

REPORT OF IMPLIMENTATION OF GREEN PROTOCOL IN THE COLLEGE CAMPUS



Introduction

St.Georges College Aruvithura college was established in the year 1965 with the vision of holistic development and providing quality education to the youth. Today, college has become a well-known higher education institution with about 2000 students enrolled in different Under graduate and post graduate programmes. The college had completed the third cycle of accreditation by NAAC, and reaccredited with A grade. The college is located at the Meenachil river side and is conveniently located away from the bustling chaos of a city. The college campus comprises of 23 acres of land filled with its rich Greenery. Through its green campus initiatives, the institution is providing environmental friendly learning atmosphere for the students. With a great concern of environmental protection and sustainability the college is doing its best for the reduction of carbon emissions, mitigating waste generation and optimizing the use of reusable materials.

St George's College is strictly following the green protocol put forward by the government of Kerala and Haritha Kerala mission. The college has successfully undergone inspection by Haritha Kerala mission and was awarded green office certificate in recognition of its green office practices.

As part of green office certification college has already implemented a ban on the use of disposable items made of thermocol, paper and plastic. Moreover, college have implemented segregated waste collection and management in the campus and have exhibited green office boards in the campus. All staff members in the college use reusable utensils for food packaging and day to day usage .Also green protocol is followed by the college in all official functions organised in the college.

The college has appointed Ms.Maria Jose assistant professor in department of physics as the nodal officer to implement green protocol in the campus .She is also in charge of the coordination of all green initiatives in the campus .

The major activities of the college towards a green culture includes:

1)WASTE MANAGEMENT

Waste management plays a significant role in maintaining a healthy environment. St. George's College Aruvithura campus maintains a healthy and clean environment by implementing an effective waste management system. The waste management in the campus functions un der the guidance and support of harithakerala mission which proposes hygienic Waste Management for effective waste disposal, soil and water conservation.

a) Waste Disposal Incinerators

Three incinerators have been installed in the college campus to implement waste disposal effectively. The Garbage collected from various departments, offices and campus premises is regularly segregated. The extracted waste is then scientifically disposed of using the three incinerators.



b) Bio Compost (for degradable waste)

There are efficient measures to maintain the organic and green environment of the college premises. As part of this earthworm bio compost works to dispose and process organic wastes emitted from various departments and campus premises. This has been installed in collaboration with the State Horticulture Mission. The vermicompost obtained from the compost pit is used for gardening and agriculture in the campus. Thus, the organic waste generated within the college is effectively processed and used in a nature-friendly manner.



c) Ban on use of Plastics

The college has adopted the "swachatha hi sewa campaign " under UGC guidelines introduced in September 2019 for the ban of plastic use in higher education institutions. As per this strict measure have taken by the institution for controlling the use of plastic. Single-use plastic items such as plastic bottles, bags, spoons, straws and cups are

banned completely and awareness is created among staff and students through orientation and display boards in the premises. Flex banners are substituted with cloths. Eco-friendly materials are used for decorations.

d) Solid Waste Management

Glass and metal, and other garbage are collected separately. The Haritha karma sena members routinely collect the solid waste from the campus and sent it for recyclimg. Reduce, Reuse, and Recycle are the guiding principles of our solid waste management system. Vermi compost made from bio waste is used to grow medicinal plants. Vermi compost is made on campus from bio waste as an organic fertilizer for the plants in our campus and promotes the practice of organic farming. A biogas plant has also been erected at the facility. Many students have switched from disposable lunch packets to reusable stainless steel lunch boxes thus far. Disposable materials are substituted with eco-friendly materials like stainless steel, glass, ceramic vessels, cloth bags, paper bags etc which can be reused by washing.

e) e-Waste Management

All electronic garbage, such as CPUs, hard drives, and laboratory equipment scrap, is sold on the market. Refill printer cartridges and laser toners are also encouraged at the college. CRT displays have been replaced with more energy-efficient LCD monitors. The UPS vendors recharge and repair the batteries.

f) Social Entrepreneurship, Swachhta& Rural Engagement Cell

Waste management is an essential part of environmental protection. Its purpose isto provide hygienic, efficient and economical solid waste storage, collection, transportation and treatment or disposal of waste without polluting the atmosphere, soil or water system. In the post-covid-19 scenario waste management in the campus and community/adopted villages is implemented by the college through Recognised SES REC (Social Entrepreneurship, Swachhta & Rural Engagement Cell)in line with the Action Plan by the ministry of education government of India. It includes waste audit, waste segregation, Reduction in waste-month-on-month, Recycling waste (paper, organic waste). Non-degradable materials like plastics are separated, washed, dried up and cleaned for recycling. Such materials are given to the local bodies for processing.

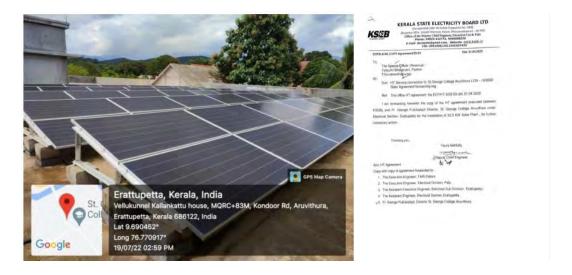




2) ENERGY CONSERVATION MEASURES

a) Solar Energy

The St. George's college Aruvithura has installed solar power plant having a capacity of 33.5 KW, to harvest solar energy and reduce dependence KSEB's power grid. The average energy consumption per month for the institution as per the demand notice from KSEB is about 4018 kWh, and when the solar energy is made available in the full-fledged form a major portion of this energy can be obtained from the solar.



b) Biogas Plant

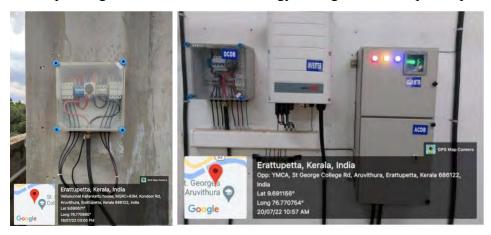
The college has recognised the potential of biogas plant as an effective way of dealing with canteen wastes. The food wastes from college canteen are put in to a biogas plant

which help to get rid of the wastes in an eco-friendly manner in addition to generating bio gas that can partially replace LPG for cooking.



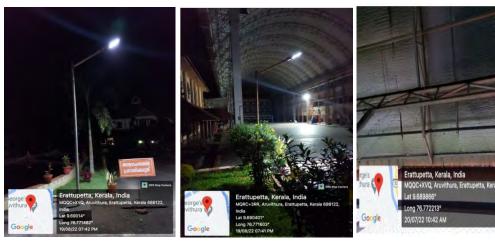
c) Wheeling to the Grid

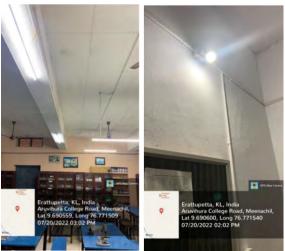
The power generated from the solar power plant is fed to the KSEB Power grid, as per the agreement between KSEB and St. George's college Aruvithura. This ensures no current produced from solar power plant is wasted when college is functioning with less power demand, like in weekend days. This wheeling of generated current to the KSEB power grid ensures maximum energy saving from Solar power plant.



d) Energy Conservation Measures

The institution has adopted different energy conservation measures such as sensor based central lightening systems, bubble wrap insulation for roofs and replacement of conventional tube lights and incandescent lamps with LEDs. All these measures help us in saving energy.





3)WATER CONSERVATION

a) Rain Water Harvesting

St. George's College Aruvithura is taking all the necessary steps to implement water conservation scientifically. Although the stream and adjacent areas have received abundant rainfall over the years, water scarcity is likely to become a severe problem due to climate change. In this context, the college made a lot of efforts to implement water conservation effectively.

The rainwater is scientifically harvested from the premises of the vast college campus through various means. The most important of these is the rainwater harvesting tank that can store about 1 lakh litters of rainwater is installed and the water from this tank is fed to different water tanks in the campus for daily usage. Also, rain water from roof tops are used for ground water level recharging, once the rainwater harvesting tanks are filled.







4) GREEN CAMPUS INITIATIVES

The institutional initiatives for greening the campus includes measures to reduce the carbon foot prints from the college. These initiatives includes

• Restricted entry of automobiles

The entry of students vehicle is strictly restricted inside the campus . students who are commuting by their own vehicles are instructed to park in the parking slot outside the college campus . Inside campus.Parking slots are available only to the Staff and nonteaching staff of the college . visitors vehicle are restricted beyond 150 meters from the entrance .signage are kept at vantage points restricting entry and parking

• Use of bicycles and electric vehicles

Students and staffs to use bicycles or eco-friendly battery powered vehicles while commuting to college . Many students and staff become part of this movement. Using of bicycles/ electric vehicles is environment friendly and prevents pollution

• Pedestrian friendly pathways ways

The institution has pedestrian friendly pathways . pathways inside the campus are well maintained . As part of beautification of the college flooring tiles were laid on the pathways . Ramps are also installed in certain points for easy walk of physically disabled students . Safety of the pedestrians is ensured as vehicles have restricted entry











Green landscaping with trees and plants: Carbon dioxide neutrality is
maintaining in the campus by planting different varieties of trees and plants.
College maintains gardens inside its premises. These lawns and the trees
provide shade and beautiful ambience. Under the supervision of botany
department, there is one butter fly garden in the college, providing a protective

environment for butterflies. The colleges also envisage its vital role in implementation of sustainable agriculture, for which a greenhouse cultivation has been set up in the college campus to provide students and general public with an insight into sustainable agriculture.







• Haritha Office

The college office follows green initiatives and green protocol and is a certified Haritha office .

5) Other Initiatives

• ini njan ozhukatte -Rejuvenation of river

As part of the program *ini njan ozhukatte* campaign for rejuvenation of river with student participation college celebrated river day by conducting river awareness seminar and planting bamboo trees in meenachil river bank.







Jalachetana

JalaChetana project is an Internal Quality Assurance Cell. St. George's College, Arucvithura led project in association with Meenachil River-Rain Monitoring Network (MRRM). The project is funded by Venugopal R Research Fund through the Meenachil River Protection council and Koll Science foundation.

The Meenachil River-Rain Monitoring Network (MRRM) is equipped with rain gauges and water scales across the 78 km river to monitor monsoon downpours and floods. MRRM is a citizen collective. The citizen collective comprises people from all walks of life including environmentalists, students, local body representatives etc. The objective of this project is to improve the lead times for flood alerts since Indian Meteorological Department (IMD) rain gauges are limited in number.

The MRRM-led rain reporters with the help of the district administration gave continuous public updates on the rainfall data, the height of the floodwater and location-wise problems.

Data collection in the long term will positively impact flood prediction and region-wise rainfall forecast and thus will aid mitigation measures.

Data collection and dissemination were done through WhatsApp and other social media platforms. This led the software development team at the Department of Computer Applications, St. George's College, Aruvithura to develop a web-based platform for collecting and disseminating data. Development of a User Interface (UI) is a challenging task since the web application is used by people with less technology exposure. A mobile application is also proposed for data collection and dissemination.

The platform can be accessed at https://jalachetana.in/

• Pachathuruth

The college maintains the Pachathuruth project in association with haritha Kerala mission. The trees are well maintained and monitored by the forestry club members of the college.





Clubs and Cells

Various clubs like Bhoomithra sena, Nature club, Birds club, Meenachil Rain-River Monitoring Network(MRRM), Climate action group etc help inculcating an appreciation of nature among students and encouraging them to participate in a variety of conservation initiatives.

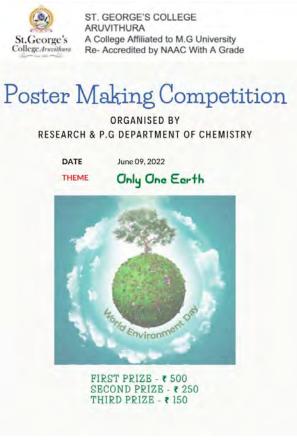


All these activities of the college aim at conservation and preservation of nature for good health and clean-living environment. It helps to reduce pollutions and provide environmental sustainability together with development. As students are the next generation citizens all the green practices of the institution help to inculcate among the students the need for conservation and preservation of nature for the sustainable development of the nation.

BROCHURES OF GREEN INITIATIVES AND RELATED EVENTS IN THE COLLEGE







ENVIRONMENT WEEK CELEBRATIONS

TEAM UP TO **CLEAN UP**

organised by **RESEARCH & PG DEPARTMENT OF CHEMISTRY**

On 2022 June 08 Time: 1.15 pm Infront of B.Sc Chemistry Lab

ST. GEORGE'S COLLEGE **ARUVITHURA**

Affiliated to Mahatma Gandhi University Kottayam Re-accredited by NAAC with 'A' Grade



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AFFILIATED TO MAHATMA GANDHI UNIVERSITY
RE-ACCREDITED WITH A GRADE BY NAAC

Department of FINANCESTAXATION

മണ്ണിൽ ഇറങ്ങാം പച്ച വിരിക്കാം ■

INTER DEPARTMENT പ്രസംഗ മത്സരം

09/06/2022 വ്യാഴാഴ്ച ഉച്ചകഴിഞ്ഞ് 2 മണിക്ക് സ്ഥലം: ന്യൂ സെമിനാർ ഹാൾ

1ST PRIZE



കൂടുതൽ വിവരങ്ങൾകും രജിസ്ട്രേഷന്യം:

STUDENT COORDINATOR ABY BENNY 9495978466

OUR PATRONS

Prof. Dr. Siby Joseph (Principal)



Organised By **Department Of Media Studies** In Association With

Environment Day Celebration



RULES AND REGULATIONS:

- 1. The Competition is open for all the students of our college.
- 2.Photos taken using mobile phones will only be considered as entries.
- 3.The work should be original and in case of any fraud activity, the entry will be disqualified.
- 4.The decision of the jury will be final. 5. Please ensure to upload quality photos.
- 6.Each contestant is responsible for the content of their work and for any possible copyright issues. 7.The committee has no responsibility towards any third parties. The jury has the right to rejct the entry, If the content or technical quality does not correspond to the terms and conditions.

FOR MORE DETAILS CONTACT: 9544637561

OUR PATRONS:

V.Rev.Dr. Augustine Palackaparambil, Manager Prof.Dr. Siby Joseph, Principal Rev.Fr. George Pullukalayil, Bursar & **Course Coordinator** Dr. Jilu Ani John, Vice Principal

THEME PLASTIC

DEADLINE

June 10 Before 5.00 pm

Submit Entries To: mediastudies@sgcaruvithura.ac.in occult CREATOR DESIGNS





Affiliated to Mahatma Gandhi University Re-accredited by NAAC with 'A' Grade







Sri. C. R. Neelakandan



V. Rev. Dr. Augustine Palackaparambil

Prof. Dr. Siby Joseph

Rev. Fr. George Pullukalayil Bursar & Course Coordinator Dr. Jilu Ani John Vice Principal



Total prize worth 2000 Rs for best 3 entries

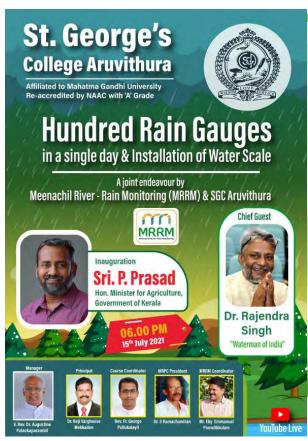
Transform waste such as paper, cardboard, wood, plastics, electronic components and rubber into works of art.

Submission Last Date: 15/6/2022 Submission Link

https://forms.gle/Mk39pxuNUE4FYFhX8

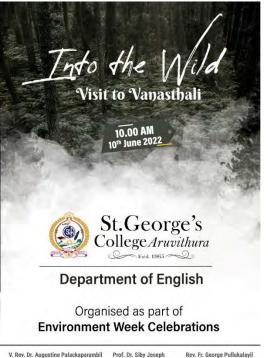












V. Rev. Dr. Augustine Palackaparambil Manager

Rev. Fr. George Pullukalayil Course Coordinator







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Inauguration of ACHET

A project of Internal Quality Assurance Cell (IQAC) With the support of Meenachil River - Rain Monitoring Network (MRRM)



Inauguration



Dr. Roxy Mathew Koll **Indian Institute of Tropical** Meteorology, Pune

10.30 AM 29th July 202<u>2</u>

Venue: **College Seminar Hall**

Presided over by



V. Rev. Dr. Augustine Palackaparambil

Prof. Dr. Siby Joseph Principal

Rev. Fr. George Pullukalayil Course Coordinator

Dr. Jilu Ani John Vice Principal



Affiliated to Mahatma Gandhi University Re-accredited by NAAC with 'A' Grade

Department of Botany in association with Organic Farming Club

St.George's College Aruvithura

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WORLD RIVER DAY CELEBRATION Seminar on

IMPACTS OF CLIMATE CRISIS

ON WATER SECTOR

Nadheevandhanam

Organised by, IQAC SGC Aruvithura in association with Meenachil River Protection Council

> Inauguration by Sri. S.P. Ravi

V. Rev. Dr. Augustine Palackaparambil

26th Sept 2022

11.00 AM

Webinar on:

Compost as a source of microplastics in the soil environment







Prof. Meththika Vithanage (Highly Cited Researchers™) Director, Ecosphere Resilience Research Center University of Sri Jayeward Sri Lanka

> Co-ordinators: Mr. Joby Joseph Dr. Abin Sebastian botany@sgcaruvithura.ac.in



Estd. 1965









