#### **Best Practice – 1**

### Title of the practice: Sanjeevanam- Environnemental promotional activities

### **Objectives:**

- 1. Promote Environmental Awareness
- 2. Encourage sustainable practices
- 3. Protect and Enhance Biodiversity and Greenery
- 4. Incorporate environmental education into the curriculum
- 5. Extend environmental initiatives beyond the college campus
- 6. Maintain a clean and hygienic campus environment
- 7. Monitor and evaluate the impact of environmental promotional activities
- 8. Recognize and celebrate the achievements
- 9. Empower students to take leadership roles in planning and executing environmental promotional activities.
- 10. Support research and innovation in the field of environmental science and sustainability

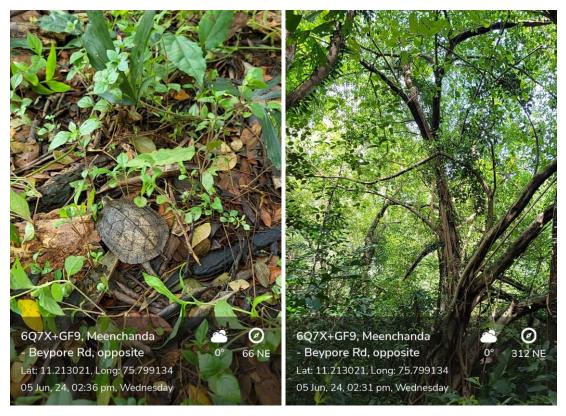
#### Supporting documents:

#### 1. SANJEEVANI BOTANICAL GARDEN

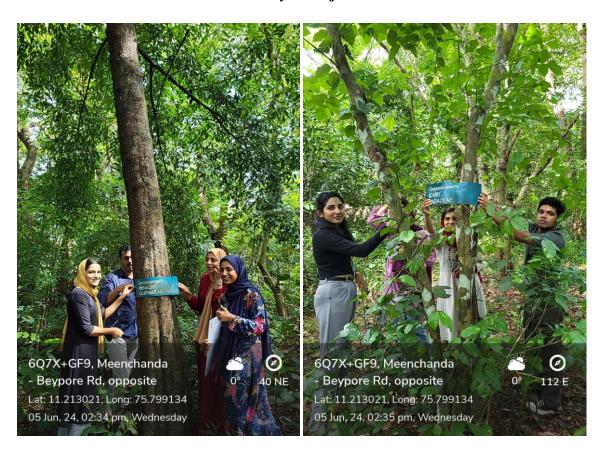
The 'Sanjeevani Vanam' ('Sanjeevani' Botanical Garden) was started in 1992, as a medicinal plant exhibition garden, under the social forestry programme of Asst Conservator of Forest, Kozhikode. The garden was named so in 2004. It was handed over to the Dept of Botany, Govt Arts & Science College on 28th November 2012 as per order No. C-1522 dated 20-10-12. The garden consists approximately of one hectare land and is an abode of naturally growing trees, planted medicinal trees and shrubs, Nakshatra and Rashi plants etc. This lush green mini forest is a blessing to our college as well as to the neighbourhood as it is located at a heavy traffic ridden area in the heart of the city. The highlight of 'Sanjeevani' is the 'Nakshatra Vanam' or Star Plants Collection. It is a collection of 27 tree species which represent 27 birth stars as per Malayalam calendar. The 'Sanjeevani garden' provides an excellent natural habitat promoting a rich biodiversity of Bryophytes, Pteridophytes and Fungi.



**Entrance to Sanjeevani vanam** 



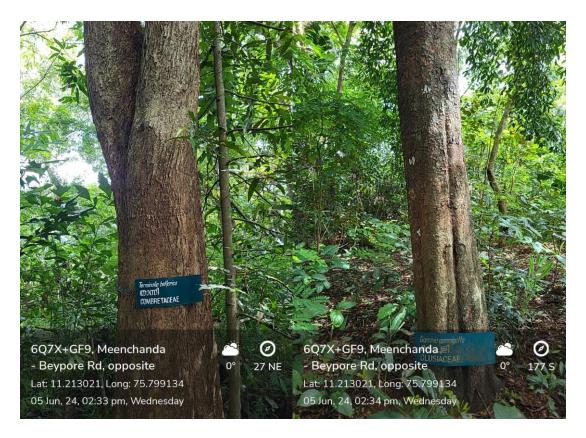
Biodiversity in Sanjeevani Vanam







Sanjeevani Vanam is well maintained by the students and the staff



Nakshatra Vanam (Trees representing the 28 birth stars)



Herbal garden maintained in the sanjeevani vanam

### 2. THE GOLDEN JUBILEE EXHIBITION QUEST 2019

A three day exhibition was conducted in co-operation with all staff and student of the college, in connection with golden jubilee of the department on 5<sup>th</sup> to 7<sup>th</sup> December 2019. The exhibition was funded by DCE, Kerala and college development council. The exhibition was inaugurated by Dr. Manash Bagchi, Curator and project coordinator, Regional Science Center and Planetarium, Calicut. The exhibition consisted of 52 stalls. All science departments, NSS, palliative care unit, nature club, E D club of the college were participated with respective stalls. Invited stalls included wildlife photographs of Vijesh Vallikkunnu and MNHS; nature calendar of award winner photographer, Mr. Prasoon Prakash; stall with biodegradable and recycled stationary items by Swasthy foundation; aqua-pet show by Aviculture association of Kerala; Native cattle breeds by Vrindavan gosala, Perambra; bee keeping and apiary products by Aboobacker; stalls from ZSI, Calicut; fossil collection from CUK, Kasargode; medical exhibition by Govt. medical College, Calicut; exhibits from KVASU, Pookode; collection of more than 125 bird nests by P V Pathmanaban, Payyanur; CWRDM, Calicut; IRTC, Palakkad; Dental care checkup camp by KMCT, Dental college, Calicut; KMCT Ayurvedic medical stall; CPCRI, Kasargod; KFRI, Peechi; CMFRI, Calicut; Exhibition bus from Regional Science Centre, Calicut; Ghandi@150 by Mathrubhoomi; handicraft stall from Sri. Abdul Karim (faculty of English, GASC, Kozhikode), Fire and Rescue department, Calicut; MILMA and food court by the students of Commerce and Hindi departments.

The exhibition was open to school and college students and also for general public. 8260 students from 40 schools and seven colleges were visited the exhibition in addition to our college students. 3700 general public were also visited the exhibition. The response from the side of visitors was great.



**QUEST 19** 









SCHOOL STUDENTS VISITING QUEST -19



QUEST-19: COLLECTION OF BIRD NESTS









QUEST-19: SUTDENTS VISITING ZOOLOGY MUSEUM





QUEST-19- PLANATARIUM





STALL BY BOTANY DEPARTMENT







VECHOOR DWARF & KASARGOD DWARF STALL BY HISTORY DEPARTMENT





QUEST 19-: WILDLIFE PHOTO EXHIBITION





**QUEST 19: PET SHOW** 

The stall by the department of Botany highlighted various plant group representatives. Vast number of hydrophytes and succulents were exhibited. Insectivorous plants were a major attraction. Instruments, fossil slides, medicinal plants, ornamental plants were also exhibited.









### 3. GREEN PROTOCOL INITIATIVES IN THE CAMPUS

Steel glasses are reusable and durable containers that eliminate the need for disposable plastic cups or bottles, thus reducing plastic waste. Unlike some plastics, they do not leach harmful chemicals into beverages, promoting safer drinking options. Our institution uses steel glasses for all programmes such as seminars, workshops, PTA meetings etc. to reduce paper glass waste and to promote sustainability.





# 4. PLANTING OF TREE SAPLINGS

The college has successfully planted over 500 trees in and around the campus, contributing to a significant increase in green cover.



Tree planting inside and outside the campus





Teachers planting trees in the occasion of their retirement

### 5. OBSERVING DAYS OF IMPORTANCE

Days of importance including world earth day, Wetland day, World water day, World environment day and Energy week are duly celebrated.

#### WORLD ENVIRONMENT DAY CELEBRATION

On 05/06/2021, as part of World Environment Day, the department of Chemistry conducted an Interdepartment Digital Poster making Competition on the topic 'Human and Nature'. 3rd year student,

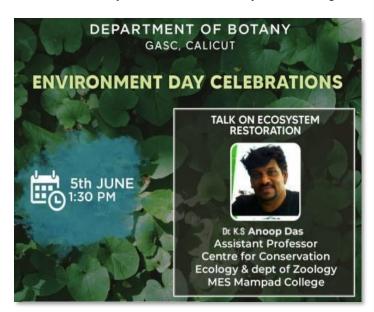


pictures shared by the students of them planting trees, making paper bags and other craft works. The active participation of both teachers and students made the event a success. Basil P.K. of the Chemistry Department, was selected as the winner. Also, Second year students made a video compiling the

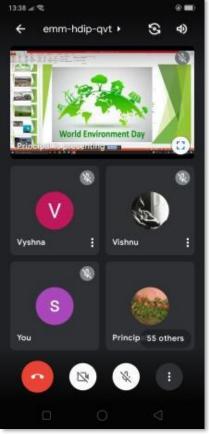




Environment Day was celebrated by conducting an



Interdepartmental Photography Competition based on "Safeguarding Our Earth starts with You" and a talk on the 2021 theme. Dr. KS Anoop Das, Assistant Professor, Head and Research Supervisor at Centre for Conservation

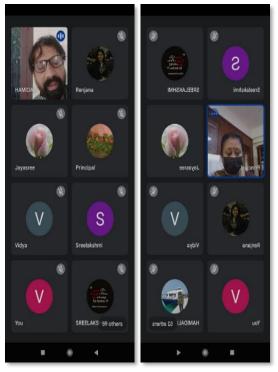


Ecology, Department of Zoology, MES College Mampad, was the chief guest. His talk on "Ecosystem Restoration' accompanied by powerpoint presentation, lasted for about one hour. Final Year student Ms Shahana Sherin delivered the vote of thanks.

#### **WORLD WETLAND DAY CELEBRATION:**

A webinar was organised by the Department of Botany on 05-02-2022 with Sri Hamidali Vazhakkadu (Chairman, Friends of Nature; District Co-ordinator, National Green Corps under MoEFCC, Govt of India) as the chief guest. The speech was highly motivating and enlightening. Sri Hamidali stressed the importance of keeping the wetlands intact and clean.





Department of Botany celebrated World wetland day by organising an interdepartmental Poster making competition based on "Wetlands Protection & Restoration" on 02.02.2019. Students and faculty members visited Kadalundi-Vallikunnu Community Reserve. In addition to boating, a class on the vegetation and migratory birds was handled by Mr. Chandrasekharan.





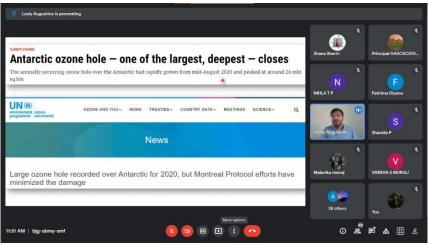




World Ozone Day celebration (September 16): Observed World Ozone day on 18-09-2021 by conducting a webinar cum short film screening. Dr Lesly Augustine, Asst professor, PG & Research Dept of Botany, Sacred Heart College, Thevara delivered a talk on "Ozone, an 'Oh', zone!". The short film shown was much relevant and thought-provoking, a warning about the future impacts if we continue neglecting the alarming climate change happening around us.

### Ozone day celebration





#### Wild life week celebration



#### **6. AWARDS AND RECOGNITIONS** (certificates to be added)

The college won National, State level and university level awards for extension activities. Government Arts and Science College, Kozhikode NSS unit has proudly bagged Nation's prestigious award for the best NSS Unit and Programme Officer for the academic year 2017-18. The unit is empowered with the vision of rendering democratic living and selfless service. The exemplary service of NSS volunteers and programme officers is recognised countrywide. And our NSS units conducted a programme in the campus to facilitate the winning of national award by Dr. Baby Sheeba, the best programme officer, Reja Fathima and Awsin, the best volunteers on 26.08.2019. Principal Dr. S. jayasree, Dr.Munneer C P were present in the programme.









## 7. <u>CLEAN BEACH DRIVES</u>

Swachatheeram-Extension Activity Of Economics Students At Kozhikode Beach (2019-2020) On 23-02-2019

The cleanliness and preservation of natural resources are vital for the well-being of

communities and the environment. Recognizing this, students of the Economics Department undertook a significant initiative to clean and





restore Kozhikode Beach on 23-02-2019. The initiative began with identifying the areas of the beach that required cleaning, estimating the resources needed, and establishing support and assistance from local community. On the designated day, students gathered at Kozhikode Beach equipped with gloves, trash bags, and other cleaning materials. The programme was inaugurated by Dr.Savitha K., HOD. Dept of. Economics. The students collected and disposed litter, plastic waste, and other debris from the beach and its surroundings. Along with cleaning students conducted an awareness campaign, educating the beachgoers about the importance of keeping the beach clean and adopting sustainable practices. Through their

strenuous efforts, the students succeeded in cleaning up a significant portion of Kozhikode Beach, making it more aesthetically pleasing. The initiative generated considerable awareness among the local community about the importance of environmental conservation and the detrimental effects of littering and pollution.

### **CLEAN BEACH**

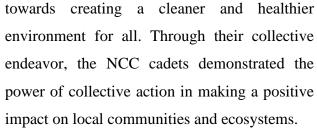
As part of District Administration Flagship Programme, 'Clean Beach', college NSS units joined hands with "Clean Beach" team and actively involved in the cleaning mission organised at Beypore, Kozhikode south and payyanakkal beaches. The NSS units were specially recognised by the district authorities for the active involvement of students and staff in the programme.



**BEACH CLEANING BY NCC CADETS** 

On April 4th, 2022, NCC cadets from Government Arts & Science College Calicut undertook a commendable initiative by participating in beach cleaning activities at Calicut beach. Their concerted efforts exemplified their commitment to environmental stewardship and community service. With dedication and enthusiasm, they worked tirelessly to remove litter and debris from the shoreline, contributing to the preservation of marine ecosystems and the beautification of the coastal area. Their proactive engagement not only underscored the importance of environmental conservation but also inspired others to take similar actions







#### CLEANING OF KADALUNDI MANGROVE COMMUNITY RESERVE

On February 7, 2019, our students organised a cleanup effort in the mangrove woods of Kadalundi



Community

Reserve, which had been contaminated by discarded plastic garbage. The group consisted of Bhoomitrasena students who

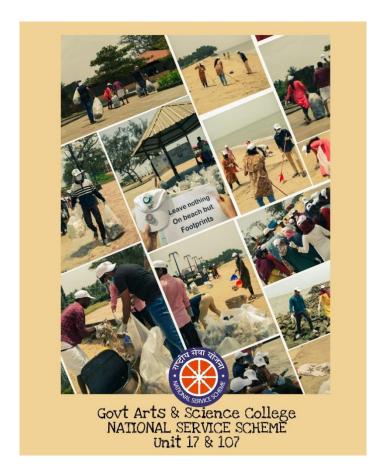




performed the sanitation. The students went to the mangroves in the Balathiruthi area, where they gathered and disposed of accumulated waste materials such as broken glass and plastic bottles, used paper products, and used sandals. Under the guidance of Mr. P. Sreenivasan, Chairman of the Community Reserve, and Dr. Abdul Riyas and Dr Vidya Varma, Assistant Professors at the college, the cleaning operation was carried out.

#### BEACH WALK-SUCHITHWA SAAGARAM SUNDARA SAAGARAM

A Beach Walk was organized by the Fisheries department as part of "Shuchithva Saagaram Sundara Theeram" Campaign. The campaign aimed at transforming the sea and the beach into a plastic-free area. The Beach Walk commenced from the Beypore Fishing Harbour and ended at Beypore Beach Marina. Officials from Harbour Engineering Department, Fisheries Department and Police Department, students from Fisheries School, NSS volunteers of Govt. Arts and Science College Calicut, Members of *Theeramaithri*, *Malsyafed*, members of ESAF took part in the campaigne.



# 8. <u>OPTIMUM UTILIZATION OF ENERGY RESOURCES</u>

Instasllation of 30 kW solar panel, biogas plant, use of LED bulbs and energy efficient equipments, Rainwater harvesting units, automatic water flow-controller, paper-less transactions and sprinkler irrigation system contributes towards optimum utilization of energy resources.

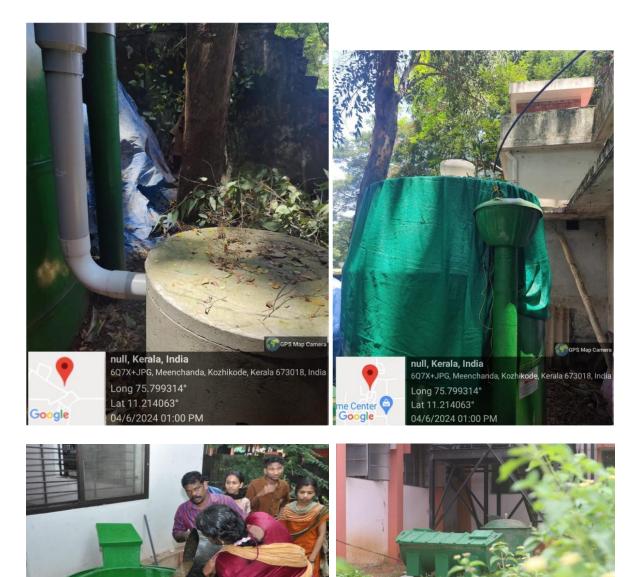
# **On-grid Solar Panel Installation**

30 KW on grid solar power plants are installed in golden jubilee building and is connected to distribution system of Kerala electricity board from 2021 onwards. Another solar power plant is installed in main building, both reduces electricity bills considerably.



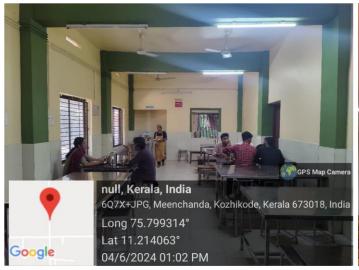
# **Biogas Plants**

Biogas plants installed in the campus and hostel also serves as renewable energy sources. Biogas slurry is used as organic manure for vegetable cultivation.



# USE OF LED BULBS AND TUBES

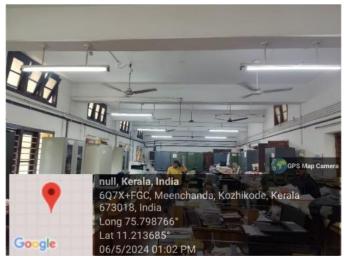
All the existing tube lights, incandescent bulbs, at the time of expiry will be replaced by LED bulbs and tubes.











# **LED Assembling Unit**

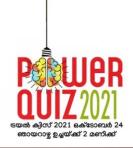
An LED assembling unit is running under the department of Physics. The unit produces LED bulbs and tube lights required for the institution. Products are available to staff and students in 'Arts Bazar'.



## **Awareness Programmes**

Energy usage awareness programmes are regularly conducted in association with bot gernmental and non-governmental organisations. Power quiz is conducted every year to make awareness about efficient energy usage, by the college in collaboration with KSEB. The solar panels & biogas plants installed in the campus provides awareness about alternative energy sources. Power quiz for the year 2022-23 was jointly organized by dept. of physics & kseb officer's association on 20/10/22 1.30 PM.

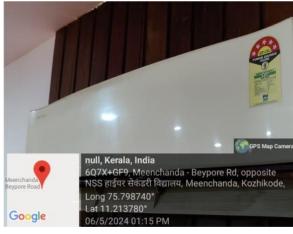




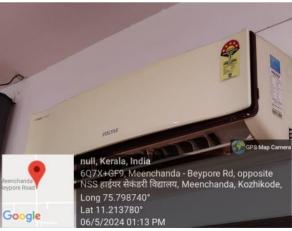
# **Energy efficient equipments**

No air conditioned buildings are there in the campus. Only the Principal room, seminar hall and IQAC room are air conditioned with 5-star rated air conditioners. Other rooms are provided with fans.







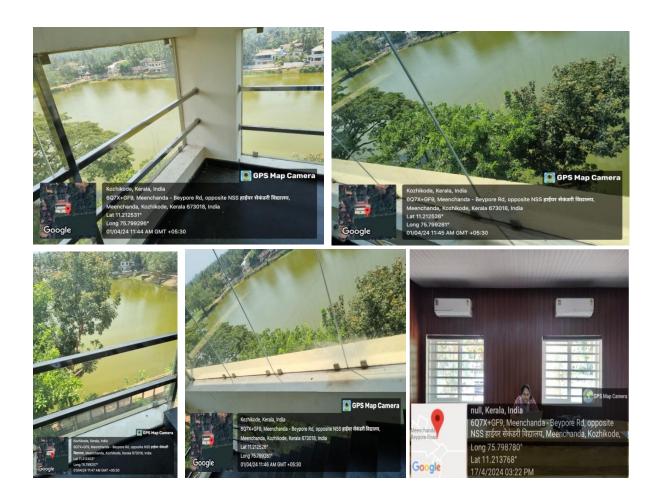


Power rooms and generator room are well maintained in the campus





The construction of buildings prioritizes air circulation and natural daylight to reduce reliance on fans and artificial lighting.

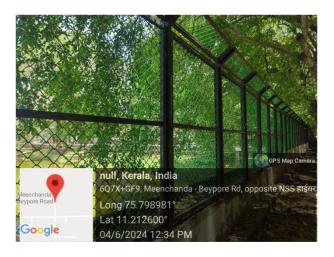


Proper air ventilation is ensured in both the auditorium and seminar hall to facilitate the clear passage of fresh air.



# 9. PROMOTING CAMPUS BIODIVERSITY

The presence of Thiruvachira pond and the maintenance of Sanjeevani vanam, nakshathra vanam, Herbal garden, Flower garden, butterfly garden, pond and other green spaces has attracted a variety of local fauna, enhancing campus biodiversity.



Thiruvachira Pond

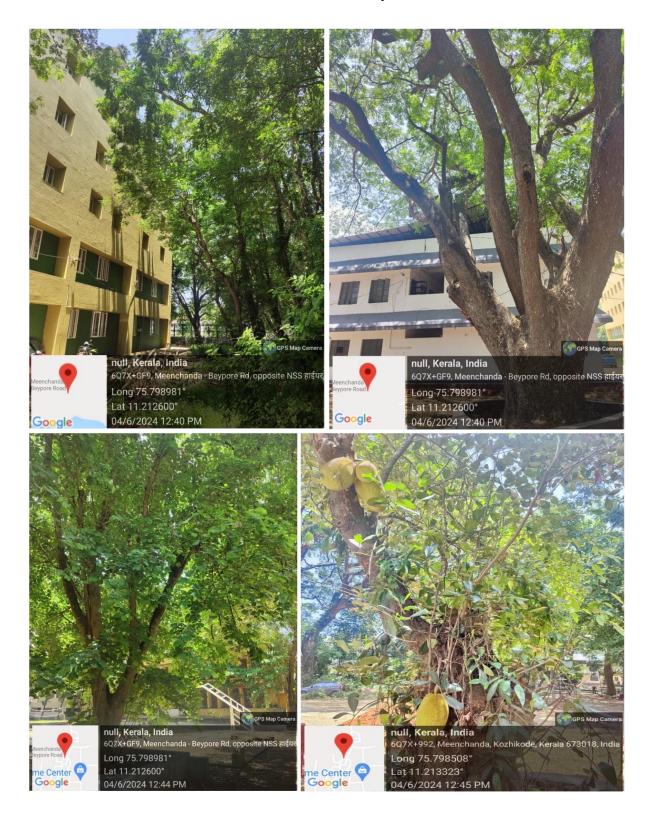
## **BUTTERFLY GARDEN MAINTENANCE**

Students of Department of Zoology undertook the regular maintenance of the butterfly garden in front of the Main Building of our college. Maintenance of butterfly garden in the campus provides essential habitats and food sources for butterflies, helping to support their population.



### Landscapping

The college actively coordinates cleanliness activities and maintains beautiful landscape with the help of clubs and committees both within and outside the campus. It maintains cleanliness in accordance with the vision of 'Swatch Bharath Abhiyan'.



# Establishment of aquarium and water plants

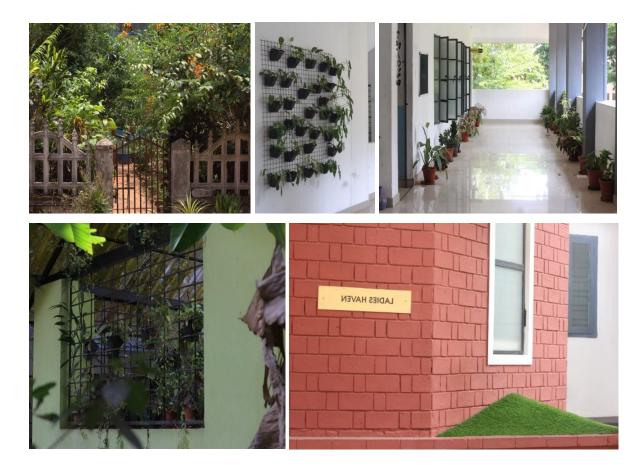
The departments of botany and Zoology maintains aquariums and diverse water plants. There is an open pond in the middle of the garden near the science block.





Establishment of lawns, trees, herbs, shrubs, and climbers on the campus

The college maintains lawns, garden, Zodiac garden, butterfly garden and vertical garden.



### Establishment of terrace garden and kitchen garden

A terrace garden is maintained near the college office. Vegetable gardens are maintained by NSS, Bhoomithrasena and Karshaka sangham.



# 10. <u>CLEANLINESS DRIVES WITHIN THE CAMPUS (PHOTOS TO BE ADDED)</u>

Regular cleanliness drives, supported by 8 permanent cleaning staff and 2 temporary staff, have maintained a clean and hygienic campus environment.

# 11. WATER CONSERVATION STRATEGIES

Thiruvachira pond serves as a water resource for the college's surrounding area.



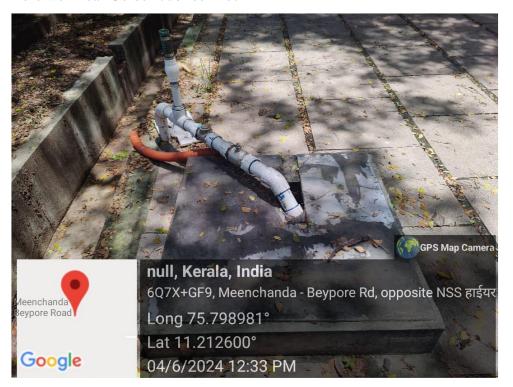
Main well and pump house near physical education department



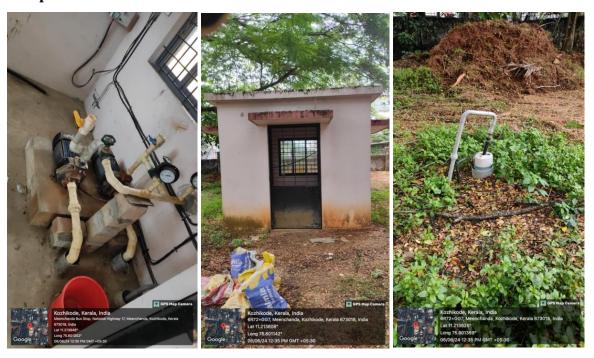
Open well near science block



### Bore well near Golden Jubilee Block



# **Pump house near Ladies hostel**



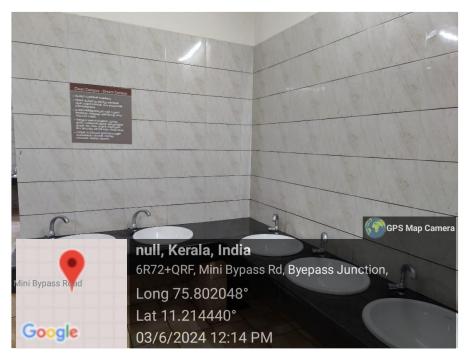
#### Rainwater harvesting unit

Rainwater harvesting unit have been constructed near the science block to collect and store rainwater, providing a sustainable water source during the hot summer seasons.



### Washbasins with instructional signboards

Signboards near wash areas educate students about the critical importance of conserving water and encourage minimal usage.



#### Sprinkler system for irrigation

A sprinkler irrigation system has been installed in the science building garden to reduce water usage and educate students about new irrigation methods. The pond within this garden is one of the only open water bodies on campus, apart from the two main open wells. Guppies are grown in this pond to control mosquito growth.



#### Water tanks and taps

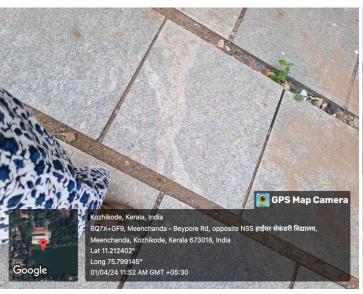
Ground water is stored and distributed in an efficient manner within the campus.



#### Construction of bunds and pathways

Limiting the construction of interlocking areas within the campus preserves space for rainwater storage, aiding groundwater replenishment. Bunds are strategically built to facilitate groundwater retention. Pathways are designed to enable convenient movement during rainy seasons, enhancing cleanliness for students and staff alike.







A sprinkler irrigation system has been installed in the science building garden to reduce water usage and educate students about new irrigation methods. The pond within this garden is one of the only open water bodies on campus, apart from the two main open wells. Guppies are grown in this pond to control mosquito growth.



#### Distribution of RO water to staff and students

Water dispensing units are placed in appropriate places to provide good quality drinking water to students, staff and public.

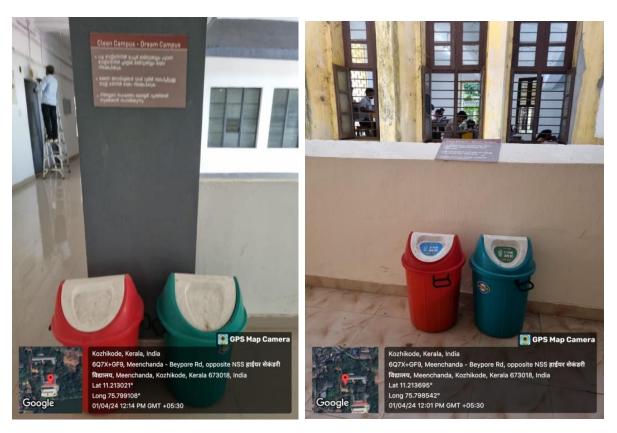






#### 11. WASTE MANAGEMENT WITHIN THE CAMPUS

Waste bins are strategically placed across the campus to facilitate waste collection. Redcolored bins are designated for plastic waste, while green-colored bins are for non-plastic waste. Additionally, separate bins are positioned near wash areas specifically for food waste collection. Instructional signboards placed near these waste bins help educate students about proper waste management practices.



Food waste is processed by using biogas plants on the campus. Two biogas plants are located within the college campus, and another is situated in the hostel campus. The biogas produced is used for cooking purposes in the college canteen and hostel mess. The biogas slurry produced is utilized as organic manure for farming purposes.



Plastic waste is collected, sorted, and then handed over to the Haritha Karma Sena of the Kozhikode Corporation for recycling.



There are 8 permanent cleaning staff, 2 temporary staff members, and one permanent gardener to ensure that the campus remains green and clean. In addition, The campus undergoes regular cleaning initiatives led by various clubs and committees such as CSS, NSS, NCC, and Bhoomithrasena.







Google





# GOVT. ARTS & SCIENCE COLLEGE, CALICUT - 18

[Re-Accredited to NAAC with B<sup>++</sup> Grade] Email Id: gasckkdprincipal@gmail.com Ph: 0495-2320694

Dated: 08/05/2022

# AGREEMENT BETWEEN GOVT. ARTS AND SCIENCE COLLEGE CALICUT AND KOLLAMPARAMBIL LIVESTOCK FARM

This agreement is entered into on 08/05/2022, between Govt Arts and Science College Calicut, located at Meenchantha, hereinafter referred to as the "College," and Kollamparambil Livestock farm located at Chulliyod, Nenmeni (Liscence number: A2-7774/20), hereinafter referred to as the "Farm."

#### Background:

- 1. The College generates a significant amount of organic waste, primarily from its hostels, which includes food waste and other organic materials.
- The Farm specializes in pig farming and need source of food at free of cost.
- Both parties seek to collaborate for mutual benefit and environmental sustainability.

#### Purpose:

The purpose of this agreement is to establish a framework for the collection and disposal of organic waste generated by the College's hostels to the Pig Farm.

#### Terms and Conditions:

- 1. The College agrees to segregate organic waste from other types of waste generated in its hostels.
- 2. The Farm agrees to provide containers for the collection of organic waste at designated locations within the College hostel premises.
- The college hostel shall ensure that the organic waste is collected and transferred to the Farm on a regular basis, as agreed upon by both parties.

- 4. The Farm shall be responsible for the transportation of the organic waste from the College hostel to its facilities.
- The Farm shall use the organic waste in an environmentally friendly manner, adhering to all relevant regulations and standards.
- The College shall have the right to inspect the Farm's facilities and processes related to the composting of organic waste to ensure compliance with agreed-upon standards.
- This agreement shall be effective for a period of 2 Years, unless terminated earlier by mutual consent or due to breach of terms.

#### Benefits:

- The College hostel reduces its environmental footprint by diverting organic waste from landfills and promoting sustainable waste management practices.
- 2. The Farm gains a reliable source of food at free of cost for pigs.
- Both parties contribute to the promotion of environmental sustainability and community engagement.

Govt. Arts and Science Coule C

Biju M Break (2017)

Kollamparambil Livestock Farm

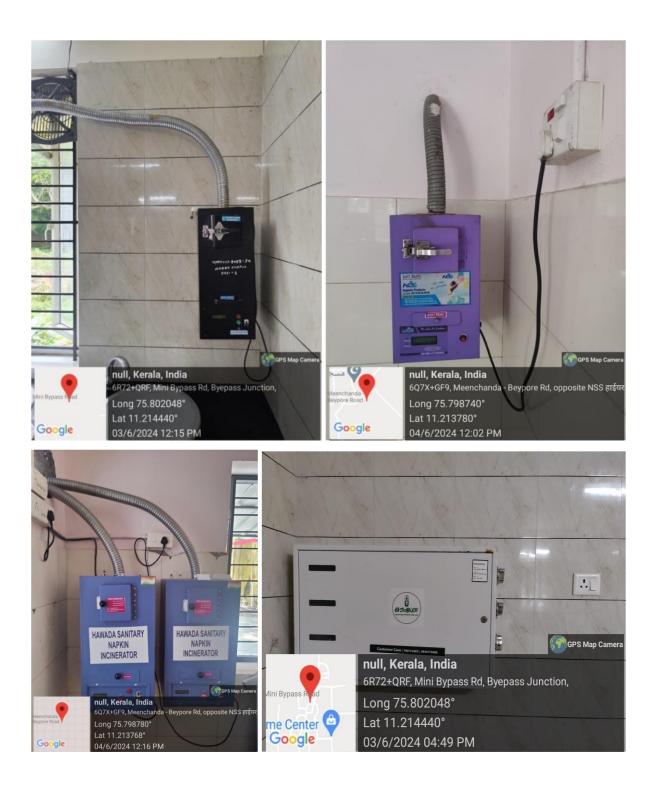
Chulliyod, Nenmeni

This agreement sets forth the entire understanding between the parties and supersedes all prior agreements and understandings, whether written or oral, relating to the subject matter herein.

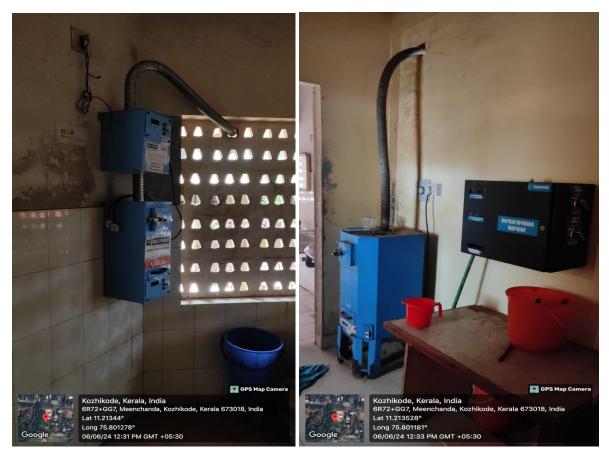


### Sanitary napkins /Incinerators

Napkin vending machines and incinerators are placed in the Ladies' Haven, Golden Jubilee Building ground floor and third floor, as well as the ladies' hostel, to handle used sanitary napkins.

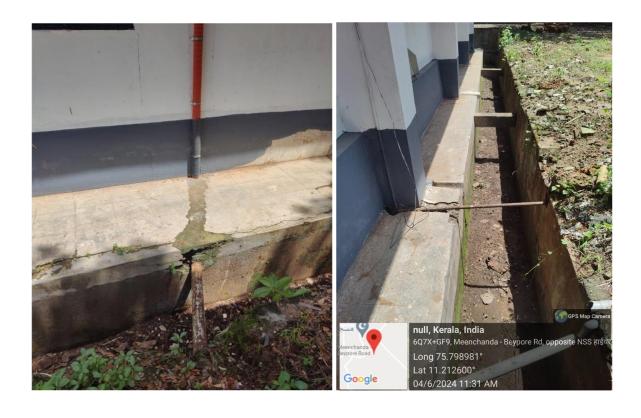


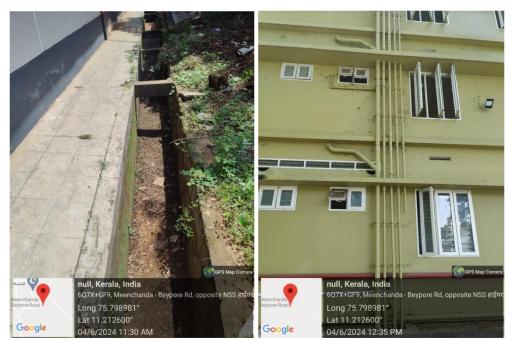
Incinerators and napin vending machines are installed in the ladies hostel.



## **Liquid Waste Management**

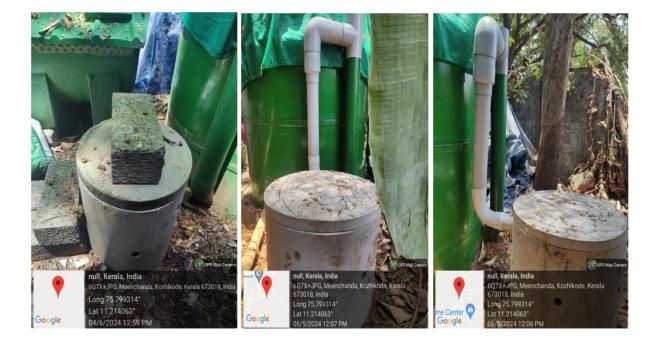
Drainages were well maintained in the campus to manage wase water. Separate waste pit is constructed to collect waste water from chemistry lab.





#### **Composting pits and Vermicompost Unit**

Two biobins are placed near the canteen building which serves as composting pits. The biodegradable waste, which can't be handled with biogas plant, is converted to bio-manure by using these biobins.



#### Control measures taken for mosquitos, vectors, and predators

The pond within the garden near science block is the only open water body on campus, apart from the two main open wells. Guppies are grown in this pond to control mosquito growth.



# 12. THE INSTITUTION HOSTED STATE-LEVEL BIODIVERSITY CONFERENCE FROM 18.02.2022-20.02.2022

Second edition of the State Biodiversity Congress organised by the Kerala State Biodiversity Board in collaboration with Govt. Arts & Science College Calicut was conducted 18-20 February 2022. The Congress which began on Saturday (18/02/2022) with a biodiversity exhibition on the campus of the Government Arts and Science College Calicut is being held under the theme 'Biodiversity and Livelihood'. The biodiversity exhibition was inaugurated by sri. A K Saseendran ( Honorable Minister of Forest and Wildlife ) The exhibition consisted of around 125 stalls – from Government institutions , Semi Government and Private NGOs., non-timber forest products, rare medicinal plants & plant products, traditional products with GI status, kudumbasree products etc. The exhibition was open to school and college students and also for general public. The response from the side of visitors was great.

The congress was inaugurated by Sri. Pinarayi Vijayan , Honorable Chief Minister on Sunday (19/02/23). CM called for a collective effort of the local bodies and citizens to protect biodiversity and stressed the need for collective missions. The Chief Minister in his address stressed the need for ensuring livelihood of the local population while conserving biodiversity.

The Congress features several sessions and events related to the theme as listed below

- Custodian Farmers meet 19/02/23
   A meeting of farmers who actively maintain, adapt and disseminate agricultural biodiversity
- 2. Workshop on 'Conservation of Biodiversity for Women Empowerment and Livelihood' 19/02/23
  - a session for selected local body representatives and organisations working for the conservation of biodiversity
- 3. T. S.G. Meet Technical support Group meeting a group of experts who will provide technical inputs and advice to the BMCs on the identification and conservation of biodiversity
- 4. Children's Biodiversity Congress- state level competition for high School and higher secondary students
- 5. Valedictory function Padmasree M.C Dathan was the chief guest



Honorable Chief Minister Sri. Pinarayi Vijayan inaugurating the Biodiversity Congress 2023.



Biodiversity exhibition Inauguration-  $\mathbf{Sri.}$  A  $\mathbf{K}$  Saseendran ( Honorable Minister of Forest and Wildlife )



Publicity & paper cuttings



#### School students @ Exhibition ground



No.083/A15/2024/KSBB

#### CERTIFICATE OF APPRECIATION

This is to certify that **The Principal**, **Govt. Arts and Science College**, **Meenchanda**, **Kozhikode**. is hereby recognized for your exemplary efforts and dedication in organizing and conducting the  $2^{\rm nd}$  Kerala State Biodiversity Congress (KSBC) at the Government Arts and Science College, Kozhikode in association with the Kerala State Biodiversity Board (KSBB) on  $18^{\rm th}-20^{\rm th}$  February, 2023. Your tireless commitment and invaluable contributions have played a pivotal role in the success of this congress, which aims to enhance biodiversity awareness and promote sustainable practices. We extend our heartfelt gratitude and appreciation for your remarkable service and dedication.

Signed by
Dr. Balakrishnan V
Date: 12-06-2024 15:50:13
Member Secretary

Date: 12-06-2024





































# 13. OUTREACH PROGRAMMES IN COLLABORATION WITH GOVERNMENT AND NON-GOVERNMENT AGENCIES

NSS special camp 'Kutturuvam' was conducted at Eangappuzha MGM HSS from 26.12.2022 to 01.01.2023. On 27.12.2022, NSS volunteers cleaned the 'Wayanad hillways' by clearing all plastic wastes and other wastes. As part of the camp, NSS volunteers cleared the check dam in Eangappuzha, on 28.12.2022-29.12.2022, by removing sand and other wastes. NSS programme officer led the work.



On 30.12.2022 and 31.12.2022, NSS volunteers cleaned the 'Vanaparvam' and its surroundings. On 01.01.2023, NSS volunteers developed a flower garden in front of the school courtyard and cleaned the school surroundings.

#### **DECONTAMINATION OF KUTTIADY KANAL**

The NSS special camp for the year 2018-19 was conducted at the Government Physical Education College, East Hill. As part of the camp, students cleaned a section of the Kuttiady Canal near Vengeri and Karap Parambu under the project 'Jeevajalam'. The work was very helpful in revamping the normal flow of water through the canal. The project was much appreciated by the public and the Kozhikode Corporation.



NSS volunteers cultivated north-indian vegetables in three places Atholi, SaradaMandiram and Kolathara of Kozhikode district in theyear 2018-19. This initiative aligns with the NSS objectives of developing a sense of social and civic responsibility among students while promoting community development and sustainability. Students gained hands-on experience in agriculture, learned about different farming techniques, crop management, and sustainable practices. Students and faculty learned about the adaptability of North Indian vegetables to the local climate and soil conditions, which contributed to their academic knowledge.





#### **OPEN POND CLEANING**

NSS volunteers cleaned a public open pond at Atholy grama panchayath in connection with a two day camp conducted at the Adwaithasramam in Atholy. The Pond was handed over to the public for use and the work was greqatly appreciated.



#### Zoology museum visit by differently abled students

A group of 65 differentially abled students and five escorting staff had visited our museum on 14/03/2022. The program was organized in collaboration with Samagra shikshan Kerala (SSK). The team was lead by Mr. Praveen Kumar Block Project Cordinator (BPC) of SSK, Kerala. A session explaining the details of museum specimens was taken by Dr. U K A Saleem, HOD of the department.







#### PUBLIC AWARENESS PROGRAM FOR WATER CONSERVATION

In association with Kozhikode Corporation our NSS team actively involved in awareness program for water conservation and cleaning of Mundakanthode in Beypore. NSS volunteers visited more than 100 houses in the village and explained them about the seriousness of pollution of Mundakan thodu and importance of cooperating cleaning mission. NSS volunteers took the comments of locals and reported to authority. After campaigning mission volunteers involed in cluster formation for cleaning process. NSS unit have been associating with corporation officials since in the beginning of the project.









#### WATER FOR BIRDS

NSS units have organized an online campaign 'water for birds'during April-May month of 2020, the Lockdown period. All NSS volunteers set hanging water pots in their locality and photos were shared.







#### 14. NATIONAL SEMINARS, FIELD TRIPS AND AWARENESS PROGRAMMES

\_National seminar sponsored by DCE: Two day national seminar was organized by the Department on 26 & 27 September 2018 on the topic "Environment and Food safety: Impact of Human interventions". The seminar was inaugurated by Dr. V. S. Ramachandran, Professor (Retd), Bharathiyar University, Coimbatore. Dr S. Jayasree, Principal of our College presided over the

function. He donated a copy of his book "Ferns and Fern allies of the Nilgiris, Tamilnadu" to our department. Dr C. A. Jayaprakas, Principal Scientist & Head, Crop protection division, CTCRI, Thiruvananthapuram handled two sessions "Impact of synthetic pesticides on man and environment" and "Scope of green pesticide from Cassava. On 27th Senior geologist T. Mohanan conducted a class on 'Natural Calamities', Drissia T.K. Senior scientist dealt with the topic 'Flooding-the need for preparedness" and Aleyamma P. K., Asst. Commissioner of food safety Kozhikode shared her views on 'Food safety act: the present scenario of food safety'.











A Two day National seminar was organized on the topic LIFE AFTER THE DELUGE- IMPACT OF RECENT FLOODS ON THE WILDLIFE OF KERALA with financial assistance from DCE, Govt. of KERALA on 30<sup>th</sup> and 31<sup>st</sup> October 2018. Dr. M. Nasser, Director of Research, University of Calicut inaugurated the seminar and many eminent resource persons including Dr. P.R. Arun (Senior Principal Scientist, SACON Coimbatore) and Dr. T.V. Sajeev (Principal Scientist, KFRI) handled various sessions during the two day exercise. Around 120 participants from outside including teachers, research scholars, PG & UG students took part in the seminar.





## NATURE CAMP- WAYANAD WILD LIFE SANCTUARY

















#### ONE-DAY CAMP AT VANAPARVAM ON 16.06.2022

One-day camp Camp was arranged at Vanaparvam biodiversity park, Kakkavayal, in Connection with world snake day on 16.06.2022, in Collaboration with Kerala Forest and Wildlife department – Social Forestry extension division. The camp was inaugurated by Beena Tharakan- President Puduppadi Grama Panchayath. Sri. Arun Prakash Lal, a licensed snake rescuer, presented an awareness class on snake bites- first aid & prevention.

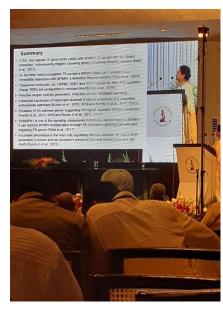




#### **Participation in Indian Botanical Congess**

Selected students of first semester B. Sc Botany participated in Indian Botanical Congress held at University of Calicut on 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> of November2019. They interacted with the delegates which provided them a very good exposure.

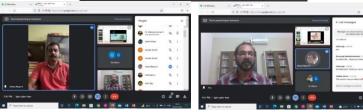
A study tour was conducted as per the syllabus for the Final BSc Zoology students from 12-15 December 2021 visiting research institutions, protected areas and other places of zoological importance. During the trip, various places including Parambikulam tiger reserve; Chinnar wildlife Sanctuary; Marayur Sandal forest & Eravikulam National Park. Were visited.





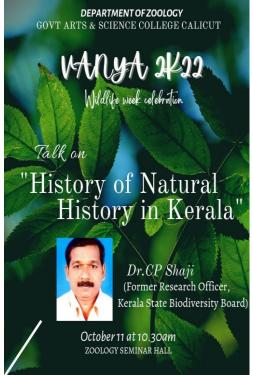
A webinar has been organized on 02/02/22 via Google meet in connection with World Wetlands Day. Dr. Kishore Kumar HOD & Assistant Professor Dept. of Botany Farook College, kozhikode was the chief guest.





The department of Zoology organized 'Vanya 2K22'- Wlidlife week celebration in connection with National Wildlife Week during the first week of October The various programmes included Interdepartmental competitions for students on Oct 06 - essay writing, pencil drawing, spot photography, Quiz & poster making and invited Talk by Dr. C. P Shaji, Fish taxonomist & former research officer Kerala State Biodiversity Board delivered a talk on the topic ''History of Natural history in Kerala'' on 11th October 2022.





WILDLIFE WEEK CELEBRATIONS





INVITED TALK BY Dr. C.P. SHAJI ON HISTORY OF NATURAL HISTORY IN KERALA

#### Frontier Lecture And Calicut University garden visit

On January 6<sup>th</sup> 2020, students of the department of Botany attended frontier lecture by Prof. Om Parkash Dhankher, Agriculture Biotechnology, Stockbridge School of Agriculture, University of Massachusetts, Amherst (U.S.A) on the topic "Biotechnological approaches for developing climate resilient crops and heavy metals phytoremediation".

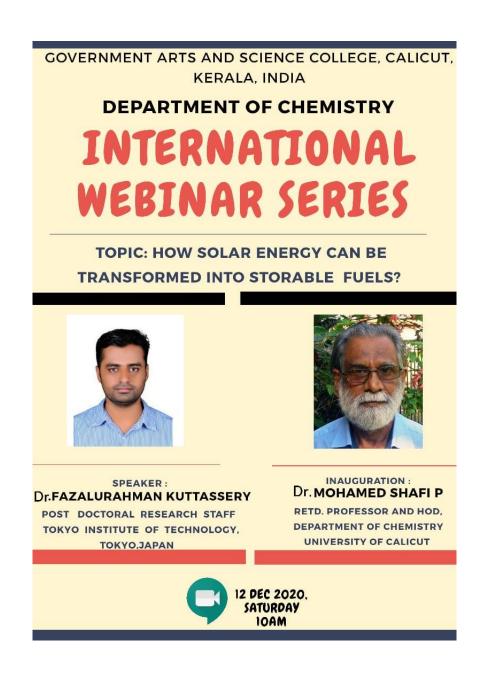




Visit to University botanical garden



The department of chemistry conducted an international webinar series on the topic 'How solar energy can be transformed into storable fuels?' on 12.12.2020. Dr. Fasalu Rahiman Kuttassery, Post doctoral staff, Tokyo Institute of Technology delivered the session. Dr. Mohammed Shafi P, Former HOD, Department of Chemistry, University of Calicut inaugurated the session.



#### WEBINAR ON CONSERVATION ON MANGROVES

A webinar was organised by the Department of Zoology as part of the Magical Mangroves movement, an awareness programme for conserving mangroves in collaboration with WWF & Godrej on 24/10/2020. Mr. Joshil Maliyekkal, ACF-Social forestry, Kozhikode inaugurated the webinar. Dr



Jafer Palot, Scientist, ZSI, Pune, delivered the keynote address. Sri. Abdul Riyas K., Assistant Professor (Sel. Grade) of the department, was the moderator of the programme.

# AWARNESS ON THE CONSUMPTION REDUCTION AND WASTE MANAGEMENT

The department of English organized a National Webinar in collaboration with The United Nations Environment Association (UNEA) on the topic "Consumption Reduction and Waste Management" where Sri. Sanjay Upadhyay, Senior Advocate at the Supreme Court of India and Sri. R.K. Dwivedi, Director, T.T.R.C. Lohia Group, Kanpur were the resource persons. The webinar was held on 20.02.2022. The talk promoted sustainable lifestyles and encouraged students to adopt habits that prioritize long-term environmental and social well-being over short-term consumption. By raising awareness about the impacts of overconsumption and waste generation, the talk empowered people to make more informed choices about their consumption patterns.



Students of the department attended the frontier lecture in connection with the celebration of Indian Botanical Day foundation Day celebration 'Current developments in lichenological research in India' on 06.12.2023 at Dept of Botany, University of Calicut.



In connection with Botany association inauguration on 06-01-2023 conducted a visit to Calicut university botanical garden and the department Herbarium. Dr John E Thoppil, Senior Professor, Dept of Botany, University of Calicut felicitated the function and suggested the

students to take up the implementation and practice of green protocol in the college be the important focus of the association.







One day workshop at KFRI-BRP, Nilambur on 4<sup>th</sup> March 2023: Students of the department of Botany participated in One-day workshop on 'Traditional Wisdom and Modern Practices for Biodiversity Conservation' at KSCSTE Kerala Forest Research Institute Sub Centre, Nilambur, Supported by MoEF & CC, Govt. of India.





The department of Zoology celebrated National Wildlife Week (**Biophilia 2018**) during the first week of October. A Wildlife Photo Exhibition was conducted and the event showcased around 120 rare wildlife photographs by various photographers associated with the Malabar Natural History Society and also included photographs of a former alumnus of the college Mr. Ali Ajmal Chembakassery.









**Film Shows** – As part of Biophilia, various wildlife documentaries were exhibited to the students. Films included "Home" by Suresh Elamon, "The Cove" a BBC Documentary among others.

**Invited Talk** - Dr. Jafer Palot, Scientist at the ZSI Western Ghats Regional Centre, Calicut delivered a talk on the 'Wildlife Protection Act & its Amendments' on 6<sup>th</sup> October 2018.



Online talk on the Snakes of Kerala – in collaboration with Social forestry department of Calicut, a talk was arranged via Google meet on 04/10/2020 on the Snakes of Kerala. The programme was inaugurated by Dr. R. Adalarasan IFS , Conservator, Forest & Wildlife department. The topic was presented by Dr. Sandeep Das, EDGE Fellow, Zoological Society of London.



As a part of the study tour from 11<sup>th</sup> to 16<sup>th</sup> October, student sof the department of Zoology visited institutions and places of zoological importance. During the trip, the Central Sericulture Research & Training Institute (Mysore), Sri Chamarajendra Zoological Gardens (Mysore), Ranganathittu Bird Sanctuary (Mysore), Regional Museum of Natural History (Mysore), National Institute of Oceanography (Goa), Salim Ali Bird Sanctuary (Goa) and Bhagawan Mahavir wildlife sanctuary (Karnataka) were visited.



A boat journey was arranged at Kadalundy Vallikkunnu Community Reserve (KVCR) on 02/02/2019 for the first and third semester students in connection with observance of world wetlands day. An interactive session with Vijesh Vallikkunnu (wildlife photographer) was also arranged on the same day.





In association with inauguration of Botany Association, On 22nd November 2018, Dr. S Sheela, Principal, Sree Neelakanda Govt. Sanskrit College Pattambi, Palakkad presented a talk.









# 15. <u>BIODIVERSITY CONSERVATION IN CURRICULUM, CERTIFICATE</u> <u>COURSES AND PROJECT WORKS RELATED TO BIODIVERSITY</u>

The department of Physics offers an open course in 'Renewable energy sources' and students from all departments got enrolled under this programme.

UG projects were carried out related to biodiversity conservation by students of the departments of Botany and Zoology. The project details are available through the following link:

https://drive.google.com/drive/folders/1nAG1CTygcmRfC4gxY\_3tIx5TUilqyGqu?usp=sharing

#### 16. INNOVATIVE PRACTICES

Cacti collection, Hydrophyte collection, Aquarium, Entamo Gallery, Vertical garden, Micro green Cultivation, Kokodama making and green houses were maintained under the departments of Botany and Zoology. The departments uphold innovative practices including Gifting of succulent plants, rare plant display and familiarisation of millets.

#### **CACTI COLLECTION**

In 2018,the Department of Botany started the collection of cacti plants & planted them in pots in . Labels were placed on the pots so that students can identify & study the xerophytic modifications. Collections include rare & beautiful cacti like *Opuntia microdasys*, *Echinocactus*, and *Mammillaria* etc.



#### **HYDROPHYTE COLLECTION**

Department of Botany took the initiative of hydrophyte



collection. Common and hydrophytes were there in the collection labels on the container. The beautiful collection hydrophyte attracts students generates curiosity in Hydrophyte them. collection included free floating ones like Azolla, Lemna. Salvinia. Eichhornia etc., submerged floating ones like Hydrilla, Utricularia, Elodea etc.. rooted



submerged like *Vallisneria*, emergent hydrophytes like *Myriophyllum, Marsilea* and plants like *Nymphaea*.

Collection and preservation of cacti and hydrophytes will help to maintain biodiversity and climate change mitigation.

Department of Zoology maintains an Entomo Gallery. Since one Elective paper for the final year BSc Zoology is Applied Entomology, the department has a facility to collect and display insects of our locality with brief descriptions as "Insect of the Week".



#### **VERTICAL GARDEN**

The Botany department constructed a vertical garden and made a green wall in 2018. This initiative was taken to offer numerous environmental benefits including improved air quality, noise reduction, temperature regulation, and biodiversity support. Green walls also contribute to aesthetic appeal, enhance indoor and outdoor spaces, and promote a sense of well-being among individuals. Overall, incorporating green walls in the college premises is a sustainable and visually appealing way to enhance the environment and promote eco-conscious practices.



#### PLANTING MANOSTENE SAPLING ON TEACHERS'S DAY

Students of Botany Department conducted a Teacher's Day celebration and they gifted a sapling of *Garcinia mangostana* (Mangostene) to the teachers of the department. The sapling was planted in the college campus.





#### **GIFTING OF SUCCULENTS**

Succulents are low-maintenance plants that can serve as beautiful and ecofriendly gifts for guests. They were planted in attractive pots and presented to distinguished guests who visited our institution.





#### MICROGREEN CULTIVATION

Microgreen refers to the foliage, baby vegetables and legumes that are harvested at a seedling stage, just after the sprouting has begun. Microgreen farming is a low investment, high dividend agricultural practice as it requires less space and money. The botany department took the initiative for microgreen farming in



December 2019.

#### **KOKODAMA MAKING**

During Covid Lockdown period students of Botany Department made 'Kokodama plants. Kokodama,, is an eco-friendly alternative to traditional plant containers. It involves planting in a natural, moss-covered ball. These biodegradable and sustainable planters reduce the need for plastic pots and promote a more natural aesthetic. Additionally, Kokodama can help improve air quality and create a calming atmosphere, making them an excellent choice for environmentally conscious initiatives.





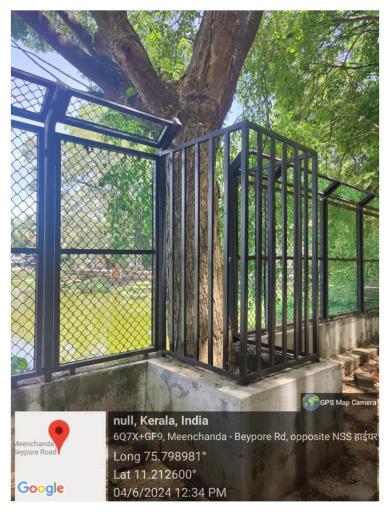
<u>Plant of the week display</u>: The 5<sup>th</sup> semester students of the department of Botany used to display one plant every week highlighting its morphological or taxonomical features.



A nursery of plants is maintained by the office staff and products were made available for sale while conducting 'Arts Bazaar'. A stall was arranged in the biodiversity congress, towards display and sale of their products.



During infrastructure augmentation, it is always ensured that the flora and fauna on the campus are not disturbed.



#### **Ed Club activities**

ED club conducted a variety of programmes including food fest and participation in biodiversity conference to observe the International Millet year.



The Ed club conducted a cooking class for the members on 16 th Feb 2023. The millet Biriyani aroused curiosity among the students as it was a unique blend of taste and health together. Millets are rich in protein, fibre, key vitamins and minerals. The entire students of ED club wholeheartedly participated in the session. The ED club put up a millet stall in connection with the biodiversity congress that held in the college from 18<sup>th</sup> to 20<sup>th</sup> of

February 2023. The millet stall was set up by collaborating with Agri Hub Technologies, Pandalam, in Pathanamthitta. The stall was set up to spread and share the importance of millet among the students, teachers and the people who visited the college including the invited guest of the congress. The items included biriyani, payasam, cutlet, mommos, sammosa and juices.



#### 17. CLUB AND COMMITTEE INITIATIVES

#### VEGETABLE CULTIVATION BY GASC KARSHAKASANGHAM

GASC Karshakasangham is an initiative to create interest among students in agriculture. In 2020-23, under the leadership of teacher coordinator Dr. Swapna K S, Associate Professor of Botany and Nature Club coordinator Ms. Shijina, Assistant Professor of Zoology, students from various departments participated in cultivation of vegetable crops in the campus. The main crops planted include Pea, Tomato, Chilly, Spinach, Brinjal, Pumpkin, Bottle gourd etc. Good harvest was collected and supplied to the canteen, student participants, and also sold to staff.















#### PALAK CULTIVATION BY NSS UNIT

NSS volunteers cultivated red and green palak using organic farming methods. They utilized biogas slurry and cow dung as fertilizers, and employed bio-pesticides for pest control. This farming and cultivation experience was highly valuable for the students. All the harvested produce was sold within the campus.







#### **CAMPUS GARDEN AND GREEN HOUSE**

Botany department of the institution maintains a campus garden which offers a wide range of benefits like promoting sustainability, providing educational opportunities and enhancing community engagement. By creating a space where students, faculty, and staff can participate in gardening activities, a deeper connection with nature can be fostered. This way sustainable practices among students can be encouraged. A campus garden is an effective way to promote environmental stewardship and create a more sustainable campus community. Green house helps in the conservation of ferns and xerophytes.



**Activities of Campuses of Kozhikode (CCEK)** 

### Kilikalum Koolavatte

This program is meant for offering drinking water for birds in and outside the campus. The team put water in pots for birds in different parts of the campus.

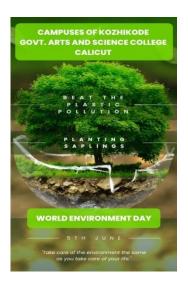


**World Water Day Celebration** 

As part of World Water Day Celebration a Digital Poster making competition was conducted on the theme 'Water conservation'.



## **World Environment Day**



The day was celebrated by Planting saplings and Collecting plastic waste from the campus. A sapling of Rose Apple Tree (Syzygium jambos) was planted in front of the Golden Jubilee Building.



# ACTIVITIES OF BEAUTIFICATION & WASTE MANAGEMENT COMMITTEE

During the year 2021-22, second phase of beautification works were carried out by the start- up firm 'Cyber Samana'. Before the conduct of their work an expert in the field of campus beautification, Dr. A. K. Pradeep, from Calicut University visited our campus and valuable suggestions were given in this regard. During the second phase of beautification work, soft and hard land scaping were done by the firm.





A clean sweep of all plastic wastes was carried out by the college NSS unit, and handed it over to Kozhikode corporation. Campus cleaning and beautification works were done by NCC, NSS and student volunteers under the guidance of faculty members of the college.











A bird's club is functioning inside the campus.









Inauguration:

bird/club - ga/c

Govt. Arts & Science College Calicut

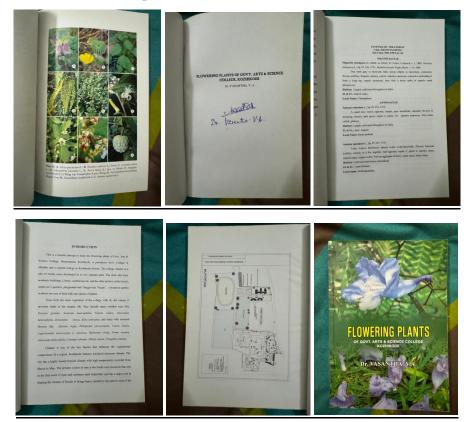
SATHYAN MEPPAYUR

President, Malabar Natural History Society



#### 18. BOOK ON THE BIODIVERSITY IN THE CAMPUS

A book 'Flowering plants' was published by Dr. Vasantha V. A., former faculty of department of Botany, about the flaura in the campus.



#### 19. REUSE OF CONSTRUCTION MATERIALS

Repurposing old construction materials for new structures is a sustainable practice that reduces waste and environmental impact. This can reduce the demand for new resources and decrease carbon emissions associated with manufacturing new materials. This approach aligns with green initiatives by promoting resource conservation and minimizing the carbon footprint of construction projects. In our institution old construction materials were repurposed and used to make grill and gate near the Auditorium. The work was done with the funding from PTA of the college.





# 20. <u>PROMOTES PUBLIC TRANSPORT, LOW-EMITTING VEHICLES, AND CONTROL OF CAR SMOKE AND EXHAUST</u>

The college is situated in Kozhikode corporation area and hence public transport facility is utilized by most of the staff and students. Car-pooling system is adopted by teaching and non-teaching staff helps which reduces pollution. Use of electric vehicles is promoted. Vehicle entry is restricted within the campus to mitigate pollution and safeguard student safety. A designated parking area for staff is situated adjacent to the main building, while pedestrian-friendly pathways connect different areas of the campus. Student vehicle parking is located outside the campus near the main gate, in compliance with government regulations. Instructional signboards are placed at appropriate places.











# 21. TREES LABELLED WITH OR SCANNING CODE







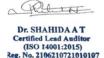
## 22. ENVIRONMENT, ENERGY AND GREEN AUDIT CERTIFICATION



# **CERTIFICATE**

This is to certify that an "Energy Audit" for Government Arts and Science College Calicut, was conducted on 11 April 2023 to assess energy costs, the availability and reliability of the energy supply, energy conservation technologies, and ways to reduce energy consumption. The activities and measures carried out by the college have been verified and found to be acceptable.











# CERTIFICATE

This is to certify that a "Green Campus Audit" for Government Arts and Science College Calicut, was conducted on 11 April 2023 to assess sustainable development practices regarding biodiversity and other resources, measures to reduce resource wastage, and efforts to improve resource quality and sustainability. During a site inspection and review of the submitted report, the college's initiatives and practices were duly verified and found to be in line with acceptable standards. The commendable efforts undertaken by students and faculty in the realm of environmental sustainability are highly appreciable.

ANAS E
Certified Lead Auditor
(ISO 14001:2015)
Reg. No. 2106170721010121

Dr. SHAHIDA A T Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010107

a PRILLIA

Dr. SABIQUE M K Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010106



# **CERTIFICATE**

This is to certify that an "Environment Audit" for Government Arts and Science College Calicut, was conducted on 11 April 2023 to assess ecofriendly initiatives and strategic planning implemented on the campus to uphold a sustainable environment for all stakeholders. The activities and measures carried out by the college have been verified and found to be acceptable. We appreciate the immense efforts undertaken by staff and students towards environmental protection and conservation.



Dr. SHAHIDA A T Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010107

Dr. SABIQUE M K Certified Lead Auditor (ISO 14001:2015)

23. ENVIRONMENTAL, GREEN, ENERGY AND WASTE MANAGEMENT INSTITUTIONAL POLICIES

### GOVERNMENT ARTS & SCIENCE COLLEGE, CALICUT



#### **KOZHIKODE-18**

[Re-Accredited to NAAC with  $B^{++}$  Grade]

Ph: 0495-2320694 E-mail: gasckkdprincipal@gmail.com

#### POLICY DOCUMENT FOR

#### ENERGY POLICY DOCUMENT

Government Arts & Science College Calicut is committed to fostering a sustainable and energy-efficient campus. This energy policy outlines our commitment to energy conservation, efficiency, and sustainability, aligning with our mission to reduce our environmental impact and promote sustainable development.

#### **OBJECTIVES:**

Implement measures to reduce energy consumption across the campus. And increase the use of renewable energy sources.

Upgrade infrastructure and practices to enhance energy efficiency.

Raise awareness and engage stakeholders in energy conservation efforts.

#### POLICY STATEMENTS

#### **Energy Efficiency and Conservation**

- Implement energy-efficient practices in all campus operations.
- Upgrade lighting, HVAC systems, and appliances to energy-efficient models.
- Conduct regular energy audits to identify and address inefficiencies.
- Utilize energy-saving technologies and automation systems.

#### Renewable Energy

- Increase the use of renewable energy sources such as solar, wind, and biomass.
- Install solar panels and other renewable energy systems on campus buildings.
- Promote research and development in renewable energy technologies.

#### Sustainable Building Practices

- Incorporate green building standards in new construction and renovation projects.
- Use sustainable materials and designs to enhance energy performance.
- Ensure proper insulation and ventilation in buildings to reduce energy loss.

#### Transportation

- Encourage the use of public transportation, cycling, and walking to reduce reliance on fossil fuels.
- Promote carpooling and the use of electric vehicles among staff and students.
- Provide facilities for bicycle parking and electric vehicle charging stations.

#### Awareness and Education

- Conduct regular seminars, and campaigns on energy conservation and sustainability.
- Integrate energy education into the curriculum and extracurricular activities.
- Encourage the participation of students, faculty, and staff in energy-saving initiatives.

#### Monitoring and Reporting

- Establish an Energy Management Committee to oversee the implementation of the energy policy.
- Regularly monitor energy usage and report on progress towards energy reduction goals.
- Use data and analytics to inform decision-making and improve energy management practices.

#### Community Engagement

 Collaborate with local communities and organizations to promote energy conservation.

- Share best practices and success stories to inspire broader adoption of energy-efficient
- Involve students in community-based energy projects and initiatives.

#### Implementation and Review

 The policy will be reviewed annually to ensure its effectiveness and updated as necessary to reflect new technologies, regulations, and best practices.

#### CONCLUSION

Government Arts & Science College Calicut is dedicated in energy conservation and sustainability. Through the collective efforts of our stakeholders, we aim to create a more sustainable future for our campus and beyond.

Date of Approval: 01/06/2022

Approved By:





Dr. Edakkotte Shaji

Principal

Government Arts and Science College Calicut

#### GOVERNMENT ARTS & SCIENCE COLLEGE, CALICUT



#### **KOZHIKODE-18**

[Re-Accredited to NAAC with B++ Grade]

Ph: 0495-2320694 E-mail: gasckkdprincipal@gmail.com

#### POLICY DOCUMENT FOR

#### ENVIRONMENTAL POLICY DOCUMENT

#### **OBJECTIVE:**

To establish a comprehensive framework that promotes sustainability and environmental responsibility within the college community.

#### POLICY STATEMENT:

Government Arts and Science College, Calicut, is committed to integrating environmental considerations into all aspects of its operations, ensuring a sustainable future for students, staff, and the broader community.

#### KEY PRINCIPLES:

- 1. Sustainability Education:
- Incorporate environmental education into the curriculum across all disciplines.
- Promote awareness and understanding of environmental issues through workshops, seminars, and activities.
- 2. Resource Management:
- Implement efficient use of resources such as energy, water, and materials.

- Encourage reduction, reuse, and recycling practices within the college premises.
- 3. Waste Management:
- Establish a robust waste segregation system to manage waste effectively.
- Promote the use of biodegradable and eco-friendly materials.
- 4. Energy Conservation:
- Adopt energy-efficient practices in college operations, including the use of LED lighting and energy-saving appliances.
- Explore renewable energy sources, such as solar panels, for campus energy needs.
- 5. Green Campus Initiative:
- Enhance green spaces by planting trees and maintaining gardens.
- Promote biodiversity by conserving local flora and fauna.
- 6. Pollution Reduction:
- Implement measures to reduce air, water, and noise pollution on campus.
- Encourage the use of public transport, bicycles, and carpooling to minimize vehicular emissions.
- 7. Water Conservation:
- Install water-saving devices and promote practices that reduce water wastage.
- Harvest rainwater and utilize it for gardening and other non-potable purposes.
- 8. Sustainable Procurement:
- Prioritize purchasing environmentally friendly and sustainably sourced products.
- Engage with suppliers committed to sustainable practices.

# IMPLEMENTATION AND MONITORING:

- Conduct regular audits and assessments to measure the effectiveness of environmental initiatives.

- Encourage feedback from the college community to continuously improve environmental practices.
- -This policy will be reviewed annually to ensure its relevance and effectiveness, with revisions made as necessary to meet evolving environmental challenges.

### CONCLUSION:

By adopting this Environmental Policy, Government Arts and Science College, Calicut, aims to foster a culture of environmental stewardship, ensuring that sustainable practices are at the core of its institutional values.

Date of Approval: 01/06/2022

Approved By:





Dr. Edakkotte Shaji

Principal

Government Arts and Science College Calicut

# GOVERNMENT ARTS & SCIENCE COLLEGE, CALICUT



#### KOZHIKODE-18

[Re-Accredited to NAAC with B++ Grade]

Ph: 0495-2320694 E-mail: gasckkdprincipal@gmail.com

## POLICY DOCUMENT FOR

# ESTABLISHING A PLASTIC-FREE/GREEN CAMPUS

#### INTRODUCTION

Government Arts and Science College Calicut is committed to environmental sustainability and recognizes the importance of reducing plastic usage and promoting eco-friendly practices on its campus. This policy document outlines the guidelines and initiatives for transitioning towards a plastic-free and green campus environment.

# ELIMINATION OF SINGLE-USE PLASTICS

The utilization of the following single-use plastic items will be strictly prohibited on campus:

- 1. Plastic bags
- 2. Plastic straws and stirrers
- 3. Plastic cutlery and plates
- 4. Plastic water bottles
- 5. Other single-use plastic items that are not deemed essential for health and safety reasons

To ensure a smooth transition, the college will provide a designated period for adjustment to this policy. During this time, departments and individuals are strongly encouraged to deplete their existing stock of single-use plastics and transition to sustainable alternatives.

In order to facilitate the adoption of sustainable practices, Government Arts and Science College Calicut will take the necessary steps to make affordable and environmentally friendly alternatives readily available on campus. This will include, but is not limited to:

- 1. Installation of water refill stations throughout the campus.
- 2. Offering reusable items such as bottles, cups, and utensils at campus stores.
- 3. Encouraging campus food services to utilize and provide compostable or reusable

To raise awareness about the detrimental effects of plastic pollution and emphasize the significance of this policy, the college will initiate an education campaign. This campaign will encompass:

- 1. Workshops and informational sessions for students, faculty, and staff.
- 2. Distribution of educational materials through various channels such as the campus website, social media, and newsletters.

To ensure compliance with the policy, a dedicated task force will be established. This task force will monitor adherence to the policy, address any challenges that may arise, and implement appropriate measures to reinforce compliance. Non-compliance will be addressed through educational reinforcement and, if necessary, disciplinary actions.

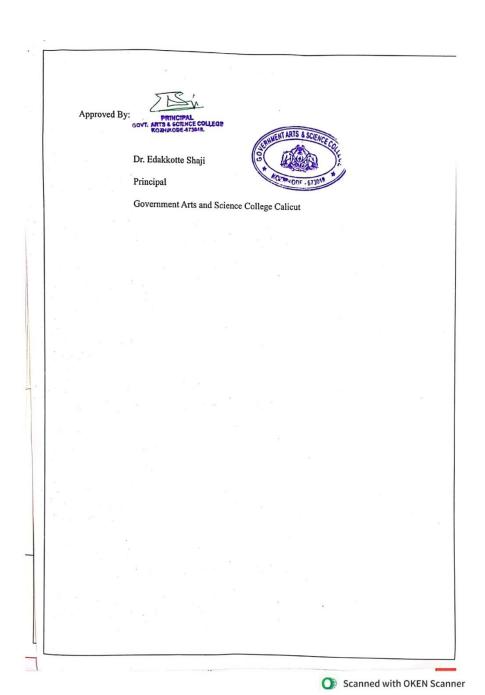
#### CONCLUSION

Government Arts and Science College Calicut is committed to creating a sustainable future by fostering a plastic-free and green campus environment that promotes environmental stewardship, social responsibility, and innovation. Through collaborative efforts and collective action, we can achieve our vision of a healthier, greener, and more sustainable campus community.

Date of Approval: 01/06/2022

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Ph: 0495-2320694 E-mail: gasckkdprincipal@gmail.com

#### POLICY DOCUMENT FOR

#### GREEN CAMPUS POLICY DOCUMENT

#### **OBJECTIVE**

A green campus prioritizes sustainability through the integration of eco-friendly practices in its operations and infrastructure. It promotes energy efficiency, waste reduction, and the use of renewable resources, while fostering an environment that encourages conservation and environmental awareness among students and staff. Initiatives often include recycling programs, sustainable landscaping, and green building designs to minimize the campus's ecological footprint.

#### INTRODUCTION

Government Arts & Science College upholds the best practice 'Sanjeevanam,' addressing environmental issues through awareness programs, departmental and club activities, and community extension efforts. Environmentally friendly practices on campus are led by the NSS, NCC, Green Army, Nature Club, Bhoomithrasena, and Karshaka Sangham. The institution strives to maintain a green and clean campus with the involvement of all stakeholders, raising awareness about environmental issues, effectively utilizing natural resources, and educating the surrounding society about eco-friendly living.

## COLLEGE ENVIRONMENTAL AIMS AND OBJECTIVES:

- > To create awareness about environmental issues and sustainable development among the stakeholders.
- > To develop a self-sustainable institution through the optimal utilization of natural resources.
- > Develop and maintain green buildings, energy-efficient systems, and sustainable landscapes.
- > The stakeholders must collectively contribute to developing an eco-friendly campus
- > Involve the local community in green initiatives and spread awareness about ecofriendly living.
- > To minimize the environmental impact of the campus through effective resource management.
- > Achieve a zero-waste campus through robust recycling, composting, and waste reduction programs.
- > Enhance campus biodiversity through the preservation of natural habitats and the creation of green spaces.

Date of Approval: 01/06/2022

Approved By:



Dr. Edakkotte Shaji

Principal

Government Arts and Science College Calicut