVITY "TREE PLANTATION"

REPORT OF THE EVENT

The TNPESU National Cadet Corps (ArmyWing) in Association with 1 TN BATTALION NCC conducted **an extension activity "TREE PLANTATION"** on 14th SEMPTEMBER 2020 at Vengadamngalam.

All the participants in this Event along with .Dr.S.JAYAKUMAR, Associate NCC officer and Public, Staff members students from various department participated in the "**TREE**

PLANTATION "to promote **Natural protection**. A oath was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiaries	Date
1.	An extension activity - "TREE PLANTATION"	Vengadamangalam	Dr.S.JAYAKUMAR	82	14th SEMPTEMBER 2020



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



VENGADAMANGALAM BENEFICIARIES

1. Sundaram	15. Govindarajan
2. Meenakshi	16. Mangalam
3. Ramanathan	17. Murugan
4. Janaki	18. Lakshmi
5. Krishnamurthy	19. Ranganathan
6. Saraswathi	20. Annapurna
7. Subramanian	21. Chandrasekhar
8. Kamala	22. Sumathi
9. Srinivasan	23. Ramachandran
10. Padmavathi	24. Jayalakshmi
11. Raghunathan	25. Sivaramakrishnan
12. Rajalakshmi	26. Kasthuri
13. Venkatesh	27. Balasubramanian
14. Parvathi	28. Gomathi

- 29. Ganesan
- 30. Radha
- 31. Narayanan
- 32. Vimala
- 33. Viswanathan
- 34. Kamakshi
- 35. Narasimhan
- 36. Kalpana
- 37. Venkataraman
- 38. Indira
- 39. Arumugam
- 40. Valli
- 41. Thyagarajan
- 42. Janardhanan



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

43. Thangam	57. Padma	71. Mangai
44. Ramaswamy	58. Mohan	72. Balaji
45. Revathi	59. Rajeswari	73. Rajamma
46. Kannan	60. Madhavan	74. Mahadevan
47. Bhuvaneshwari	61. Shanthi	75. Kalyani
48. Sampath	62. Aravindan	76. Prasad
49. Savitri	63. Anuradha	77. Suguna
50. Sankaran	64. Shanmugam	78. Chandru
51. Kamatchi	65. Malathi	79. Geetha
52. Suresh	66. Venugopal	80. Rajagopal
53. Anjali	67. Devaki	81. Leelavathi
54. Ganapathy	68. Arunachalam	82. Ravi
55. Kamalam	69. Jaya	
56. Vasudevan	70. Subbiah	

AN EXTENSION ACTIVITY "WORLD EARTH DAY -CLEANING "

REPORT OF THE EVENT

The TNPESU National Cadet Corps (ArmyWing) in Association with 1 TN BATTALION NCC conducted **an extension activity "WORLD EARTH DAY -CLEANING**" on 22nd April 2020 at MELAKOTTAIYUR

All the participants in this Event along with. Dr.S.JAYAKUMAR, Associate NCC officer and Public, Staff members students from various department participated in the "**WORLD EARTH DAY-CLEANING** "to promote World Earth Day **.**A oath was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of	Date
				Beneficiaries	
1.	An extension Programme-	MELAKOTTAIYUR	Dr.S.JAYAKUMAR	88	22 nd April 2020



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

" WORLD		
EARTH DAY		
CLEANING "		



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

MELAKOTTAIYUR BENEFECIARIES

- 1. . Rajendran
- 2. . Nalini
- 3. . Thirumalai
- 4. Shantha
- 5. . Shanmugavel
- 6. Suseela
- 7. Balakrishnan
- 8. . Mangalam
- 9. Chandrika
- 10. . Ravi Shankar
- 11. . Mythili
- 12. . Venkatachalam
- 13. . Jayashree
- 14. . Gopalakrishnan
- 15. Karpagam
- 16. Senthil
- 17. . Anandi
- 18. . Paramasivam
- 19. Vijaya
- 20. Raju
- 21. Arundhati
- 22. Raghavan
- 23. Subbulakshmi
- 24. . Aranganathan
- 25. . Sarojini
- 26. Prabhakaran
- 27. Rajalakshmi
- 28. Vasanthi
- 29. Sundararajan
- 30. Rajeswari

- 31. Karthik
- 32. Kamalamma
- 33. . Rajan
- 34. Kausalya
- 35. Nagarajan
- 36. . Shanmugasundari
- 37. . Ganesh
- 38. . Shobha
- 39. Mohandas
- 40. . Sujatha
- 41. . Chandrasekar
- 42. . Kalaivani
- 43. Sankaralingam
- 44. . Radhamani
- 45. . Thirupathi
- 46. . Mangaiyarkarasi
- 47. . Ranganayaki
- 48. . Kannan
- 49. . Shyamala
- 50. . Arunagiri
- 51. . Sarada
- 52. . Kuppuswamy
- 53. Thenmozhi
- 54. Sundaramoorthy
- 55. Banumathi
- 56. . Varadarajan
- 57. Bhagyalakshmi
- 58. . Viswanathan
- 59. . Maragatham
- 60. . Shanmugam

- 61. Janardhan
- 62. . Usha
- 63. . Manickam
- 64. . Poongodi
- 65. . Govindasamy
- 66. Suganthi
- 67. Balasubramaniam
- 68. . Kamatchi
- 69. . Krishnan
- 70. Chellamma
- 71. Rajendran
- 72. . Bhavani
- 73. Ganesan
- 74. Sangeetha
- 75. . Ramalingam
- 76. Vasuki
- 77. Raman
- 78. . Gayathri
- 79. . Rajamani
- 80. . Vijayalakshmi
- 81. . Natarajan
- 82. Mangalam
- 83. . Kasthuri
- 84. Venkatraman
- 85. . Gomathi
- 86. Karthikeyan
- 87. Vanaja
- 88. . Sathyanarayanan


Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

(2019-2020)

AN EXTENSION PROGRAMME "Anti Plastic AWARENESS Rally "

REPORT OF THE EVENT

The National Service Scheme conducted an extension Programme" Anti Plastic

AWARENESS Rally " on 13th Sep 2019 at mambakkam

All the participants in this Event along with Dr.S.JAYAKUMAR, NSS Programme officer and Public, Staff members students from various department participated in the "Anti Plastic AWARENESS Rally" to promote anti Plastic awareness and signing . Free cloths bag was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiaries	Date
1.	An extension Programme- " Anti Plastic AWARENESS Rally "	mambakkam	Dr.S.JAYAKUMAR	81	13th Sep 2019



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES





Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Mambakkam benefeciaries

1. Sundaram	27. Balasubramanian	53. Anjali
2. Meenakshi	28. Gomathi	54. Ganapathy
3. Ramanathan	29. Ganesan	55. Kamalam
4. Janaki	30. Radha	56. Vasudevan
5. Krishnamurthy	31. Narayanan	57. Padma
6. Saraswathi	32. Vimala	58. Mohan
7. Subramanian	33. Viswanathan	59. Rajeswari
8. Kamala	34. Kamakshi	60. Madhavan
9. Srinivasan	35. Narasimhan	61. Shanthi
10. Padmavathi	36. Kalpana	62. Aravindan
11. Raghunathan	37. Venkataraman	63. Anuradha
12. Rajalakshmi	38. Indira	64. Shanmugam
13. Venkatesh	39. Arumugam	65. Malathi
14. Parvathi	40. Valli	66. Venugopal
15. Govindarajan	41. Thyagarajan	67. Devaki
16. Mangalam	42. Janardhanan	68. Arunachalam
17. Murugan	43. Thangam	69. Jaya
18. Lakshmi	44. Ramaswamy	70. Subbiah
19. Ranganathan	45. Revathi	71. Mangai
20. Annapurna	46. Kannan	72. Balaji
21. Chandrasekhar	47. Bhuvaneshwari	73. Rajamma
22. Sumathi	48. Sampath	74. Mahadevan
23. Ramachandran	49. Savitri	75. Kalyani
24. Jayalakshmi	50. Sankaran	76. Prasad
25. Sivaramakrishnan	51. Kamatchi	77. Suguna
26. Kasthuri	52. Suresh	78. Chandru

Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

79. Geetha

80. Rajagopal

81. Leelavathi

AN EXTENSION ACTIVITY "TREE PLANTATION"

REPORT OF THE EVENT

The National Service Scheme conducted **an extension activity "TREE PLANTATION"** on 25th October 2019 at KEERAPAKKAM.

All the participants in this Event along with Dr.S.JAYAKUMAR, NSS Programme officer and Public, Staff members students from various department participated in the "TREE PLANTATION" to promote Natural Growth. Equipment and Plants was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiaries	Date
1.	An extension activity - "TREE PLANTATION"	KEERAPAKKAM	Dr.S.JAYAKUMAR	112	25th October 2019



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES







Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Beneficiaries

1. Sundaram	26. Kasthuri	51. Kamatchi	76. Prasad
2. Meenakshi	27.	52. Suresh	77. Suguna
3. Ramanathan	Balasubramanian	53. Anjali	78. Chandru
4. Janaki	28. Gomathi	54. Ganapathy	79. Geetha
5. Krishnamurthy	29. Ganesan	55. Kamalam	80. Rajagopal
6. Saraswathi	30. Radha	56. Vasudevan	81. Leelavathi
7. Subramanian	31. Narayanan	57. Padma	82. Ravi
8. Kamala	32. Vimala	58. Mohan	83. Meera
9. Srinivasan	33. Viswanathan	59. Rajeswari	84. Shankar
10. Padmavathi	34. Kamakshi	60. Madhavan	85. Jayanthi
11. Raghunathan	35. Narasimhan	61. Shanthi	86. Narayan
12. Rajalakshmi	36. Kalpana	62. Aravindan	87. Padmini
13. Venkatesh	37. Venkataraman	63. Anuradha	88. Ashok
14. Parvathi	38. Indira	64. Shanmugam	89. Lalitha
15. Govindarajan	39. Arumugam	65. Malathi	90. Ramesh
16. Mangalam	40. Valli	66. Venugopal	91. Radhika
17. Murugan	41. Thyagarajan	67. Devaki	92. Arvind
18. Lakshmi	42. Janardhanan	68. Arunachalam	93. Mohana
19. Ranganathan	43. Thangam	69. Jaya	94. Dinesh
20. Annapurna	44. Ramaswamy	70. Subbiah	95. Parimala
21. Chandrasekhar	45. Revathi	71. Mangai	96. Sampathkumar
22. Sumathi	46. Kannan	72. Balaji	97. Pushpa
23. Ramachandran	47. Bhuvaneshwari	73. Rajamma	98. Murali
24. Jayalakshmi	48. Sampath	74. Mahadevan	99. Sarala
25.	49. Savitri	75. Kalyani	100. Narasimha
Sivaramakrishnan	50. Sankaran	·	



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

AN EXTENSION PROGRAMME " SOIL CLEANING "

REPORT OF THE EVENT

The National Service Scheme conducted **an extension Programme**" **SOIL CLEANING** "**on** 12th July 2019 at Vengadamngalam.

All the participants in this Event along with Dr.S.JAYAKUMAR, NSS Programme officer and Public, Staff members students from various department participated in the **"SOIL CLEANING** "to promote **National Integration. Sampling** was also taken by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiarie	Date
				S	
1	An extension Programme -" SOIL CLEANING "	Vengadamngala m	Dr.S.JAYAKUMA R	112	12.07.201 9



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES



Signature of ANO

Signature of Registrar



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

(2018-2019)

AN EXTENSION PROGRAMME "ENVIRONMENT CLEANING"

REPORT OF THE EVENT

The National Service Scheme conducted **an extension Programme "ENVIRONMENT CLEANING**" on 12th Aug 2018 at Vengadamngalam.

All the participants in this Event along with Lt.Dr.S.JAYAKUMAR, NSS Programe officer and Public, Staff member's students from various department participated in the "ENVIRONMENT CLEANING "to promote PUBLIC HEALTH. Equipments was also served by the participants.

SI	Programme	LOCATION	ANO NAME	No of Beneficiaries	Date
1.	An extension Programme- "ENVIRONMENT CLEANING"	VENGADAMANGALAM	Dr.S.JAYAKUMAR	100	12th Aug 2018



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES







Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Kandigai beneficiaries

- 1. . Rajendran
- 2. . Nalini
- 3. . Thirumalai
- 4. Shantha
- 5. . Shanmugavel
- 6. Suseela
- 7. Balakrishnan
- 8. . Mangalam
- 9. Chandrika
- 10. . Ravi Shankar
- 11. . Mythili
- 12. . Venkatachalam
- 13. . Jayashree
- 14. . Gopalakrishnan
- 15. Karpagam
- 16. Senthil
- 17. . Anandi
- 18. . Paramasivam
- 19. Vijaya
- 20. Raju
- 21. Arundhati
- 22. Raghavan
- 23. Subbulakshmi
- 24. . Aranganathan
- 25. . Sarojini
- 26. Prabhakaran
- 27. Rajalakshmi
- 28. Vasanthi
- 29. Sundararajan
- 30. Rajeswari
- 31. Karthik
- 32. Kamalamma

- 33. . Rajan
- 34. Kausalya
- 35. Nagarajan
- 36. . Shanmugasundari
- 37. . Ganesh
- 38. . Shobha
- 39. Mohandas
- 40. . Sujatha
- 41. . Chandrasekar
- 42. . Kalaivani
- 43. Sankaralingam
- 44. . Radhamani
- 45. . Thirupathi
- 46. . Mangaiyarkarasi
- 47. . Ranganayaki
- 48. . Kannan
- 49. . Shyamala
- 50. . Arunagiri
- 51. . Sarada
- 52. . Kuppuswamy
- 53. Thenmozhi
- 54. Sundaramoorthy
- 55. Banumathi
- 56. . Varadarajan
- 57. Bhagyalakshmi
- 58. . Viswanathan
- 59. . Maragatham
- 60. . Shanmugam
- 61. Janardhan
- 62. . Usha
- 63. . Manickam
- 64. . Poongodi
- 65. . Govindasamy

155

66. Suganthi

- 67. Balasubramaniam
- 68. . Kamatchi
- 69. . Krishnan
- 70. Chellamma
- 71. Rajendran
- 72. . Bhavani
- 73. Ganesan
- 74. Sangeetha
- 75. . Ramalingam
- 76. Vasuki
- 77. Raman
- 78. . Gayathri
- 79. . Rajamani
- 80. . Vijayalakshmi
- 81. . Natarajan
- 82. Mangalam
- 83. . Kasthuri
- 84. Venkatraman
- 85. . Gomathi
- 86. Karthikeyan
- 87. Vanaja
- 88. . Sathyanarayanan
- 89. . Rajeswari
- 90. . Chandrasekar
- 91. . Selvi
- 92. . Aravind
- 93. . Kalyani

96. . Suresh

97. . Rukmani

99. . Rajeswari

100.

- 94. Venkatasubramanian
- 95. . Vasumathi

98. . Narayanaswamy

Sampath Kumar



Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

AN EXTENSION PROGRAMME "COMMUNITY GARDEN "

REPORT OF THE EVENT

The National Service Scheme conducted **an extension Programme 'COMMUNITY GARDEN** " on 4th SEPTEMBER 2018 at KOLAPPAKKAM.

All the participants in this Event along with Dr.S.JAYAKUMAR, NSS Programme officer and Public, Staff members students from various department participated in the "COMMUNITY GARDEN" to promote Natural Sustainability. Sample Flower plants were also taken by the participants.

SI	Programme	LOCATION	NAME of NSS OFFICER	No of Beneficiaries	Date
1.	An extension Programme- "COMMUNITY GARDEN "	KOLAPPAKKAM	Dr.S.JAYAKUMAR	112	4th SEPTEMBER 2018











TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY Melakottaiyur, Chennai-127

CRITERION 7 – INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

Name of Beneficiaries

1. Sundaram	27.	54. Ganapathy	81. Leelavathi
2. Meenakshi	Balasubramanian	55. Kamalam	82. Ravi
3. Ramanathan	28. Gomathi	56. Vasudevan	83. Meera
4. Janaki	29. Ganesan	57. Padma	84. Shankar
5. Krishnamurthy	30. Radha	58. Mohan	85. Jayanthi
6. Saraswathi	31. Narayanan	59. Rajeswari	86. Narayan
7. Subramanian	32. Vimala	60. Madhavan	87. Padmini
8. Kamala	33. Viswanathan	61. Shanthi	88. Ashok
9. Srinivasan	34. Kamakshi	62. Aravindan	89. Lalitha
10. Padmavathi	35. Narasimhan	63. Anuradha	90. Ramesh
11. Raghunathan	36. Kalpana	64. Shanmugam	91. Radhika
12. Rajalakshmi	37. Venkataraman	65. Malathi	92. Arvind
13. Venkatesh	38. Indira	66. Venugopal	93. Mohana
14. Parvathi	39. Arumugam	67. Devaki	94. Dinesh
15. Govindarajan	40. Valli	68. Arunachalam	95. Parimala
16. Mangalam	41. Thyagarajan	69. Jaya	96. Sampathkumar
17. Murugan	42. Janardhanan	70. Subbiah	97. Pushpa
18. Lakshmi	43. Thangam	71. Mangai	98. Murali
19. Ranganathan	44. Ramaswamy	72. Balaji	99. Sarala
20. Annapurna	45. Revathi	73. Rajamma	100. Narasimha
21. Chandrasekhar	46. Kannan	74. Mahadevan	
22. Sumathi	47. Bhuvaneshwari	75. Kalyani	
23. Ramachandran	48. Sampath	76. Prasad	() - AMA AN
24. Jayalakshmi	49. Savitri	77. Suguna	Registrar
25.	50. Sankaran	78. Chandru	Tamilnadu Physical Education and
Sivaramakrishnan	51. Kamatchi	79. Geetha	Sports University Chennai - 600 127.
26. Kasthuri	52. Suresh	80. Rajagopal	

53. Anjali