

# GREEN AUDIT REPORT

2017-2018

**PERIYAR EVR COLLEGE**  
TIRUCHIRAPPALLI – 620023  
TAMIL NADU, INDIA



## GREEN AUDIT REPORT: 2017-18

The Green Audit Report summarises the institution's natural resources and reports on the measures taken to conserve and develop them. In addition it observes the activities carried out to minimise the negative impacts of human activities on the environment. The goal of this audit is to secure the environment and reduce the threats to human health and to check whether the rules and regulations of the government and environmental regulating authorities are followed; to avoid more difficult-to-handle interruptions in the environment; and to suggest the best protocols for contributing to sustainable development.

### 1. Energy Consumption

The college's annual energy consumption in 2018 is 1,68,977 units, which is 14% higher than the previous calendar year. During 2017-2018, the average bimonthly energy consumption on campus was 28,163 units, with a range of 17490 to 34285 units. The campus's per capita annual energy consumption is 41 units.

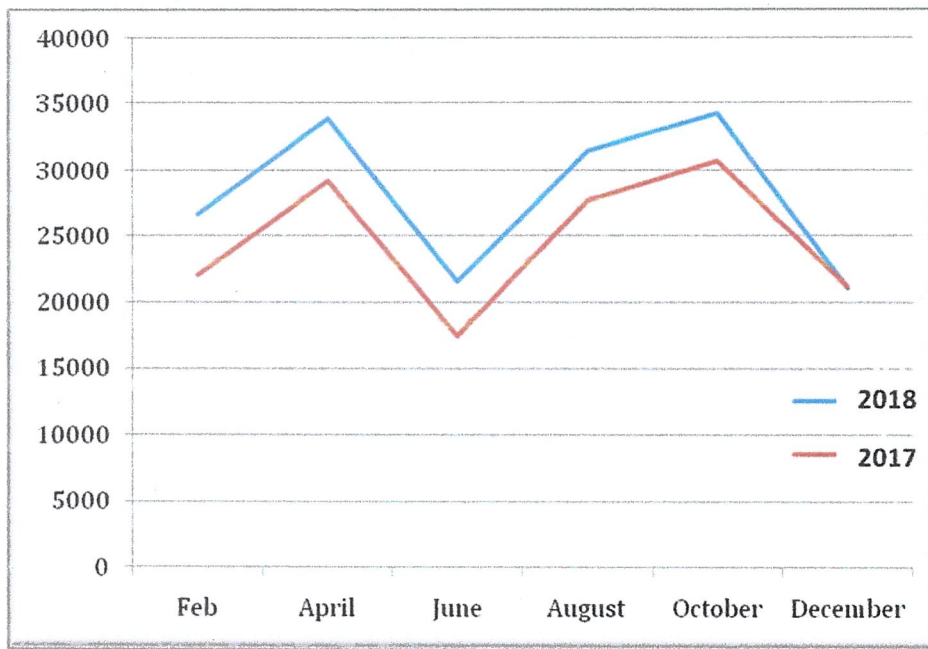


Fig.1. Consumption of electricity in the college campus

### 2. Energy Conservation Efforts

The institution takes several steps to control and conserve energy by using energy-efficient equipment such as lights, fans, computers, printers, refrigerators, air conditioners, water purifiers, and other educational tools. Periodic maintenance and replacements are also carried out in order to reduce energy consumption. Machines, appliances, and instruments are immediately turned off after use.

### 3. Use of Mass Transport System and Personal Transport Vehicles

More than 4942 students and faculty members attend college. The majority of them use public transport, such as buses (51.2%), and trains (11.8%). Almost one-third of them commute to college by bicycle or on foot. Only about 7.4% of them use private vehicles such as two-wheelers and cars, which are the primary sources of air pollution and mass consumption of petroleum products.

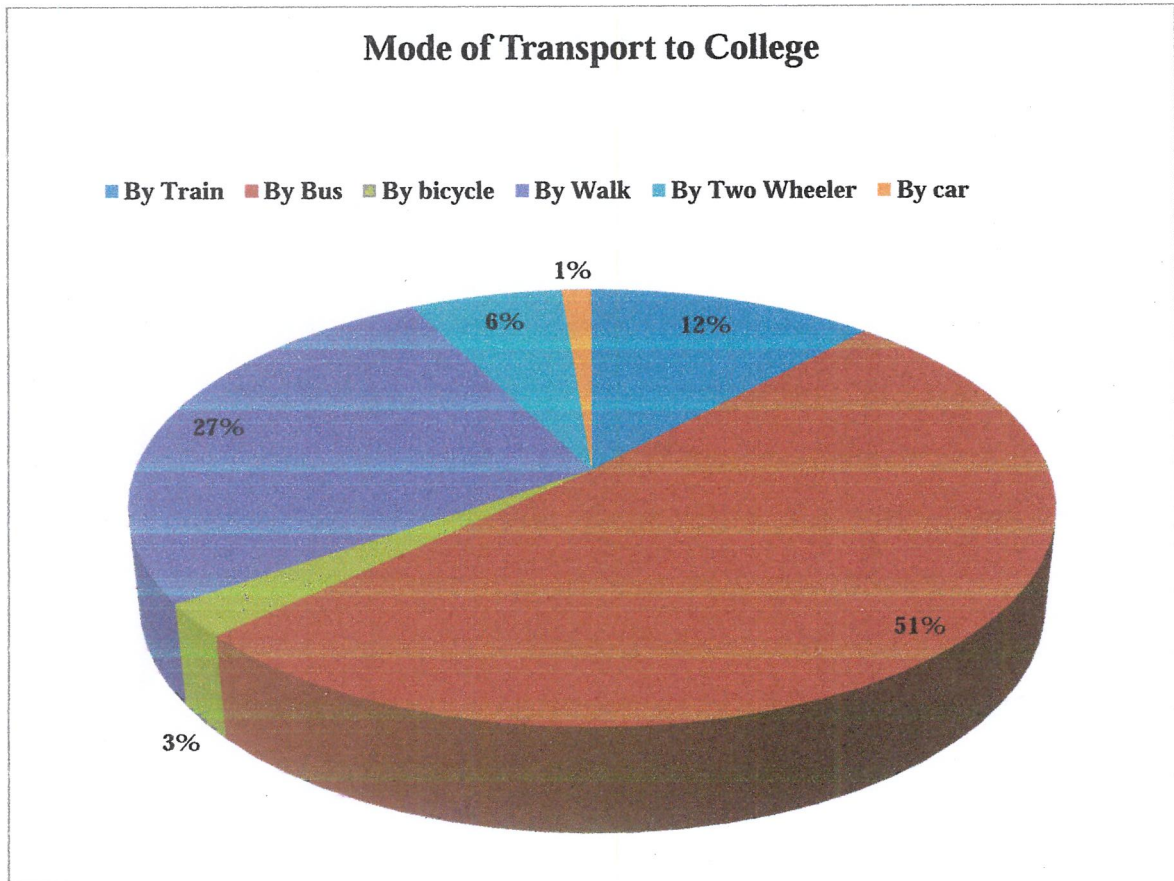


Fig. 2. Mode of commutation to the college



Fig. 3. Students commuting to the college

#### 4. Water Resource Conservation

##### a. Water Harvesting

Considering the rainfall received during 2017, it is worth exploring rainwater harvesting as a method to collect and store rainwater for various purposes. Rainwater harvesting involves capturing and storing rainwater for future use, which can help conserve water resources and supplement water supply during dry periods. The significant rainfall amounts in September, October, and November, for example, indicate periods of potentially higher rainwater availability that can be harnessed through proper rainwater harvesting techniques.

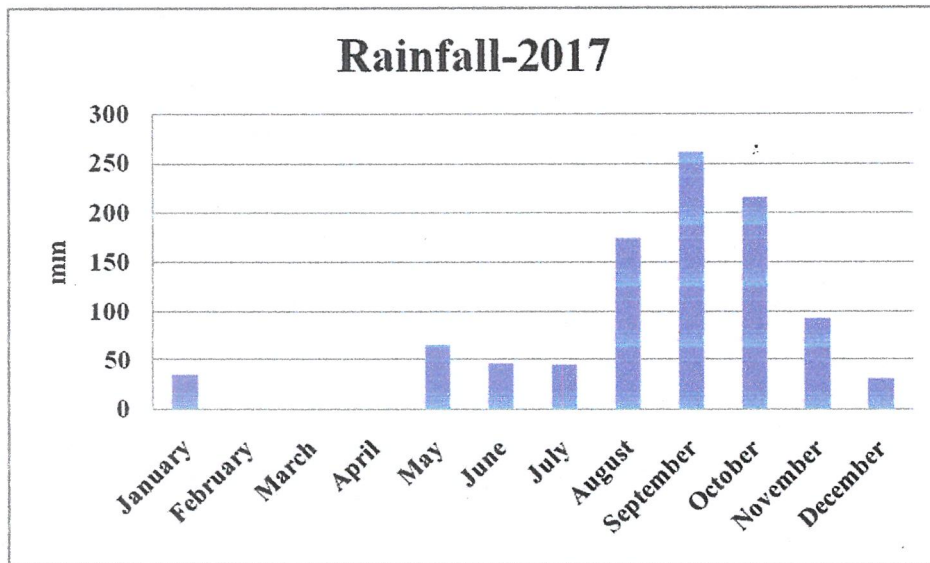


Fig. 4. Rainfall received during 2017



Fig. 5. Rainwater harvesting pit

To save rain water, rain water harvesting structures were built in all of the college's blocks, with adequate collection and injection facilities. Rainwater draining from the college

campus is controlled to a reasonable extent by natural landscape and periodic manual lining. These efforts increase the campus's water resource augmentation.

#### **b. Water Utilization**

Water users on campus are taught about judicious water through curriculum and awareness programmes. Water from an open well and four bore wells is collected and stored in five overhead tanks before being used appropriately and economically.

#### **c. Water Reuse**

Watering plants is done with waste water generated by non-consumptive uses of the hostel inmates, college, and canteen. Waste water stagnation is completely avoided by properly channelling waste water to the plants. It monitors mosquito breeding and related issues.

### **5. Avoidance of Plastics**

The college campus has been designated a plastic-free zone. Plastic cups, carry bags, plastic papers, and other disposable plastics are strictly prohibited on college campuses. Some of the packaged plastic items (such as milk pouches) from the canteen and hostel are collected and sold for recycling by workers or rag pickers. Any abandoned plastic items are safely collected and deposited in common trash cans. Student and N.S.S. volunteers perform routine cleaning.

### **6. Reduction of Paper Use and E-governance**

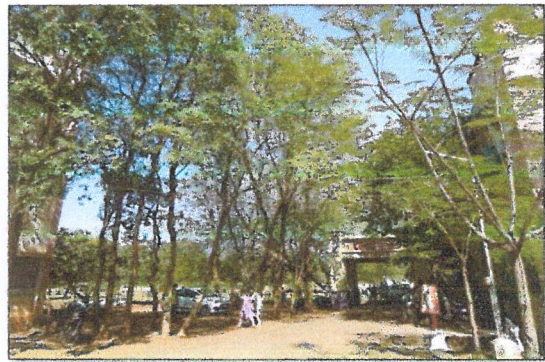
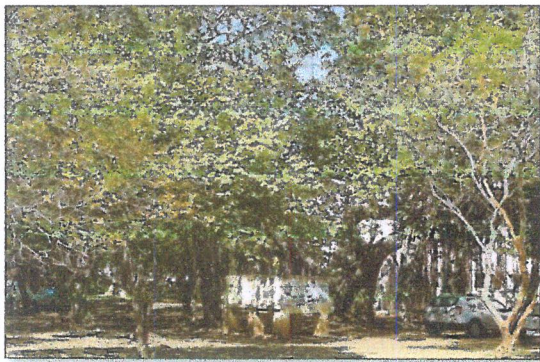
The college is attempting to reduce paper use by encouraging e-governance. It is a state government college, and the college strictly adheres to all e-governance policies and practises imposed and initiated by the state government. Some efforts are made at the college level to reduce paper use, such as e-pay bill generation in the office, consolidated examination application by the Controller of Examinations, and so on.

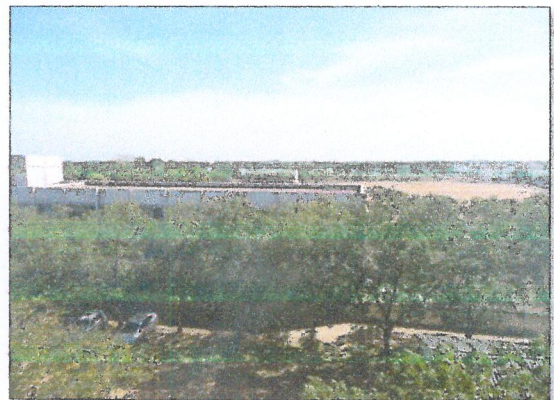
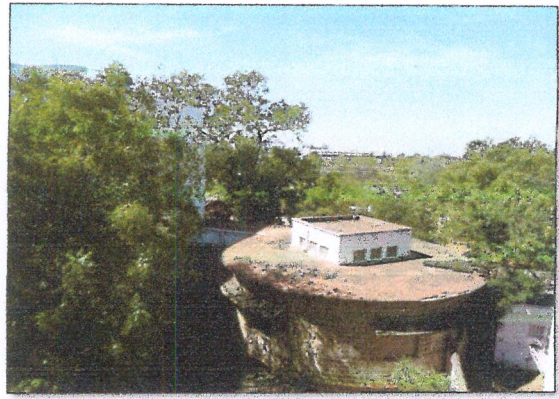
### **7. Solid Waste Management**

Solid waste is collected on a regular basis and properly dumped in pits dug out in strategic locations. The majority of solid waste consists of fallen tree leaves. Other types of solid waste are collected and disposed of in common trash cans. Napkins are collected and safely incinerated on campus using two incinerators. Canteen waste is deposited in the common dustbin located outside the campus. Some residents near the college collect food waste from the canteen and use it as cattle feed. Electronic waste is safely removed from circulation. The condemned computer systems are scrapped.

## 8. Green Cover

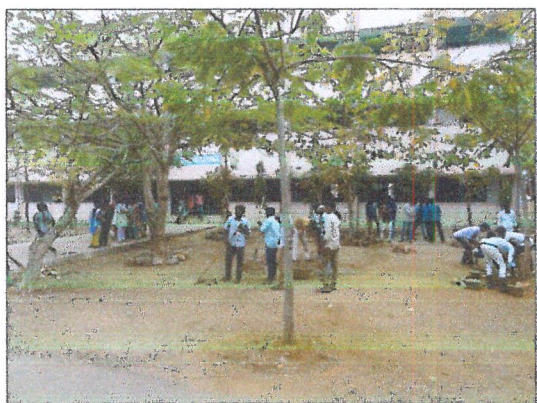
There are numerous plant species at the college. The campus's oldest tree is a 75-year-old banyan tree. It has animatic prop roots and is home to a variety of birds and microbes





## 9. Campus Cleaning

Solid waste collection and disposal are done on a regular basis on campus, with the help of students and NSS volunteers. In order to save the environment and water resources, Seemaikarvuel (*Prosopis juliflora*) was removed from the campus in January 2017 at a cost of Rs. 75,000/-.



## 10. Environmental Education

Environmental Studies has become part of the curriculum for all undergraduate courses, according to the University Grants Commission (UGC) guidelines (following a directive from the Supreme Court's National Green Tribunal). The core module includes both theoretical and practical work. It is a required course for first-year undergraduate students. The course's main topics include pollution, the eco-system, and environmental social issues, among others. Students were also given additional course works such as Environmental Pollution and Management (Botany), Green Chemistry, Environmental Pollution Analysis Techniques (Chemistry), and Environmental Economics (Economics).

Aside from that, a variety of initiatives are being undertaken by the college's various departments to provide students with environmental education. The Department of Visual Communication has created several short films and organised public awareness campaigns about environmental sustainability. The Department of Zoology conducts vermiculture research to convert vegetable matter into vermin-composts. The Department of Botany is organising an exhibition on medicinal plants with taxonomic information, uses, and application methods. Visits to industry (Fenner India, Madurai), mangrove forest (Pitchavaram), and coastal ecosystem (Kaveri Poompattinam) were arranged by the Department of Economics.



## CERTIFICATE

This is certified that Green Audit for academic year 2017-18 is carried out by the Periyar EVR College, Tiruchirappalli - 620023.

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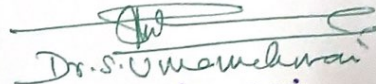
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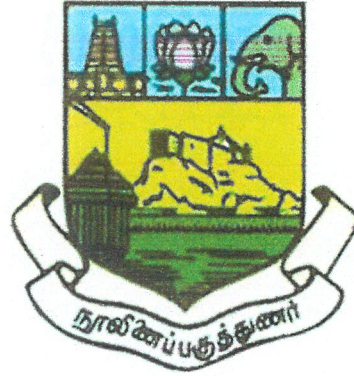
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# GREEN AUDIT REPORT

2018-2019

**PERIYAR EVR COLLEGE**  
TIRUCHIRAPPALLI – 620023  
TAMIL NADU, INDIA



## GREEN AUDIT REPORT: 2018-2019

The purpose of this Green Audit Report is to provide a comprehensive overview of the institution's utilization of natural resources, highlight conservation efforts and their progress, and assess measures taken to mitigate the adverse effects of human activities on the environment. The primary objectives of this audit are to safeguard the environment, promote human health, ensure compliance with governmental regulations and environmental standards, prevent further ecological disruptions, and propose optimal protocols to foster sustainable development.

### 1. Energy Consumption

In the year 2018-2019, the college's annual energy consumption amounted to 168,662 units, showing an increase of 315 units compared to the previous calendar year. On a bimonthly basis, the average energy consumption on campus during 2018-2019 was 37,793.5 units, ranging between 21,440 and 32,990 units.

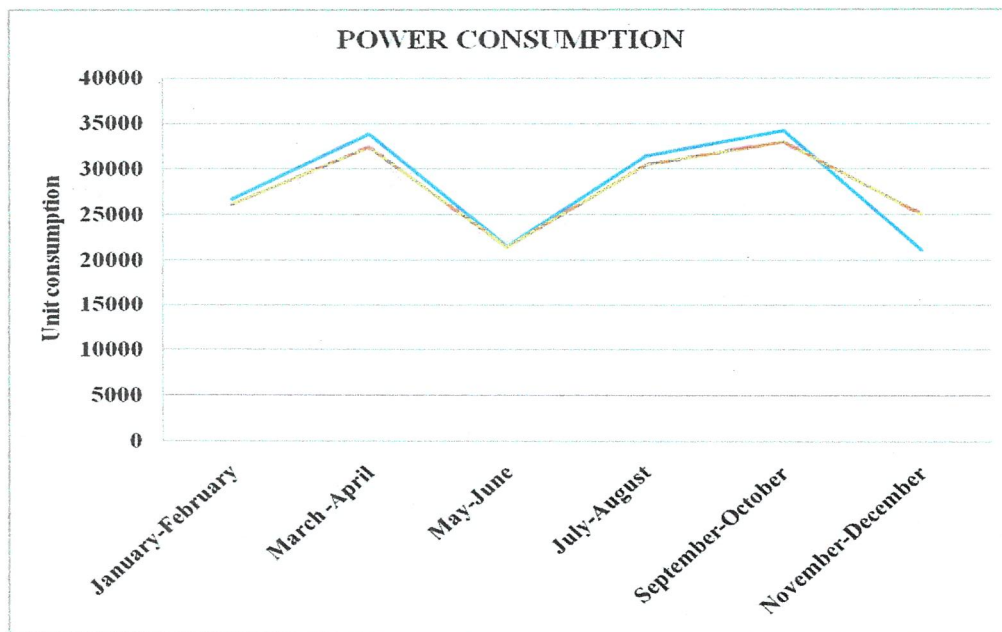


Figure 1. Consumption of electricity in the college campus

### 2. Energy Conservation Efforts

To ensure energy conservation, the institution implements various measures such as the utilization of energy-efficient equipment including lights, fans, computers, printers, refrigerators, air conditioners, water purifiers, and educational tools. Regular maintenance and replacements are conducted periodically to minimize energy consumption. Additionally,

machines, appliances, and instruments are promptly switched off after use, further contributing to energy conservation efforts.

### 3. Use of Mass Transport System and Personal Transport Vehicles

The college has a sizable population of over 5002 students and faculty members. A significant portion of this community, approximately 60.84%, relies on public transport, specifically buses, for their daily commuting needs. Another 8.20% prefer trains as their preferred mode of transportation. Nearly one-third of the college population chooses a sustainable means of commuting, either by cycling or walking to the campus. Private vehicles, including two-wheelers and cars, are used by only about 5.52% of the college community. It is worth noting that these vehicles contribute to air pollution and consume significant amounts of petroleum products.

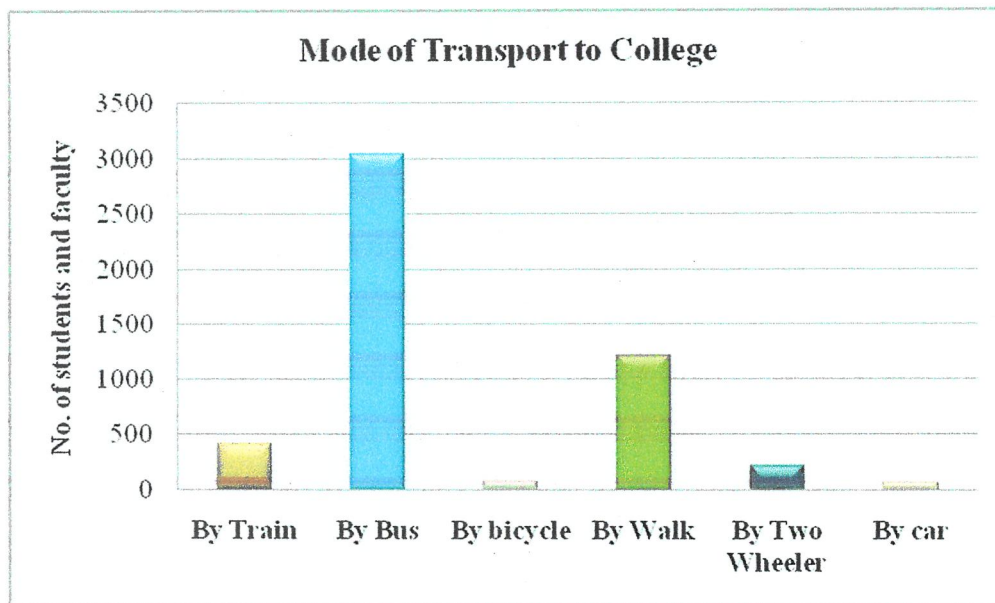


Figure 2. Mode of commutation to the college



## 4. Water Resource Conservation

### a. Water Harvesting

The rainfall pattern shows varying amounts throughout the year. Notable rainfall is observed in May, with 214.5 mm, and November, with 152.6 mm. February also received some rainfall, albeit a smaller amount at 8.4 mm. However, there were several months with no rainfall, including January, March, April, and December. Given the rainfall data, it is crucial to consider rainwater harvesting as a means to capture and store rainwater for various purposes. Rainwater harvesting systems can help in utilizing the available rainfall effectively, especially during months with higher rainfall amounts.

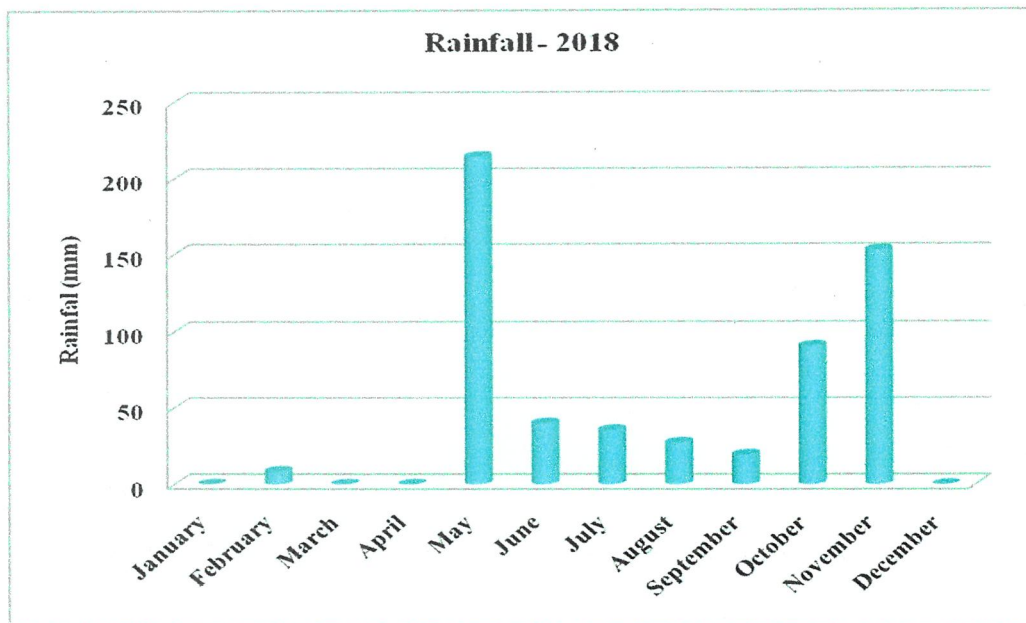
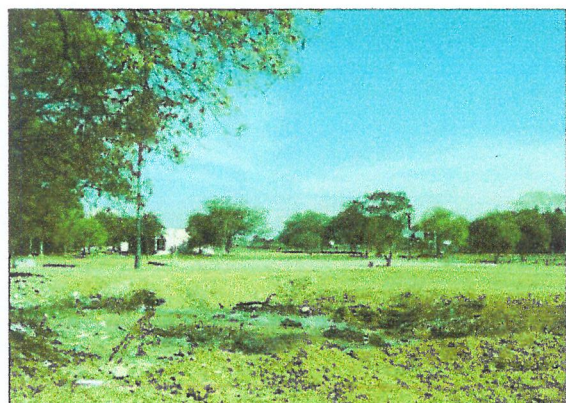


Figure. 3. Rainfall received during 2018



In order to conserve rainwater, the college has constructed rainwater harvesting structures across all its blocks, equipped with appropriate collection and injection facilities. The campus effectively manages rainwater runoff through natural landscaping and regular

manual lining, thus ensuring a controlled and regulated flow. These initiatives significantly contribute to augmenting the college's water resources and promote sustainability.

#### **b. Water Utilization**

The college emphasizes the importance of responsible water usage to its water users through dedicated curriculum modules and awareness programs. Water conservation practices are integrated into the educational curriculum, raising awareness about the judicious use of water resources.

To meet the water requirements, the college collects water from various sources, including an open well and four bore wells. The water is carefully stored in five overhead tanks to ensure proper utilization and efficient distribution. By adopting this approach, the college aims to use water resources prudently and economically, promoting sustainability on campus.

#### **c. Water Reuse**

To water the plants on campus, the college utilizes wastewater generated from non-consumptive sources, including waste water from the hostel inmates, college facilities, and canteen. The college has implemented effective measures to prevent the stagnation of wastewater by appropriately channeling it towards the plants. This approach not only ensures the efficient utilization of water resources but also helps in minimizing mosquito breeding and related issues. The college remains vigilant in monitoring and addressing any potential concerns associated with mosquito breeding.

### **5. Avoidance of Plastics**

The college campus has been designated as a plastic-free zone, with strict regulations against the usage of plastic cups, carry bags, plastic papers, and other disposable plastics. To support this initiative, packaged plastic items like milk pouches from the canteen and hostel are collected and sold for recycling by workers or rag pickers. Any discarded plastic items are safely collected and disposed of in designated trash cans. Routine cleaning activities are carried out by student volunteers and N.S.S. (National Service Scheme) members to maintain cleanliness on the campus.

### **6. Reduce the Paper Use and E-governance**

The college is actively committed to reducing paper usage by promoting e-governance initiatives. As a state government college, it strictly complies with all e-governance policies and practices mandated by the state government. Various measures are implemented at the college level to minimize paper consumption. For instance, the office adopts e-pay bill generation, ensuring electronic payment methods are utilized. The

Controller of Examinations facilitates consolidated examination applications, reducing the need for individual paper-based applications. These efforts reflect the college's commitment to embracing electronic alternatives and reducing paper waste.

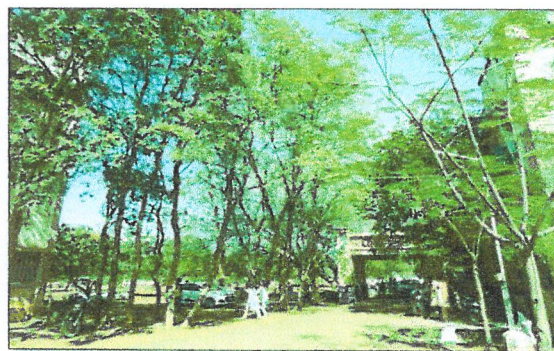
### **7. Solid Waste Management**

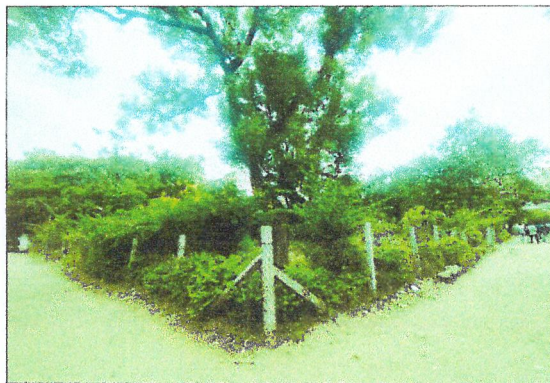
Regular collection of solid waste is carried out at the college, and it is appropriately disposed of in pits strategically located on the premises. The primary component of solid waste consists of fallen tree leaves. Other forms of solid waste are gathered and disposed of in designated trash cans. Napkins, specifically, are collected separately and safely incinerated using two dedicated incinerators on campus. Waste generated from the canteen is deposited in a common dustbin situated outside the campus. Some local residents near the college collect food waste from the canteen, utilizing it as cattle feed.

Efforts are made to ensure the proper handling of electronic waste. Condemned computer systems are scrapped, and precautions are taken for the safe removal of electronic waste from circulation. UPS batteries, toners, and cartridges are recycled as much as possible, although they have a limited number of recycling cycles. The college remains committed to environmentally responsible waste management practices.

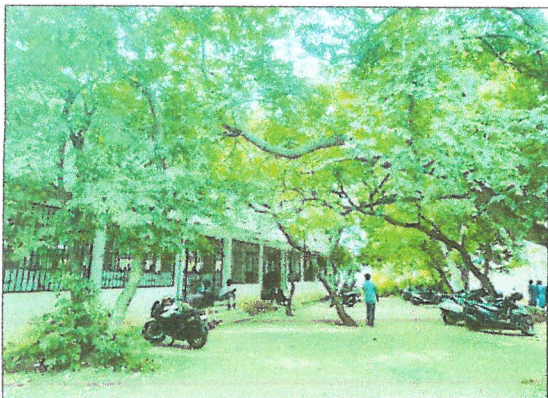
### **8. Green Cover**

The college campus boasts a rich diversity of plant species, with numerous varieties flourishing throughout the grounds. One of the most notable trees on campus is a magnificent 75-year-old banyan tree. This ancient tree features impressive aerial prop roots, giving it a unique and striking appearance. Beyond its visual appeal, the banyan tree serves as a habitat for a diverse range of bird species, providing them with shelter and nesting opportunities. Additionally, the tree supports a thriving ecosystem of microbes, further contributing to the biodiversity of the college campus.



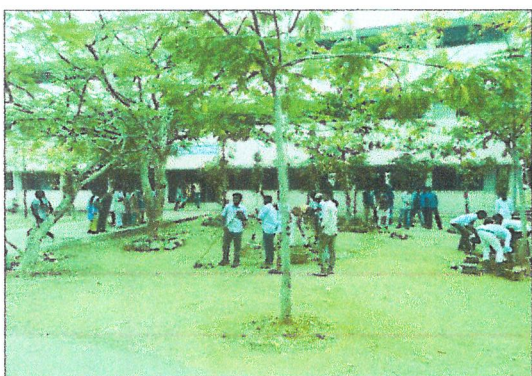






### **9. Campus Cleaning**

On the college campus, solid waste collection and disposal are carried out regularly with the assistance of students and NSS (National Service Scheme) volunteers. These dedicated individuals actively contribute to maintaining a clean and sustainable environment. Seemaikarvuel, an invasive species if present around the college was removed to restore the ecological balance and to promote the well-being of the campus environment.



### **10. Environmental Education**

Environmental Studies has been incorporated into the curriculum of all undergraduate courses, in accordance with the guidelines set by the University Grants Commission (UGC) and the directive from the Supreme Court's National Green Tribunal. This mandatory course is offered to first-year undergraduate students and encompasses both theoretical and practical components. The core module covers a wide range of topics such as pollution, ecosystem dynamics, environmental social issues, and more. In addition to the core module, students are assigned additional coursework tailored to their respective disciplines. For instance, students studying Botany are exposed to Environmental Pollution and Management, while those in Chemistry explore Green Chemistry and Environmental Pollution Analysis Techniques. Economics students delve into Environmental Economics.

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# GREEN AUDIT REPORT

2019-2020

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## GREEN AUDIT REPORT: 2019-2020

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### 1. Energy Consumption

During the 2019-2020 academic year, the college consumed a total of 1,66,171 units of energy, indicating a slight rise of 2491 units compared to the preceding year. On a bimonthly basis, the average energy consumption on campus was 27695 units throughout 2019-2020. The energy usage fluctuated between 21,150 and 32,540 units within this period.

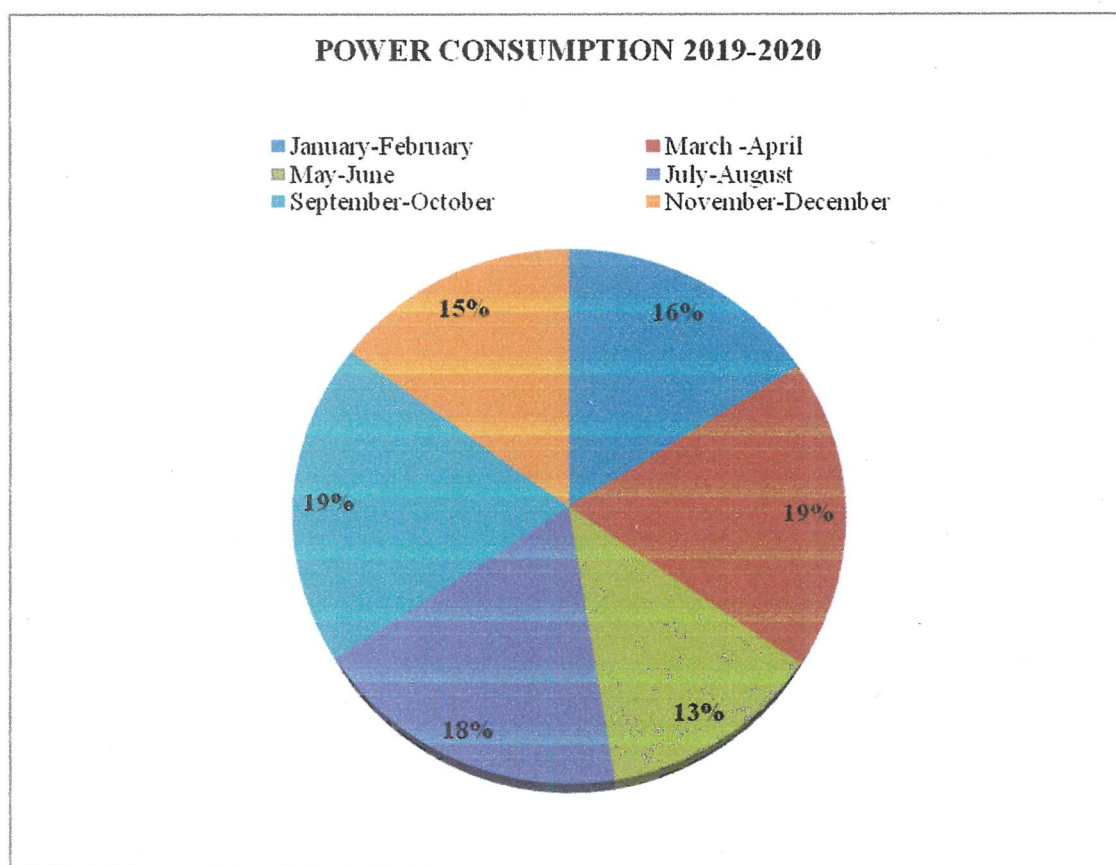


Fig. 1. Consumption of electricity in the college campus 2019-2020

### 2. Energy Conservation Efforts

The institution implements various measures to effectively manage and conserve energy, including the utilization of energy-efficient equipment such as lights, fans,

computers, printers, refrigerators, air conditioners, water purifiers, and other educational tools. Regular maintenance and timely replacements are undertaken to minimize energy consumption. Additionally, machines, appliances, and instruments are promptly switched off when not in use, further contributing to energy conservation efforts.

### 3. Use of Mass Transport System and Personal Transport Vehicles

The college accommodates a substantial student and faculty population, exceeding 4998 individuals. A significant majority of this community, approximately 60.84%, opt for public transportation, primarily buses, as their preferred mode of commuting. Furthermore, around 8.24% of students and faculty members rely on trains for their daily transportation needs. Notably, nearly one-third of the college community chooses to commute by bicycle or on foot, reflecting their preference for environmentally friendly modes of travel. Conversely, only about 5.5% of individuals use private vehicles like cars and two-wheelers, which contribute significantly to air pollution and the excessive consumption of petroleum products.

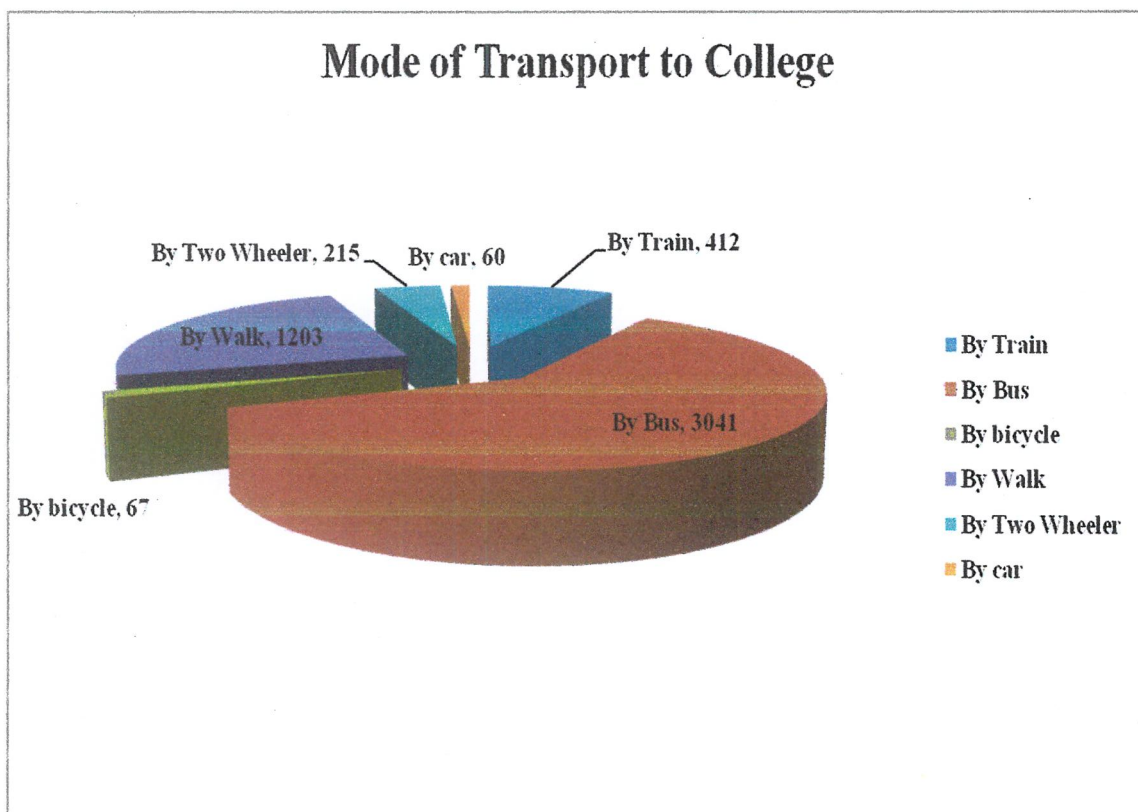


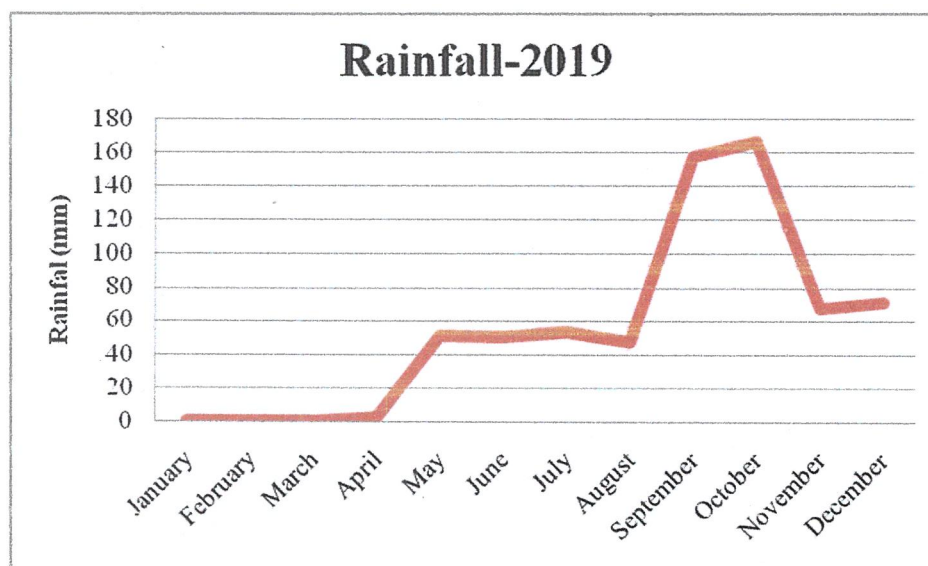
Fig. 2. Mode of commutation to the college



#### 4. Water Resource Conservation

##### a. Water Harvesting

The rainfall pattern shows relatively low rainfall during the first three months of the year, with April receiving just 2 mm. However, the rainfall gradually increases from May onwards, reaching its peak in October. September and October have the highest rainfall amounts, with 157.2 mm and 166.3 mm, respectively. Considering the rainfall data, it is important to consider rainwater harvesting as a means to capture and store rainwater for various purposes. Rainwater harvesting systems can help in utilizing the available rainfall efficiently and reduce dependence on other water sources. Implementing rainwater harvesting techniques can contribute to water conservation and sustainability, especially during periods of lower rainfall or drought conditions.



**Fig. 3.** Rainfall received during 2019

In order to conserve rainwater, the college has constructed rainwater harvesting structures in all of its blocks, equipped with suitable collection and storage facilities. The campus effectively manages rainwater run-off through a combination of natural landscape features and periodic manual lining. These initiatives significantly contribute to the augmentation of water resources within the campus.



**Fig.4.** Rain Water Harvesting Pits

#### **b. Water Utilization**

The college actively educates water users on campus about responsible water usage through curriculum integration and awareness programs. Water conservation and efficiency practices are emphasized to promote judicious water consumption. The college employs a system where water from an open well and four bore wells is collected and stored in five overhead tanks. This stored water is then utilized in a manner that ensures appropriate and economical usage throughout the campus.

#### **c. Water Reuse**

To water the plants, the college utilizes wastewater generated from non-consumptive activities in the hostels, college, and canteen. By redirecting this waste water to the plants, the college ensures that stagnant water is avoided. Proper channels are implemented to effectively distribute the wastewater for irrigation purposes, mitigating the risk of mosquito breeding and associated issues. The college actively monitors and addresses any potential concerns related to mosquito breeding to maintain a healthy and hygienic environment.

#### **5. Avoidance of Plastics**

The college campus has been officially designated as a plastic-free zone, with strict regulations in place to prohibit the use of plastic cups, carry bags, plastic papers, and other disposable plastics. To support sustainable practices, the canteen and hostel actively collect

packaged plastic items, such as milk pouches, which are then sold to workers or rag pickers for recycling. Additionally, any abandoned plastic items found on the campus are safely collected and deposited in designated trash cans. Routine cleaning activities are conducted by student volunteers and N.S.S. (National Service Scheme) members to ensure the cleanliness and upkeep of the campus.



**Fig. 5.** Litter free campus

## **6. Reduce the Paper Use and E-governance**

The college is actively taking steps to minimize paper usage by promoting e-governance practices. As a state government college, it strictly adheres to all e-governance policies and initiatives mandated by the government. Various measures have been implemented at the college level to reduce paper consumption. These include generating e-pay bills in the office and implementing consolidated examination applications managed by the Controller of Examinations, among other initiatives. By embracing e-governance, the college aims to minimize its environmental footprint and contribute to sustainable practices.

## **7. Solid Waste Management**

Regular collection of solid waste takes place at the college, and it is appropriately disposed of in strategically located pits. The predominant type of solid waste consists of fallen leaves from trees. Other types of solid waste are gathered and disposed of in designated trash cans. Napkins are collected separately and safely incinerated on campus using two dedicated incinerators. The waste generated by the canteen is deposited in a common dustbin situated outside the campus. Furthermore, some local residents near the college collect food waste from the canteen and utilize it as cattle feed, promoting recycling and reducing waste. Electronic waste is handled with care, ensuring its safe removal from circulation. Condemned



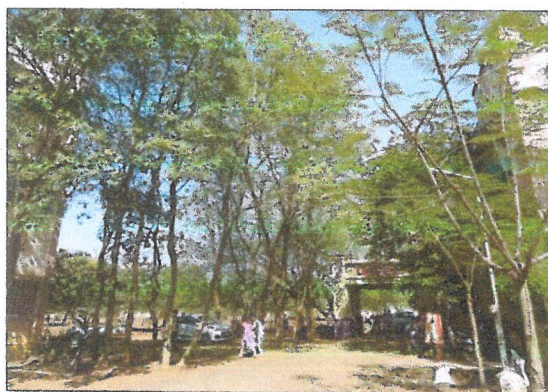
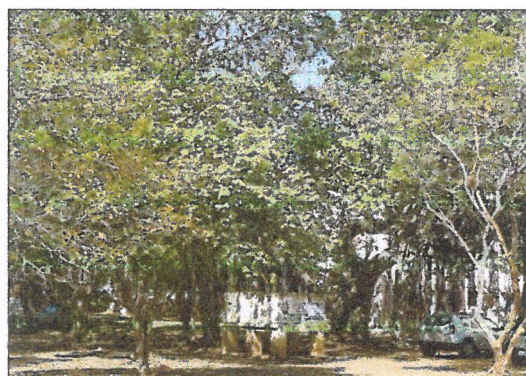
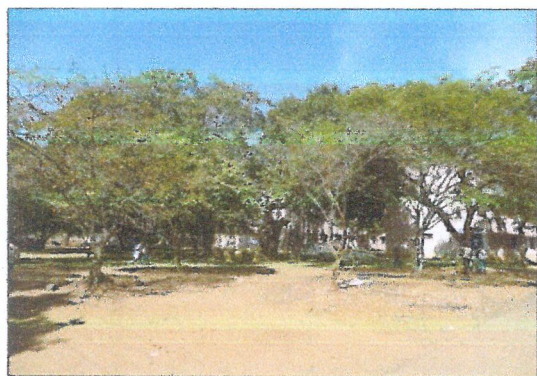
computer systems are properly scrapped, while UPS batteries, toners, and cartridges are recycled to the extent possible, considering their limited recyclability.

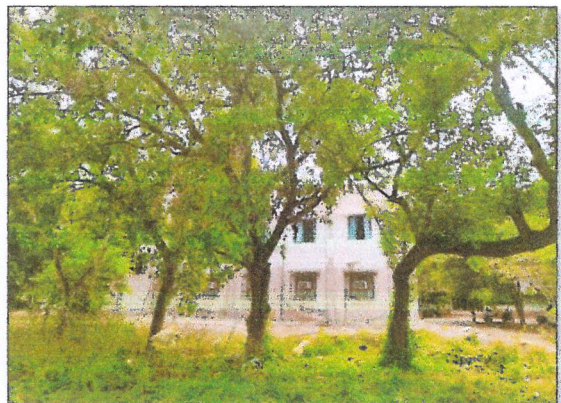


**Fig. 6.** Compost pit

### **8. Green Cover**

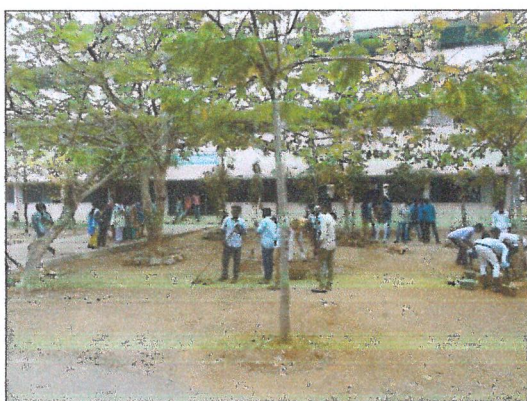
The college campus boasts a diverse array of plant species, among which the oldest tree is a majestic banyan tree aged 75 years. This iconic tree showcases remarkable animatic prop roots, creating a visually striking sight. Apart from its aesthetic appeal, the banyan tree serves as a habitat for a wide variety of birds and supports a thriving microbe community. Its presence enhances the ecological balance and biodiversity of the college campus.





## 9. Campus Cleaning

The college ensures regular collection and proper disposal of solid waste through the collaborative efforts of students and NSS volunteers. In a bid to preserve the environment and conserve water resources, a specific plant species known as Seemaikarvuvel (*Prosopis juliflora*) was eradicated from the campus. By eliminating this particular plant species, the college demonstrates its commitment to maintaining a sustainable and eco-friendly campus environment.



## 10. Environmental Education

Environmental Studies has been incorporated into the curriculum of all undergraduate courses as per the guidelines set by the University Grants Commission (UGC) and the Supreme Court's National Green Tribunal. This mandatory course is taken by first-year undergraduate students and encompasses both theoretical and practical components. The core module covers various subjects such as pollution, ecosystems, environmental social issues, and more.

In addition to the core module, students are also assigned specific coursework related to environmental studies based on their respective disciplines. For instance, courses like Environmental Pollution and Management (Botany), Green Chemistry, Environmental Pollution Analysis Techniques (Chemistry), and Environmental Economics (Economics) are offered to students.

## CERTIFICATE


This is certified that Green Audit for academic year 2019-2020 is carried out by the  
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# GREEN AUDIT REPORT

2020-2022

**THANTHAI PERIYAR GOVERNMENT  
ARTS & SCIENCE COLLEGE**  
TIRUCHIRAPPALLI – 620023  
TAMIL NADU, INDIA



## GREEN AUDIT REPORT: 2020-2022

The Green Audit Report offers a detailed assessment of an organization's natural resources, focusing on conservation efforts, advancements, and strategies to minimize the negative effects of human activities on the environment. Conducted over a span of two years (2020-2022) due to the COVID-19 pandemic, the audit aims to achieve several primary goals. These include safeguarding the environment, promoting human health, ensuring compliance with government regulations and environmental standards, preventing further disruptions to the environment, and proposing effective protocols to foster sustainable development.

### 1. Energy Consumption

Over the course of the academic years 2020-2022, the college consumed a total of 181,505 units of energy. On a bimonthly basis, the average energy consumption on campus during this period was 30,250 units. It is important to note that energy usage varied between 24,894 and 34,640 units within the same timeframe, reflecting fluctuations in energy consumption.

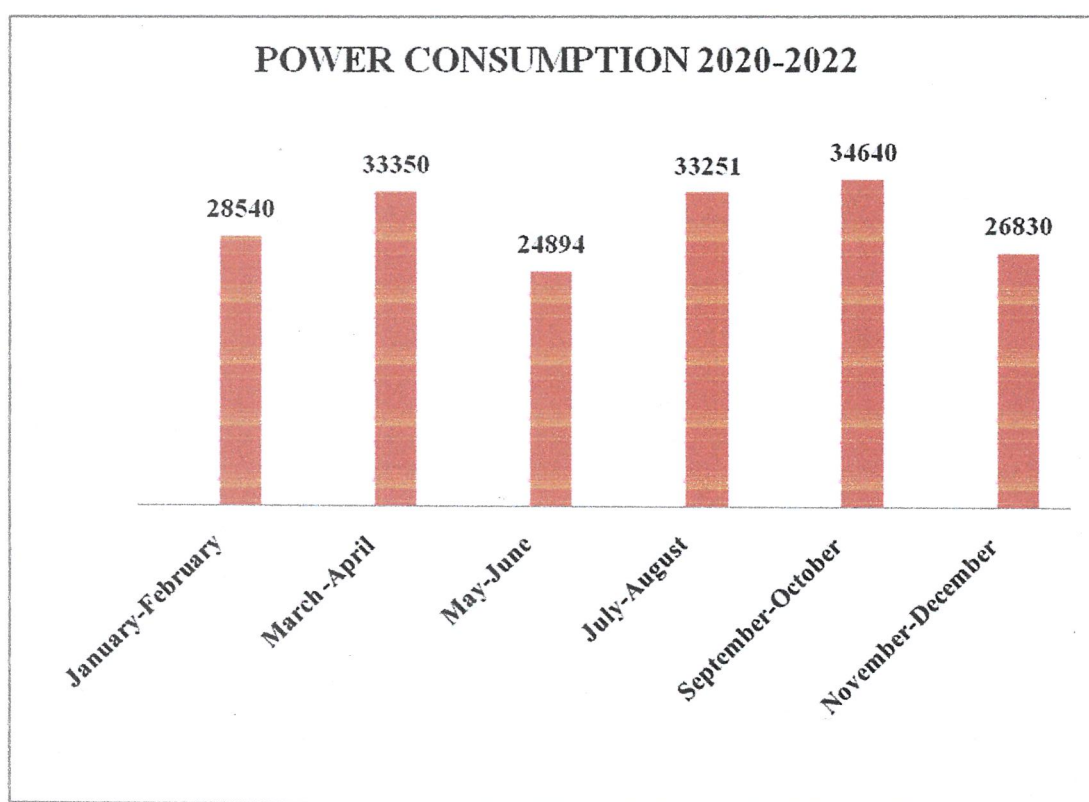


Figure 1. Consumption of electricity in the college campus 2019-2020

## **2. Energy Conservation Efforts**

The institution has implemented a range of measures to efficiently manage and conserve energy. One such measure involves the utilization of energy-efficient equipment throughout the campus. This includes the use of energy-saving lights, fans, computers, printers, refrigerators, air conditioners, water purifiers, and other educational tools. Regular maintenance and timely replacement of equipment are prioritized to ensure optimal energy efficiency. Furthermore, the institution encourages the practice of switching off machines, appliances, and instruments when they are not in use. This simple yet effective measure helps conserve energy by preventing unnecessary power consumption. By promoting a culture of responsible energy usage, the institution aims to reduce its overall energy footprint and contribute to a more sustainable environment.

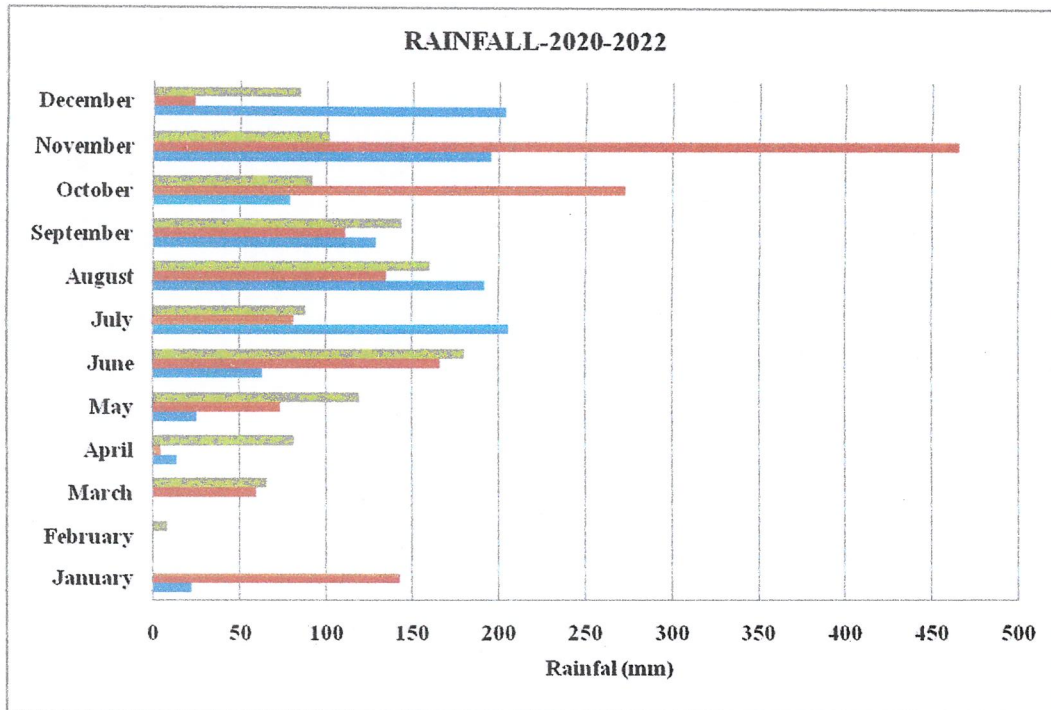
## **3. Use of Mass Transport System and Personal Transport Vehicles**

The college accommodates a sizable population of students and faculty, totaling over 4,998 individuals. Interestingly, a majority of this community, approximately 60.84%, prefers public transportation, with buses being the most popular mode of commuting. Around 8.24% of students and faculty members rely on trains for their daily transportation needs. Notably, an encouraging trend is observed among approximately one-third of the college community who choose to commute by bicycle or on foot. This reflects their commitment to environmentally friendly modes of travel, promoting sustainable transportation options. Conversely, only a small percentage, approximately 5.5% of individuals, rely on private vehicles such as cars and two-wheelers. It is worth noting that these vehicles contribute significantly to air pollution and the excessive consumption of petroleum products. The college recognizes the need to address these challenges and encourages alternative modes of transportation to reduce environmental impact and promote a greener campus.

## **4. Water Resource Conservation**

### **a. Water Harvesting**

By analyzing the data, we can identify the months that received substantial rainfall. For example, in 2020, months like July, August, November, and December had high rainfall amounts. In 2021, months like June, October, and November recorded significant rainfall. Similarly, in 2022, months like June and November had considerable rainfall. These months present excellent opportunities to capture and store rainwater for future use. Systems like rooftop rainwater harvesting, storage tanks, and filtration systems can be installed to collect and store rainwater during periods of high rainfall.



**Figure. 2.** Rainfall received during 2020-2022

To promote rainwater conservation, the college has taken several steps. Firstly, rainwater harvesting structures have been constructed in all of its blocks, equipped with appropriate collection and storage facilities. These structures efficiently capture and store rainwater, allowing it to be utilized for various purposes within the campus. In addition to the rainwater harvesting structures, the college employs natural landscape features and periodic manual lining to effectively manage rainwater run-off. By incorporating sustainable drainage systems and implementing measures to retain rainwater on-site, the campus minimizes water wastage and maximizes water resource augmentation. These initiatives play a crucial role in conserving rainwater and reducing the college's dependence on external water sources. By implementing such measures, the institution demonstrates its commitment to sustainable water management practices and sets an example for the campus community to follow.

**b. Water Utilization**

The college takes a proactive approach to educate the campus community about responsible water usage. Through curriculum integration and awareness programs, students and faculty members are educated on the importance of water conservation and efficiency practices. Emphasis is placed on promoting judicious water consumption to minimize wastage and preserve this valuable resource. In terms of infrastructure, the college has implemented a system for water collection and storage. Water from an open well and four



bore wells is collected and stored in five overhead tanks. This setup ensures a sufficient supply of water for the campus while also allowing for appropriate and economical usage. By employing such a system, the college optimizes water management and reduces the strain on external water sources. It underscores the institution's commitment to sustainable water practices and serves as a model for the campus community in adopting responsible water usage habits.

### **c. Water Reuse**

In an effort to promote sustainability and efficient water usage, the college employs wastewater generated from non-consumptive activities in the hostels, college, and canteen to water the plants. This approach allows for the reuse of wastewater and minimizes the accumulation of stagnant water. To effectively distribute the wastewater for irrigation purposes, the college has established proper channels and systems. By redirecting the wastewater to the plants, the college ensures that it serves a beneficial purpose while reducing the demand for freshwater resources. Additionally, the college takes proactive measures to address any potential concerns related to mosquito breeding. Stagnant water can provide breeding grounds for mosquitoes, and to prevent this, the college actively monitors and mitigates the risk of mosquito breeding. This ensures a healthy and hygienic environment on campus while maintaining the ecological balance. Through these initiatives, the college demonstrates its commitment to sustainable water management practices, environmental stewardship, and the overall well-being of the campus community.

### **5. Avoidance of Plastics**

The college campus has received an official designation as a plastic-free zone, reflecting its commitment to reducing plastic waste. Strict regulations are in place to prohibit the use of plastic cups, carry bags, plastic papers, and other disposable plastics within the campus premises. To support sustainable practices, the canteen and hostel actively participate in collecting packaged plastic items, such as milk pouches. These items are then sold to workers or rag pickers who specialize in recycling. This initiative helps divert plastic waste from landfills and promotes the recycling of plastic materials. Furthermore, any abandoned plastic items found on the campus are diligently collected and deposited in designated trash cans. This ensures that plastic waste is properly managed and prevents littering within the campus. To maintain the cleanliness and upkeep of the campus, routine cleaning activities are carried out by student volunteers and members of the N.S.S. (National Service Scheme). Their efforts contribute to creating a clean and hygienic environment for everyone on campus. By implementing these measures, the college actively fosters a plastic-free

environment and encourages sustainable practices among its community members. The institution's commitment to reducing plastic waste helps protect the environment and promotes a cleaner and greener campus.

#### **6. Reduce the Paper Use and E-governance**

The college is committed to minimizing paper usage and has adopted several measures to promote e-governance practices. As a state government college, it strictly adheres to all e-governance policies and initiatives mandated by the government. At the college level, various steps have been taken to reduce paper consumption. For instance, e-pay bills are generated in the office instead of using traditional paper-based bills. Additionally, the college has implemented consolidated examination applications, which are managed by the Controller of Examinations. These initiatives help streamline administrative processes and significantly reduce the need for paper. By embracing e-governance practices, the college demonstrates its dedication to minimizing its environmental impact. It actively contributes to sustainable practices by reducing paper consumption, promoting digital communication, and embracing technological solutions for administrative tasks. These efforts align with the college's commitment to environmental conservation and sustainability, while also supporting the broader government initiatives for e-governance.

#### **7. Solid Waste Management**

The college has established a regular solid waste collection system to ensure proper waste management. Fallen leaves from trees constitute a significant portion of the solid waste generated on campus. These leaves are appropriately disposed of in strategically located pits, which facilitate their decomposition and return valuable nutrients to the soil.

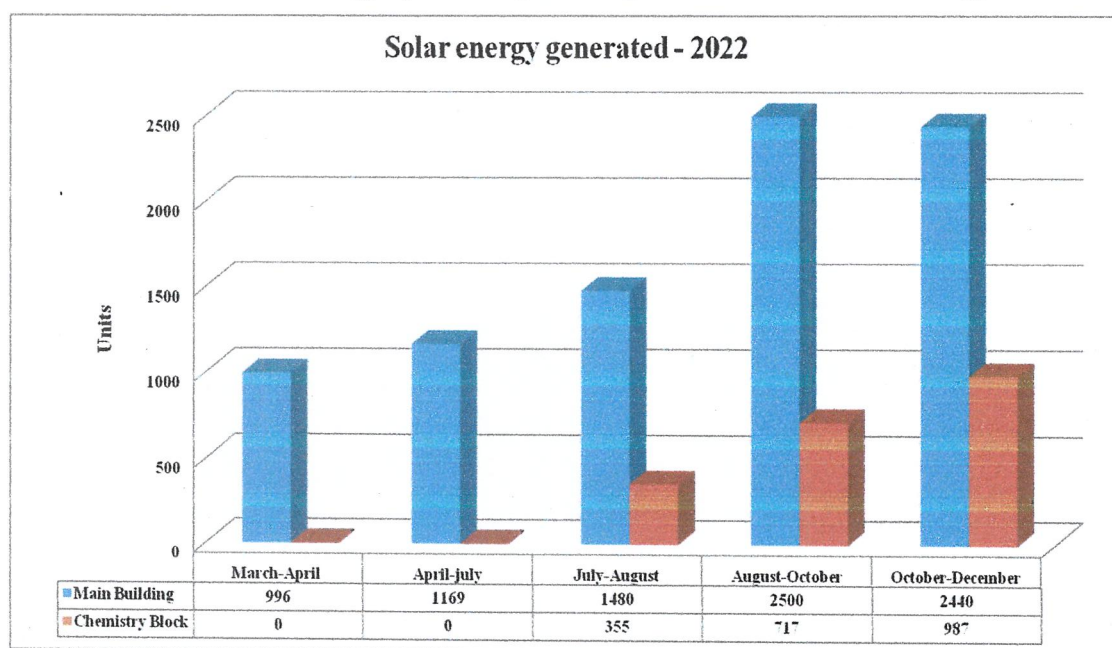
Other types of solid waste are gathered and disposed of in designated trash cans. Notably, napkins are collected separately to maintain hygiene and are safely incinerated on campus using two dedicated incinerators. The waste generated by the canteen is deposited in a common dustbin situated outside the campus, ensuring proper waste segregation. In an effort to promote recycling and reduce waste, some local residents near the college collect food waste from the canteen and utilize it as cattle feed. This practice supports the circular economy by repurposing food waste and minimizing its disposal. Electronic waste is handled with care to prevent environmental pollution. Condemned computer systems are properly scrapped, and UPS batteries, toners, and cartridges are recycled to the extent possible, considering their limited recyclability. Through these waste management practices, the college aims to minimize the environmental impact of solid waste and promote sustainable waste management methods.

## 8. Green Cover

Within the college campus, a rich variety of plant species thrives, including a remarkable 75-year-old banyan tree. This majestic tree stands as a symbol of natural beauty and grandeur. Its captivating features include animatic prop roots that create a visually stunning display. Beyond its aesthetic appeal, the banyan tree plays a crucial ecological role. It serves as a habitat for a diverse array of birds, providing them with shelter and nesting opportunities. The tree's sprawling branches and foliage offer a safe haven for these avian residents, contributing to the campus's vibrant bird population. Furthermore, the banyan tree supports a thriving microbe community within its root system. These microorganisms play a vital role in nutrient cycling and soil health, contributing to the overall ecological balance of the campus environment. By preserving and nurturing the banyan tree, the college showcases its commitment to biodiversity conservation. The tree's presence not only enhances the aesthetic appeal of the campus but also creates a habitat for various species, contributing to a healthier and more ecologically diverse environment.

## 9. Solar Energy

Solar panels were installed in the main building and chemistry block and by harnessing solar power, the buildings can rely less on traditional energy sources, such as fossil fuels, which helps reduce greenhouse gas emissions and environmental impact. Solar energy have significantly reduced the energy consumption of those buildings, it indicates the effectiveness of the solar energy system in providing clean and renewable energy.



**Figure 3. Solar energy generated in the year 2022**

Solar energy is a sustainable and renewable resource, so utilizing it can contribute to a greener and more sustainable future. Additionally, the reduction in energy consumption can also lead to cost savings for the college. Generating electricity through solar panels can help offset the need to purchase electricity from the grid, resulting in lower utility bills over time.

### **10. Campus Cleaning**

The college places a strong emphasis on proper solid waste management, which is achieved through the collaborative efforts of students and NSS (National Service Scheme) volunteers. Together, they ensure the regular collection and appropriate disposal of solid waste, promoting a clean and healthy campus environment.

In addition to waste management, the college has taken proactive steps to preserve the environment and conserve water resources. In January 2019, a specific plant species known as Seemai karvuvul (*Prosopis juliflora*) was eradicated from the campus. This particular plant species, known for its invasive nature, can deplete water resources and negatively impact native plant species and ecosystems. By removing it, the college demonstrates its commitment to maintaining a sustainable and eco-friendly campus environment. The eradication of Seemai karvuvul reflects the college's proactive approach to environmental conservation and its dedication to preserving local biodiversity. By eliminating invasive species and promoting the growth of native plants, the college contributes to the overall health and ecological balance of the campus environment.

### **10. Environmental Education**

The college has implemented the integration of Environmental Studies into the curriculum of all undergraduate courses, aligning with the guidelines established by the University Grants Commission (UGC) and the Supreme Court's National Green Tribunal. This mandatory course is taken by first-year undergraduate students and includes both theoretical and practical components. The core module of the Environmental Studies course covers a wide range of subjects, including pollution, ecosystems, environmental social issues, and more. Students receive a comprehensive understanding of the fundamental principles and concepts related to the environment and its conservation.

Furthermore, students are assigned specific coursework within the discipline of their respective majors, which further deepens their understanding of environmental studies. For example, students in Botany may take courses like Environmental Pollution and Management, while Chemistry students may study courses such as Green Chemistry and Environmental Pollution Analysis Techniques. Economics students may explore the subject of Environmental Economics, focusing on the economic aspects of environmental

conservation and sustainable development. By incorporating environmental studies into various disciplines, the college ensures that students across different fields gain a comprehensive understanding of environmental issues and their implications. This approach encourages interdisciplinary learning and equips students with the knowledge and skills necessary to address environmental challenges in their respective fields of study.





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 Tiruchirappalli, Tamil Nadu, India  
 OMFW+97P, Tiruchirappalli, Tamil Nadu  
 620023, India  
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 Long 78.696031°  
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**Solar Panels**



tel Pv Ltd, Trichy  
 Edamalaipatti Pudur, Tamil Nadu, India  
 Race Course Road, Kajamalai Colony,  
 Edamalaipatti Pudur, Tamil Nadu 620023, India  
 Lat 10.774459°  
 Long 78.695714°  
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**Covid Protocols**



Race Course Road  
 Tiruchirappalli, Tamil Nadu, India  
 29, New Police Line Area, Tiruchirappalli, Tamil Nadu 620023,  
 India  
 Lat 10.774057°  
 Long 78.695437°  
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**Creating Awareness among staff**



Tiruchirappalli, Tamil Nadu, India  
 Unnamed Road, Tiruchirappalli, Tamil Nadu  
 620023, India  
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**Litter free Veranda**



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 Edamalaipatti Pudur, Tamil Nadu 620023, India  
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**Miyawaki forests**



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 Race Course Road, Kajamalai Colony,  
 Edamalaipatti Pudur, Tamil Nadu 620023, India  
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**Tree saplings ready for plantation**



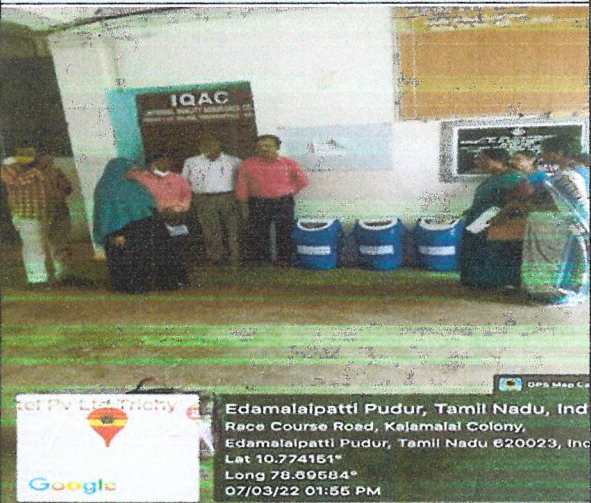
**Napkin Incinerator**



**Drinking Water Tanks**



**College Campus**



**Solid Waste Collection baskets**



**Rest Room For Girls**



**Creating Awareness Among Students**

## CERTIFICATE


This is certified that Green Audit for academic year 2020-2022 is carried out by the  
Thanthai Periyar Government Arts and Science College (Periyar EVR College),  
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