



KURIAKOSE ELIAS COLLEGE MANNANAM

Affiliated to Mahatma Gandhi University, Kottayam
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Criterion - VII

Institutional Values and Best Practices

7.2.1. Best Practice I

PRAKRITHI DHAARA - Transformative Sustainability Initiatives at Kuriakose Elias College

Table of Contents

| Sl. No. | Contents | Page Number |
|----------------|---|--------------------|
| 1. | Executive Summary | 1-8 |
| 2. | Waste Management | 9-16 |
| 3. | Water Conservation and Management | 17-22 |
| 4. | Energy Conservation | 23-38 |
| 5. | Green Initiatives Within and Outside the Campus | 39-104 |



Executive Summary

Kuriakose Elias College is recognized for its comprehensive environmental initiatives that align with the guidelines of the *Haritha Kerala Mission*, Government of Kerala. The college has embraced a green protocol, integrating sustainable practices across waste, water, and energy management, with a dedicated focus on eco-friendly practices among students and staff.

Waste Management

- **Segregation:** Waste is segregated at the source into biodegradable and non-biodegradable categories, with color-coded bins placed throughout the campus. The *Haritha Karma Sena* collects non-biodegradable waste monthly for recycling.
- **Vermi composting:** Organic waste from the campus garden is processed into compost, which is then used to enrich the college's greenery.
- **Biogas Plant:** Food waste from the college canteen is used in a biogas plant, reducing LPG consumption while producing organic manure for gardening.
- **Incinerators:** Three incinerators are in place for efficient waste disposal, including sanitary napkins.
- **Plastic Waste Management:** Plastics segregated and used pens collected from pen drop boxes are handed over to scrap vendors.
- **E-Waste Management:** Electronic waste is managed by repair and reuse, with a collaboration from Zion Consultants for major repairs and disposal of e-waste. The programmes B.Sc. Computer Application and B.Sc. Physics with Applied Electronics use damaged computers for their practical sessions.

Water Conservation and Management

- **Rainwater Harvesting:** A rainwater harvesting system with a 100,000-liter tank reduces reliance on external water sources.
- **Open Wells and Bunds:** The campus utilizes two functioning open wells and bunds for groundwater replenishment.
- **Water Purification:** A water purification plant ensures clean drinking water, supported by water purifiers and coolers installed across campus.
- **Water Quality Monitoring:** The Chemistry Department routinely monitors water quality and offers a Certificate Programme in Water Analysis.
- **Awareness Programmes** are organised to promote water conservation.



Energy Management

- The college utilizes renewable energy through a solar power plant and encourages energy-saving practices, such as the use of LED lights across campus. Students are trained in eco-friendly practices, including LED bulb making. ENCON club and K.E Energy Conservation Cell (KE ECC) is actively functioning in the college for creating awareness about the importance of energy conservation among students.

Green Initiatives Within and Outside the Campus

- **Green Protocol:** A comprehensive green protocol is in place, promoting the use of reusable materials, banning single-use plastics, encouraging the 3Rs (Reduce, Reuse, Recycle), and integrating eco-friendly practices in all events.

- **Embracing Environmental Stewardship through Key Observances**

As part of our ongoing commitment to environmental stewardship, Kuriakose Elias College actively observes key international days focused on environmental and energy conservation. These include World Environment Day (June 5), World Nature Conservation Day (July 28), World Ozone Day (September 16), Water Conservation Day (March 22) and other days dedicated to water conservation, pollution prevention, and recycling. Through seminars, workshops, awareness campaigns, and hands-on activities like tree planting and clean-up drives, these observances inspire collective action towards a sustainable future, reinforcing the importance of environmental protection and energy conservation.

- **Green Audit and Recognitions**

The numerous awards and recognitions received by Kuriakose Elias College offer clear evidence of its successful environmental and social initiatives from Haritha Keralam Mission, M.G. University, Mahatma Gandhi National Council for Rural Education, Rotary Club etc.

Community Centered Green Activities 2018-2023

The green initiatives implemented at Kuriakose Elias College throughout the year hold significant importance for multiple reasons. Firstly, they provide practical learning experiences that foster a deeper understanding of environmental issues and sustainability practices among students. Additionally, these initiatives promote active participation from both students and the local community, encouraging collective responsibility toward environmental stewardship. By enhancing green cover and maintaining various gardens, the college contributes to the conservation of local flora and fauna, thereby promoting biodiversity on campus. The creation of green spaces also improves air quality and offers a tranquil environment, benefiting the physical



and mental well-being of students and staff. Moreover, initiatives like organic farming, waste management, and the promotion of eco-friendly products highlight the significance of sustainable practices, encouraging students to adopt these values in their daily lives. The college's commitment to sustainability reflects a broader social responsibility, aiming to inspire future leaders to prioritize environmental concerns. Projects that focus on maintaining historical sites, such as *Chavara Kadavu*, enhance students' appreciation of local heritage and its connection to sustainability. Furthermore, the diverse range of initiatives, from mushroom cultivation to beekeeping, encourages innovation and creativity in finding sustainable solutions to environmental challenges. Overall, the green initiatives at Kuriakose Elias College not only contribute to environmental conservation but also play a crucial role in shaping responsible, informed citizens equipped to tackle future environmental challenges.

2022-23

1. Green Campus Initiatives

Green Classroom: The college established a green class room as part of the Environment Day celebrations on June 5, 2022, A survey using Google Earth and mapping of the campus were conducted to identify suitable areas for outdoor learning. An outdoor space (688 sq. m.) created under existing tree cover, equipped with benches for students. Students participated in the design and planting process, providing seating while preserving natural surroundings.

Green Cover: The campus spans 7.23 acres, with 4,965 sq. m. under green cover, maintained through annual sapling planting by faculty and students.

Campus Nursery: The campus nursery, primarily for ornamental plants, is managed by two staff members, who ensure the health and maintenance of the plants. Students also care a collection of medicinal plants.

Pedestrian- Friendly Pathways: The campus has well-maintained pathways with disabled-friendly ramps enhancing accessibility while restricting vehicle access for pedestrian safety.

2. Social Entrepreneurship, Swachhta & Rural Engagement Cell

Recognized as an SES REC Institution in 2020, the college implements an action plan with ten working groups focused on sanitation, waste management, water management, and community engagement.



3. Cleaning of Mudiyoorkkara- Chaathunnippara Road

On August 13, 2022, as part of the 75th Independence Day observance, N.S.S. volunteers cleaned a 3-km stretch of road in Arpookara Panchayat.

4. Scrap Challenge (Reduce, Recycle, and Reuse)

A waste collection programme was organised on August 23, 2022, to collect used materials. The funds generated from this programme were used for distributing grocery kits for BPL families in the adopted village and for distributing “Onakkodi” to Abhaya Bhavan inmates.

5. Pachathuruth Project:

Launched on September 24, 2022, in collaboration with Haritha Keralam Mission to plant a variety of plants in a five-cent area.

6. Hands-on Training:

- **Mushroom Cultivation:** A certificate course for B.Sc. Botany students, emphasizing sustainable practices.
- **Bee Garden Management:** Offered a diploma course on beekeeping and honey harvesting.

7. Organic Farming: Cultivated elephant yam using organic manure generated from the vermi-composting unit.

8. Herbal Chemistry Course: Provided hands-on experience with medicinal plants and their applications.

9. K.E.C. Handicrafts and Sweets Fiesta: Held on November 16, 2022, to promote eco-friendly rural businesses and showcase student creativity.

10. Puthunampu Initiative: On March 27, 2023, promoted organic farming through vegetable sapling distribution and education.

11. Sustainable Menstruation Awareness: Conducted a session on March 9, 2023, promoting eco-friendly menstrual products.

12. Nature Camps: Students participated in various camps organized by the Kerala Forest and Wildlife Department, fostering environmental appreciation.

The college has made significant strides in adopting green protocols and promoting sustainability through various initiatives, enhancing both campus beauty and environmental awareness within the community.

The initiatives undertaken by Kuriakose Elias College demonstrate a strong commitment to environmental sustainability and community involvement. Through educational programs, hands-on training, and awareness campaigns, the college has effectively engaged students in eco-friendly practices and fostered a culture of conservation. These efforts not only contribute to environmental



protection but also empower individuals to take meaningful action towards a more sustainable future. Continued focus on such initiatives will be vital for promoting environmental stewardship and ensuring the well-being of our planet.

2021-22

Environmental awareness and conservation are vital for achieving a sustainable future. Numerous initiatives and campaigns focused on promoting eco-friendly practices and safeguarding natural resources are crucial for fostering community engagement and inspiring action throughout the year 2021-22, as outlined below:

1. Barren Land Cultivation and Income Generation: The NSS unit utilized 20 cents of barren land for cultivation to promote self-sufficiency among volunteers. Crops like tapioca and elephant yams were planted, and the income generated from sales was used for community welfare, such as supplying grocery kits to cancer patients.

2020-21

The Green Initiatives at K.E College for the academic year 2020-2021 were a series of impactful efforts designed to foster environmental sustainability, raise awareness about ecological issues, and engage the college community in meaningful environmental practices. These activities not only promoted a greener campus but also encouraged students, faculty, and the surrounding community to take an active role in protecting the environment. Below is a summary of the key events and programs that took place.

1. Training for Sanitizer Preparation and Distribution (June 2020)

During the COVID-19 outbreak, the Department of Chemistry took the lead in preparing hand sanitizers in the college laboratory according to WHO guidelines.

2. Sannadhasena Online Training Program (August 27, 2020)

NSS volunteers participated in the Sannadhasena Online Training Program aimed at preparing volunteers for disaster management and eco-friendly pre-monsoon preparations.

3. Plogging Run (October 2, 2020)

Volunteers participated in a Plogging Run to clean up their surroundings while promoting fitness and cleanliness under the banners of **Fit India** and **Swachh Bharath**. This event helped raise eco-awareness and encouraged community engagement in environmental sustainability.



4. Distribution of Sanitary Napkins (November 12, 2020)

NSS volunteers distributed sanitary napkins to the women of Ward 8 in Arppookkara Panchayat to promote menstrual hygiene. Sponsored by the **Rotary Club of Kottayam Southern**, this initiative focused on raising awareness about health practices for women in the community.

5. Eco-Friendly Product Making (January 27, 2021)

A hands-on workshop, where volunteers crafted paper bags from recycled materials and made natural lotions, both sold to staff members.

6. Seed Distribution for Kitchen Garden (February 5, 2021)

In preparation for the **SPROUT 2021 camp**, volunteers were provided vegetable seeds to create kitchen gardens at home. This initiative promoted sustainable agriculture and environmental stewardship among the participants.

7. SPROUT 2021: Seven-Day Camp (February 12-18, 2021)

Conducted under the theme "**Youth for Prevention and Mitigation of COVID**", the seven-day online camp featured offline activities, including kitchen gardening, paper bag making, micro green farming, and lotion/phenyl making. The camp focused on practical skill development, mental and physical resilience, and contribution to sustainable living during the pandemic.

2019-20

The *Green Initiatives* at Kuriakose Elias College for the academic year 2019-2020 encompassed a variety of activities aimed at promoting environmental sustainability, awareness, and community involvement. Here's a summary of the major events:

- 1. Litter-Free Village, City, and Campus Inauguration (June 11, 2019):** The college hosted the university-level inauguration of this programme, launched by M.G University. The initiative aimed to spread awareness about maintaining a litter-free environment and collective responsibility for a cleaner Kerala.
- 2. Pen Drop Box Scheme (July 12, 2019):** To combat plastic pollution, the NSS unit installed pen drop boxes for recycling discarded pens, under the Haritha Kerala Mission.
- 3. Suchitva Pakhwada Pledge (August 1, 2019):** NSS volunteers took a cleanliness pledge to participate in the Cleanliness Fortnight, spearheaded by programme officers of the college.
- 4. Mini Camp (August 23-25, 2019):** The annual orientation camp focused on environmental extension activities, including cleaning the Vaarimuttam viewpoint and beautifying surrounding areas by planting medicinal and ornamental plants.
- 5. Cleanliness Survey at Medical College, Kottayam (September 2019) and Suchitva Sandesha Rally (NSS Day, September 24, 2019) :** As part of the seven-day camp, NSS volunteers conducted a cleanliness survey and awareness campaign at Kottayam Medical



College and in nearby areas, preparing detailed reports on waste management and disposal practices. Over 200 volunteers participated in a rally advocating for cleanliness, marching from the campus to Medical College Kottayam, and handing over survey reports to the hospital's authorities.

6. Production of Grow Bags: To propagate and practise the principle of 3R's - Reduce, Reuse and Recycle for the waste reduction and in continuation with the efforts for reducing plastic wastes, NSS Volunteers initiated the production of grow bags using the left-over flex posters used for various functions in our college during the previous years

These initiatives underscore the college's commitment to fostering environmental awareness, promoting sustainability, and engaging students in hands-on eco-friendly projects.

2018-19

The green initiatives undertaken during the 2018-19 academic year at Kuriakose Elias College, Mannanam, reflect a strong commitment to environmental sustainability, community engagement, and energy conservation. Here's a summary of the key events and activities:

1. Invited Talk - On June 7, 2018, Dr. Jomy Augustine from St. Thomas College, Pala, delivered a talk on environmental stewardship, emphasizing the role of every species in maintaining ecosystem balance. The event, attended by students and teachers, underscored the importance of sustainable living practices.

2. Swachh Bharat Pakhwada (August 01-15, 2018): In alignment with the Swachh Bharat campaign, volunteers took a pledge and participated in cleaning the college premises. A session on "Health and Hygiene" by Ms. Nisha Maria E.G focused on the link between cleanliness and health.

3. Post-Flood Village Cleaning (August 24, 2018): Following the 2018 Kerala floods, a team of students, teachers, and alumni undertook a massive cleaning drive in Kallara Grama Panchayat. They cleaned 19 houses and public spaces in the flood-hit Akathanthara Colony, in collaboration with local authorities and health professionals.

4. Railway Station Cleaning (October 02, 2018): To mark Gandhi Jayanthi, green volunteers cleaned Kottayam Railway Station and planted flowering plants as part of a broader initiative to maintain public spaces.

5. Malarikkal Eco Tourism Development: Volunteers contributed to the eco-tourism project at Malarikkal by building bamboo benches, cleaning the area, and planting 21 fruit plants. This initiative aimed at creating a plastic-free environment and promoting local employment through eco-tourism.



6. Suchitva Mission Kerala: The Haritha Keralam team trained NSS volunteers on implementing green campus initiatives and the Green Protocol, promoting the use of eco-friendly materials over flex boards for campus events.

Besides this activities various Eco seminars, Workshops Competitions nature education programmes etc. are also conducted during these years

These initiatives collectively highlight the college's active role in promoting sustainability through education, practical actions, and community outreach. The college's green volunteers, in collaboration with various departments and external partners, contributed significantly to enhancing environmental consciousness and resilience in the face of natural disasters.



EMPOWERING SUSTAINABILITY: WASTE, WATER, AND ENERGY SOLUTIONS AT KURIAKOSE ELIAS COLLEGE

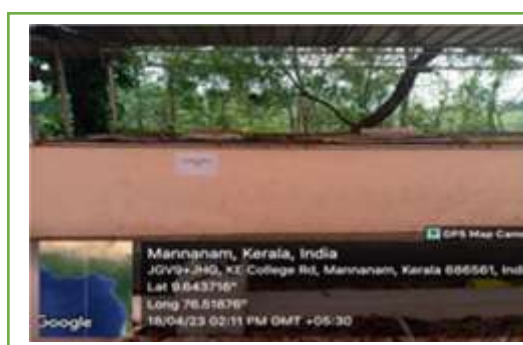
1. Waste Management

The College has implemented, segregated waste collection and management on the campus and has exhibited several billboards stating slogans like *"Green Campus, Clean Campus"* in prominent campus locations to motivate students and staff to green practices. The surroundings of the college are kept organic and green with the help of effective methods. The waste generated on campus is segregated by keeping it in colour-coded bins. The non-biodegradable waste is then collected by Haritha Karma Sena personnel monthly for recycling



a) Vermicomposting Unit

The waste obtained from plants, garden waste, etc., is deposited in a vermi-composting unit for preparing the compost, which is then used in the campus garden.





(b) Biogas Plant

The food waste is put into a biogas plant, which enables us to reduce the consumption of L.P.G. in the college canteen, and by-products are used as organic manure for the garden.



(c) Incinerator

Three incinerators have been installed to implement trash disposal successfully on the college campus. Garbage is periodically collected from campus premises and is then scientifically disposed of using three incinerators. It is used to dispose of solid waste, including sanitary napkins. A sanitary pad vending machine is also provided in the women's hall.



Incinerators for sanitary napkins

Common incinerator



Sanitary pad vending machine



(d) Management of Plastic Wastes

Plastics were segregated and given to the scrap vendors/ Haritha Karma Sena. Two pen drop boxes were installed in the college building. All students are encouraged to drop their used pens in the boxes. The collection of pens will then be sent for recycling through scrap dealers. Display boards are kept on the campus to propagate and practice the principle of the 3Rs (Reduce, Reuse, and Recycle) for waste reduction. Programmes were conducted to create awareness about the threat caused by plastic pollution to the natural environment. Flex banners are substituted with cloths and eco-friendly materials are used for decorations.

Main Building



Self-Financing Block





| DATE | AMOUNT | ITEM & WEIGHT | Signature |
|------------|--------|---|-------------|
| 19/09/2022 | 300/- | Plastic, old curtain cloth 15 kg | [Signature] |
| 13/12/2022 | 300/- | Plastic, tube light, LED, CFL 9 kg plastic + 17 kg light | [Signature] |
| 28/01/2023 | 300/- | Plastic, thermocole 21 kg plastic, 7 kg t. case | [Signature] |
| 17/03/2023 | 300/- | Plastic, tube light 17 kg plastic, 4 kg glass | [Signature] |
| 22/07/2023 | 300/- | Plastic 31 kg plastic | [Signature] |
| 25/10/2023 | 300/- | 24 kg plastic | [Signature] |
| 22/11/2023 | 300/- | 14 kg plastic | [Signature] |
| 19/01/2024 | 300/- | 9 kg plastic 2 kg thermocole | [Signature] |
| 21/02/2024 | 300/- | 7 kg plastic, 7 kg glass | [Signature] |
| 24/05/2024 | 300/- | 9 kg plastic, 11 kg glass | [Signature] |
| 18/06/2024 | 300/- | 2 kg plastic, 4 kg light materials | [Signature] |
| 23/07/2024 | 300/- | 5 kg plastic | [Signature] |

HARITHA KARIMASEENA
 Alhirampuzha, Ward - IV
 President Secretary

| Kuriakose Elias College, Mannanam | | | | |
|--|-------------------|--------------------|--------------------|-----------------|
| Cleaning & Gardening Expenses Summary for the period 2018-2023 | | | | |
| Year | Cleaning Expenses | | Gardening Expenses | |
| | Aided | Self-Financing | Aided | Self-Financing |
| 2018 19 | 1,26,000 | 3,49,272 | 2,20,485 | 1,48,680 |
| 2019 20 | 2,56,634 | 2,79,900 | 1,11,575 | 58,129 |
| 2020 21 | 1,34,575 | 1,44,309 | 65,502 | 43,611 |
| 2021 22 | 99,600 | 1,51,050 | 1,01,220 | 1,67,545 |
| 2022 23 | 93,950 | 2,86,780 | 28,470 | 79,023 |
| | 7,10,759 | 12,11,311 | 5,27,252 | 4,96,988 |
| Year | Cleaning Expenses | Gardening Expenses | | |
| 2018 19 | 4,75,272 | 3,69,165 | | |
| 2019 20 | 5,36,534 | 1,69,704 | | |
| 2020 21 | 2,78,884 | 1,09,113 | | |
| 2021 22 | 2,50,650 | 2,68,765 | | |
| 2022 23 | 3,80,730 | 1,07,493 | | |
| | 19,22,070 | 10,24,240 | | |



Dr. Ison V. Vanchipurackal
 PRINCIPAL
 KURIAKOSE ELIAS COLLEGE
 MANNANAM, KERALA - 695 561

e) E-Waste Management

The college has a comprehensive approach to managing electronic goods. They prioritize repairing minor issues in-house and rely on Zion consultants, Kottayam for significant repairs and annual maintenance.

The practical sessions of the Computer Maintenance and Hardware course use damaged computers to teach students about computer maintenance and hardware, while lab sessions allow students to learn hands-on skills like dismantling and reassembling electronic and electrical instruments.

The college uses buyback options for technology upgrades instead of purchasing new equipment to stay current. Any unused gadgets are stored in a storage room for potential future use.



Zion Consultants

Vilanganpara Buildings, Goodshepherd Road, Kottayam, Pin 686 001.

Mob:-9447514978, 9447131736

E-mail: zionktm@yahoo.com

Agreement For Annual Maintenance Contract and Disposal of E-Waste

An agreement made on this 5th day of June 2020 between the Zion Consultants, Vilanganpara Buildings, Good Shepherd Street, Kottayam, Kerala -686001 represented by Mr. Rajesh Kumar T.K., Kottayam West, Kottayam, Manager, here in after referred to as the first party

And

K.E. College Mannanam represented by the principal as the 2nd party

Whereas, the first party is engaged in the business of repairing and maintenance of computers and its accessories. The 2nd party is the head of the KE College and maintaining a well-equipped computer lab and also maintenance computer in the department and having a total 150 computer in the college

Both the parties mutually agreed as follows:

- I. The first party agrees to the annual maintenance of all the computers in the college Including formatting, servicing and replacing small spare parts for a period of 5 years from 2020.
- II. The first party agrees to take over the E-Waste, if any, occurred in the intuition at their Own cost and as per the conditions of E-Waste management ordered by Government or any Other appropriate authority for a period of 5 years beginning from June 2020 to May 2025.
- III. Total cost of the above mentioned services is calculated as Rs.40,000/- per year for 5 years And agreed by both the parties
- IV. The second party agrees to pay sum of Rs.40,000/- per year for 5 years beginning from June 2020 for all the above mentioned services.
- V. This agreement for annual maintenance executed is only existing 150 computers. Any Addition after this date not coming under this agreement.
- VI. Payment will be made annually @Rs.40,000/- per year after considering satisfactory working And performance

In wellness where of Dr. Brigit Paul, Principal, for and on behalf of the K.E. College, Mannanam and by Mr. Rajesh Kumar T.K., Kottayam West, Kottayam, Manager, for and behalf of Zion Consultants have here in to set their hands the day and year shown against their respective signature

Signed by:

Rajesh Kumar T.K.

Signed by:

Dr. Brigit Paul

DR. BRIGIT PAUL
Drawing & Disbursing Officer
KURIAKOSE ELIAS COLLEGE
MANNANAM, KERALA-686 561



In the Presence of:

1. Dr. Sandhya C
2. Dr. Vinu S. George



| DATE | ITEMS | REMARKS |
|------------|--|---|
| 01-07-2007 | D. Computer monitors - 3 Nos. | Bought under management fund |
| 02-07-2007 | O.S.M.P.s - 10 Nos. | Damaged O.S.P.s. P.C. repaired.] |
| 05-05-2008 | Modem - 2 Nos. | Damaged |
| 07-10-2008 | P.C. cabinet - 01 Nos. | Damaged |
| 08-03-2009 | C.P.U - 04 Nos. cat 5 type cable = 150mts | Bought under management fund. old cables replaced with new |
| 10-08-2009 | Mouse - 21 Nos. Keyboard - 17 Nos. | Damaged. |
| 20-03-2010 | Computer monitor - 05 Nos. | Damaged. |

| | | |
|------------|--|--|
| 21-03-2011 | 1) cat 5 type cable = 200mts 2) Modem - 2 Nos 3) Mother board - 05 Nos | Replaced with new cable. Damaged (S.F.) Damaged (S.F.) |
| 10-08-2011 | 1) Monitor - 11 Nos. 2) Cable = 200 mts. 3) CPU = 10 Nos. 4) S.M.P.s - 11 Nos. 5) Keyboard - 22 Nos. | Damaged from S.F. section |
| 06-01-2012 | S.M.P.s - 7 Nos. cabinet - 4 Nos. Mouse - 9 Nos. Printer - 04 Nos. Scanner - 02 Nos. | Damaged from S.F. section. |

| | | |
|------------|---|--|
| 03-03-2005 | CCTV camera - 4 Nos. Keyboard - 07 Nos. S.M.P.s - 09 Nos. Monitors - 03 Nos. Multimeter - 09 Nos. CRO - 05 Nos. Function Generator - 02 Nos. I.C power suppl - 03 Nos. | Damaged from S.F. From B.Sc Physics with Applied Electronics Lab. |
| 02-07-2005 | Mouse - 09 Nos. cat 5 type cable = 150 mts. damaged I.C's. Resistors, capacitors Transistors bread board. Electronic connection wires Total - 5kg | Damaged. From S.F. Physics Laboratory |



COMPUTERS AND ELECTRONIC SPARES TO
DEPARTMENT OF COMPUTER APPLICATIONS
FOR STUDY PURPOSE

| DATE | ITEMS | REMARKS |
|------------|---|--|
| 20-07-2020 | CPU - 07 Nos. Monitors - 07 Nos. | Received Anitha T. Manu Dr. Smitha S |
| 11-07-2022 | Returned Items - 03 CPU and 05 monitors | Returned Anitha T. Manu Smitha S |
| 04-04-2021 | SMPs - 2 Nos. CPU - 04 Nos. | Received Anitha T. Manu Smitha S |
| 31-03-2022 | Items Returned CPU - 05 Nos. SMPs - 04 Nos. | Returned Anitha T. Manu Smitha S |

| | | |
|------------|---|--|
| 1-04-2022 | SMPs - 04 Nos. CPU - 06 Nos. Monitors - 04 Nos. | Received Anitha T. Manu Smitha S |
| 31-03-2023 | Items returned CPU - 05 Nos. Monitors - 03 Nos. SMPs - 04 Nos. | Returned Anitha T. Manu Smitha S |



2. Water Conservation and Management

(a) Rainwater Harvesting Unit

The rainwater harvesting unit on the campus collects the rainwater from rooftops and other surfaces and stores it in a tank with a capacity of 100,000 liters. By implementing a rainwater harvesting system, K.E. College reduces its dependence on groundwater and other sources of water.



(b) Open Well

Open wells are traditional sources of water that have been used for centuries. The College can promote sustainable water use and reduce its dependence on other water sources by utilizing open wells.





(c) Bunds

Bunds are constructed to conserve water in the surrounding area. They can help capture and retain water during the rainy season, allowing it to percolate into the ground and recharge groundwater sources. By constructing bunds, the college can help replenish groundwater sources and promote sustainable water use in the surrounding area.



(d) Water Purification Plant

The campus has a water purification plant and functional drainage systems. The plant consists of a multi grade sand filter, an iron removal filter, and an activated carbon filter.



Main Block



Self-Financing Block



Canteen

(e) Water Purifiers

To ensure clean drinking water, water purifiers, and coolers are installed throughout the campus.

Ground Floor



Main Building First Floor



Main building second floor



Visitors lounge





Boys Hostel



Principal's Office



Self Financing Block



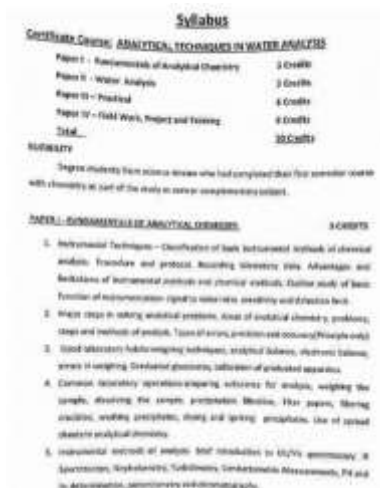
(f) Monitoring of Water Quality

The College's water analysis facility routinely monitors water quality on campus and nearby houses using a water analyzer. All the water parameters were found to be within the permissible limits as per Indian standards.



(g) Academic initiatives for water quality management

Water quality management is one of the research areas of the Research and Postgraduate Department of Chemistry. The thesis entitled "*Investigations on the Synthesis of Different Nano catalysts for the Deterioration of Persistent Organic Pollutants in Water Under Sunlight,*" submitted in December 2022, exemplifies the outcomes of research carried out on the synthesis and characterization of different novel nano semiconductor photo catalysts and their application in wastewater treatment. Publishing this research work in a peer-reviewed journal with a high impact factor serves as recognition of its quality. The department also offers a certificate programme in water analysis.



(h) Water Conservation Awareness Programmes

The College has made efforts to raise awareness about the importance of water conservation and its sustainable use through initiatives such as Observance of world water day, competitions, etc.

As a part of the International World Water Day celebration-2023, the Department of Chemistry, of the College conducted an awareness programme on water conservation for the people of Vechoor Gramapanchayat on March 22, 2023, in association with M.S Swaminathan Research Foundation and Harithakeralam Mission.

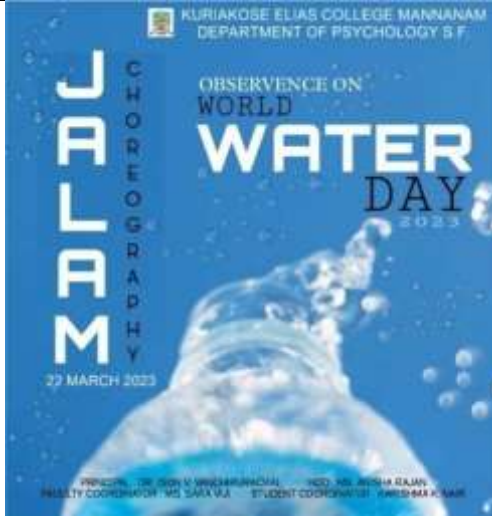
WORLD WATER DAY-2023

World Water Day is an annual celebration held on March 22 to promote sustainable water resource management and raise awareness on the significance of freshwater. Due to climate change, pollution, and unsustainable water management practices, the world is facing an acute water crisis in 2023, making the celebration of World Water Day even more significant. "Accelerating Change" is the theme for World Water Day 2023, which aims to address the water and sanitation crisis. The day presents a chance to accelerate innovations in water resource management and sanitation initiatives, as well as the necessity of ensuring that water resources are sustainably managed for future generations. World Water Day 2023 is a call to action for all stakeholders to come together to discuss the challenges and opportunities of sustainable water resource management and to work toward ensuring that everyone has access to safe and clean water. The program is coordinated by M.S Swaminathan Research Foundation, Kuriakose Elias College, Mannanam, Haritha Kerala Mission - Kottayam and Vechoor Panchayat.

Programme Schedule

10:00 am

| | |
|----------------------|---|
| Welcome Address | Mr. Jibin Thomas M.S Swaminathan Research Foundation Kuttanur |
| Presidential Address | Mr. K R Shylakumar President, Vechoor Grama Panchayat |
| Special Message | Mr. Ajith Kumar Senior Resource Person, Haritha Kerala Mission- Kottayam |
| Technical Training | Dr. Lily Joseph Assistant Professor- Department of Chemistry, K.E College, Mannanam |
| Awareness Programme | Dr. Jeety Thomas Assistant Professor- Department of Chemistry, K.E College, Mannanam |
| Vote of Thanks | Mrs. Jimmal Social Worker |





3. Energy Conservation Initiatives

(a) Solar Panel

Solar panels were installed on the rooftop, having a total capacity of 20 K.W., to harvest the solar energy and converting to electricity. The current generated is fed to the Kerala State Electricity Board power grid. The power generated meets 30% of the energy needs of the campus.





Government Certifications and Power Details of the Solar Panels Installation



Government of Kerala
 Department of Electrical Inspectorate
Office of the Electrical Inspector
 Star Junction, M.C Road, Kottayam P.O, Kottayam-01.
 Phone:- 0481 2588576, Email-ekottayam@gmail.com



Proceedings of the Electrical Inspector, Kottayam

(Present:- Jameskutty Thomas)

Subject:- Installation of 20KVA DG Set, relocation of existing 40kVA DG Set & connected electrica at the premises of M/s KE College, Mannanam, Kottayam - Sanction for energisation - orders issued - reg -

- Read:-**
1. Scheme approval No. B3-1172/19/EIK dated 12/03/19
 2. Completion report No. Nil received on 05/06/20 of M/s Electro Controls,Electrical Engineers & Contractors,First Floor, Marettle Tower, Palace Road, Changanacherry, Kottayam-686101
 3. Inspection conducted on 03/07/20
 4. Nonconformities reported under letter number B3-1172/19/EIK dated 09/07/20
 5. Compliance report furnished under cover of letter No.Nil received on 21/07/20 of M/s Electro Controls,Electrical Engineers & Contractors,First Floor, Marettle Tower, Palace Road, Changanacherry, Kottayam-686101

Order No. B3-1172/19/EIK dated 06/08/20

Sanction under Section 54 of The Electricity Act, 2003 and Regulation 32 of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 is hereby accorded for energisation of the electrical installation covered under the Completion Report read as 2nd above and installed at the premises of M/s KE College, Mannanam, Kottayam with the following specifications subject to the conditions mentioned here under.

Specifications:-

MV Generators

| Rating(kVA) | Voltage(V) | Make | Sl. No. | GCP Breaker(A) |
|-------------|------------|---------------------|------------|----------------|
| 40 | 415 | CROMPTON GREAVES | G2S40.0/43 | 63 |

(Relocation Only)

Engine:-

Make: Greaves Colton Ltd.
 Sl. No: 11340450184
 Rating: 56.1Hp@1500rpm

| | | | | |
|----|-----|-----------|--------------|----|
| 20 | 415 | KIRLOSKAR | YK430250A-58 | 32 |
|----|-----|-----------|--------------|----|

(Newly Installed)

Engine:-

Make: Kirloskar
 Sl. No: YHLD03WNA02303-010
 Rating: 31.25Hp@1500rpm

Connected Load 118.39kW

Earth Electrodes

5Nos.

MV Switch Gears

- a. GSB ISO 125A - 2Nos.
- b. GSB SFU 63A - 9Nos.
- c. KSEB SFU 200A - 1No.
- d. SF PANEL ISO 200A - 1No.
- e. SF PANEL MCCB 100A - 3Nos.
- f. KE INSTITUTE PANEL COS 125A - 1No.
- g. KE INSTITUTE PANEL MCCB 160A - 1No.
- h. KE INSTITUTE PANEL MCB 50A - 5Nos.
- i. BIO TECHNOLOGY COS 125A - 1No.





| | | | |
|-----------------------------|-------------|-------------|-------------|
| j. BIO TECHNOLOGY SFU | 63A - 5Nos | | |
| k. INDOOR STADIUM COS | 100A - 1No. | | |
| l. AUDITORIUM SB ISO | 125A - 1No. | | |
| m. AUDITORIUM SB MCB | 63A - 6Nos. | | |
| n. OFFICE VDB ISO/MCB | 63A - 1No. | 32A - 1No. | 25A - 3Nos. |
| o. OFFICE DG VDB MCB/ISO | 63A - 1No. | 32A - 6Nos. | |
| p. QP ROOM COS | 63A - 1No. | | |
| q. COMPUTER LAB COS | 63A - 1No. | | |
| r. COMPUTOR LAB VDB MCB | 40A - 3Nos. | | |
| s. PHYSICS LAB SB COS | 125A - 1No. | | |
| t. PHYSICS LAB SFU | 63A - 6Nos. | | |
| u. CHEMISTRY LAB SB COS | 125A - 1No. | | |
| v. CHEMISTRY LAB SB SFU | 63A - 4Nos | | |
| w. NEW SEMINAR HALL COS | 63A - 1No. | | |
| x. DG VDB(BIO TECH) MCB/ISO | 63A - 1No. | 32A - 4Nos. | |
| y. AUDITORIUM COS | 63A - 1No. | | |

Conditions:-

- Any addition or alteration to the existing installation shall be carried out only after getting prior written approval from this office.
- The owner should rectify any defects that may be pointed out during subsequent inspection of the installation by the undersigned.
- All the pre-commissioning tests shall be recorded for ready reference.
- Electricity duty for the units produced from the solar energy system should be remitted to the government when demanded.
- The whole installation should be in conformity with CEA (Technical Standards for connectivity of the distributed generation resources) Regulation, 2013 and KSERC (Grid interactive distributed solar energy systems) Regulation, 2014.
- Consent from Licensee shall be obtained in case of grid tied system.
- This office earlier sanction order referred above and the electrics covered by it stand merged with this order.
- This Sanction is subject to the orders / directions of any Court of Law as far as such orders / directions concern the electrical installations covered by this Sanction.
- All the conditions stipulated in the letters under reference cited above shall be scrupulously complied with.

To

The Administrator
KE College, Mannanam, Kottayam



Electrical Inspector

Copy to:

- M/s Electro Controls, Electrical Engineers & Contractors, First Floor, Marett Tower, Palace Road, Changanacherry, Kottayam-686101 [Lic. No.- CA436]
- The Assistant Engineer, KSEB, Electrical Section:- Athirampuzha
- Stock File/Computer Data
- Office Copy

MR Case No.2371 Existing PIR Case No.5361

e.solutions-7.7



Government of Kerala
Department of Electrical Inspectorate
Office of the Electrical Inspector
Kottayam South P.O., Kottayam
Kottayam, 686001
Phone: 04812568878.
Email: eiktm@ceikerala.gov.in
Website: www.ceikerala.gov.in



An IS 15700 : 2005 Certified Department

Kottayam
12.03.2019

Application No: 0720079022019
File No : B1-01172/19/EIK

From
Electrical Inspector

To
Fr Ozhikayil
Administrator K E College Mannanam Kottayam

Sir,

Subject: Scheme for the installation of 1 no 20 kVA DG set, installation of 20kWP solar panel and relocation of existing 40kVA DG set at the premises of K E College, Kottayam Athirampuzha, ATHIRAMPUZHA, Kottayam, 686561 - Issue of scheme approval - regarding.

Reference:
1. Scheme submitted by Baby John, Valluvambram, Malappuram, Kerala, 676517 received on 15.02.2019

Scheme for the installation of 1 no 20 kVA DG set, installation of 20kWP solar panel and relocation of existing 40kVA DG set and connected electrics at the premises of K E College, Kottayam Athirampuzha, Kottayam, 686561 is approved subject to following conditions :

1. Power allocation sanction should be obtained from the Kerala State Electricity Board/Licensee and a copy of the same forwarded to the Office of the Electrical Inspector, Kottayam.
2. Installation of all switch boards and distribution boards should be in conformity with Regulation 37 (iii) of the Central Electricity Authority (Measures relating to safety and Electric Supply) Regulation, 2010.
3. Fuses should be graded properly and selected based on the rating of cables. Low watt loss fuses shall be selected.
4. Earthing of the installation should conform to IS 3043/1987.
5. Isolation facility should be provided for all equipments within a distance of 3 meters from equipments conforming to Regulation 35(5) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.



- 6. M.V Installation should conform to I.S.732.
- 7. Installation of all cables should be as per standards.
- 8. Only materials with I.S.certification as required under Quality Control Order should be used.
- 9. Only energy efficient equipments shall be used in the installation.
- 10. The validity of the scheme approval is upto 11.03.2021.
- 11. The acoustic enclosure of DG set shall be of CPCB approved type.
- 12. Energy meters should be provided in the generators circuits which may be tested and sealed with CTs, if any by the KSEB / Meter Testing and standards Laboratory attached to this Department and copy of the test report shall be forwarded to the Office of the Electrical Inspector,Kottayam.
- 13. Completion report should be submitted to the Office of the Electrical Inspector,Kottayam.
- 14. All relays & meters shall be tested in Meter Testing and Standards Laboratory Thiruvananthapuram / Labs in District Office and test certificate shall be submitted along with completion report.
- 15. Completion report should be submitted to the Office of the Electrical Inspector,Kottayam for arranging inspection.

If the installation is found defective in actual practice such additions or alterations as may be found necessary by the Electrical Inspectorate at the time of inspection or subsequently shall be carried out by the owner

Yours Faithfully

Electrical Inspector



Scrutiny Fee Details

| Sl No | Challan No | Date | Amount | Treasury |
|-------|--------------------|------------|----------|------------|
| 1 | KL011769562201819E | 15.02.2019 | 2328.00 | |
| 2 | KL012855298201819E | 19.03.2012 | 10000.00 | E-treasury |

Copy to:

1 Baby John , Valluvambram , Malappuram, Kerala , 676517

2 Electrocontrols , Electro Controls 1st floor Murette Tower Palace Road Changanachery Kottayam ,

This is a computer generated document. Signature is not required.



National Electronic Fund Transfer (NEFT) Mandate Form

| | | |
|---|---|---|
| 1 | Vendor Name | TATA POWER SOLAR SYSTEMS LTD. |
| 2 | Vendor Code | |
| 3 | Permanent Account Number (PAN) | AAACT4660J |
| 4 | Particulars of Bank Account | |
| | A. Name of the Bank | STATE BANK OF INDIA |
| | B. Name of the Branch | IFB, Residency Road Branch |
| | C. Branch Code | 09077 |
| | D. Address | 61, Residency Plaza, Residency Road, Bangalore - 560025 |
| | E. City Name | Bangalore |
| | F. Telephone No | 080-25943548 |
| | G. NEFT IFSC Code (11 digits) | SBIN0009077 |
| | H. 9 digit MICR code appearing on the cheque book | 560002059 |
| | I. Type of Account (10/11/13) | Cash Credit - 13 |
| | J. Account No. | 10503342950 |
| 5 | Vendor's e-mail id | www.tatapowersolar.com |
| 6 | Date of effect | |

(Please enclose a photocopy of the cancelled cheque to enable us to verify the details mentioned above)

We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the company responsible.

For TATA POWER SOLAR SYSTEMS LTD.

[Handwritten Signature]

Signature of the Vendor

Authorised Signatory

Bank Certificate

We certify that TATA POWER SOLAR has a Account No 10503342950 with us and we confirm that the details given above are correct as per our records. OF STATE BANK OF INDIA

Date :

Place :

[Handwritten Signature]
 Deputy General Manager
 Authorised Officer of the Bank with seal





KERALA STATE ELECTRICITY BOARD LTD.

Athirampuzha Electrical Section - 4664

SOLAR GRID FEASIBILITY REPORT

| | |
|--|------------------------------------|
| Consumer Number | 1146643002491 |
| Consumer Name | PRINCIPAL K E COLLEGE /208/2597374 |
| Section | Athirampuzha [4664] |
| Application Date | 10-10-2018 |
| Inspection Date | 16-10-2018 |
| HT Feeder | Ammancherry [GANDHINAGAR 66KV S.S] |
| Transformer | KE COLLEGE |
| Capacity in kVA | 150 |
| 15% of capacity in KW | 21.600 |
| Capacity of Solar plant connected till now in KW | 0.000 |
| Remaining Capacity that can be connected in KW | 21.600 |
| Capacity of Solar plant demanded in KW | 20.000 |
| Is it feasible to connect to grid ? | Yes |
| Validity of this certificate | 30 days |

Please remit Rs.20000/- as registration fees of the scheme for installation of solar energy system. If you fail to do so within 30 days from the date of issue of this certificate you will loose your priority.

Please submit the following documents along with application for registration

1. Scheme for installation of the solar energy system (Single Line diagram)
2. Technical specifications as well as other particulars of the grid-tied inverter, manually operated isolating switch, solar meter and net meter
3. Type Test Certificates for MCB,ELCB, fuse, inverter, etc issued by the laboratories accredited by the National Accreditation Board For Testing and Calibration Laboratories (NABL) or by such other institutions at international level for the testing and calibration of electrical equipment

Rajesh
 24/10/18
 Assistant Engineer
 Electrical Section
 Athirampuzha
 Rs.20000/-

Solar OnGrid Consumer (Generator)

| | | | |
|------------------|---------------|---------------|------------------------------------|
| Consumer No | 1146643002491 | Consumer Name | PRINCIPAL K E COLLEGE /208/2597374 |
| Section | 466400003 | Capacity | 30 KW |
| Application Date | 06-09-2018 | | |

Bank Statement for 202106 (Generator)

| | | | |
|----------------|----------|-----------------|---------|
| Generation | 1620 kWh | Consumption | 900 kWh |
| Net Generation | 0.000 | Net Consumption | 720 kWh |
| Balance | 0.000 | | |



B. ENCON Club & Awareness Programmes on Energy Conservation

Encon Club of Kuriakose Elias College is run by the Department of Physics, under the sponsorship of BPCL- Cochin Refineries. ENCON club is purely a voluntary non-profit group activity aimed at practicing energy conservation and environment protection the club organizes various competitions, seminars and awareness programs regularly for college students on environment related and energy saving topics.

- **Workshop on LED Bulb Making**

On campus, tube lights are replaced with L.E.D. tubes or bulbs to save energy. Less energy use reduces the demand for energy from power plants and decreases greenhouse gas emissions. The college ENCON club conducted hands-on experience in the fabrication of solar cells for students. Dr. Benny Joseph Thullisseril, Professor, KMEA Engineering College, Aluva, served as a resource person. A skill-development workshop on the making of L.E.D. bulbs was also conducted. Our students researched sustainable energy conservation models in Kerala and submitted the report to college authorities. The Department of Physics with Applied Electronics conducted a two-day awareness programme on energy conservation for the school students in the Idukki District on November 23 and 24, 2022. They also conducted a one-day workshop on "Decoration Lights" (L.E.D.) on December 15, 2022, at the College to create awareness among students about the efficiency and reduced power consumption of L.E.D. lights compared to traditional lighting, such as fluorescent and incandescent lights.

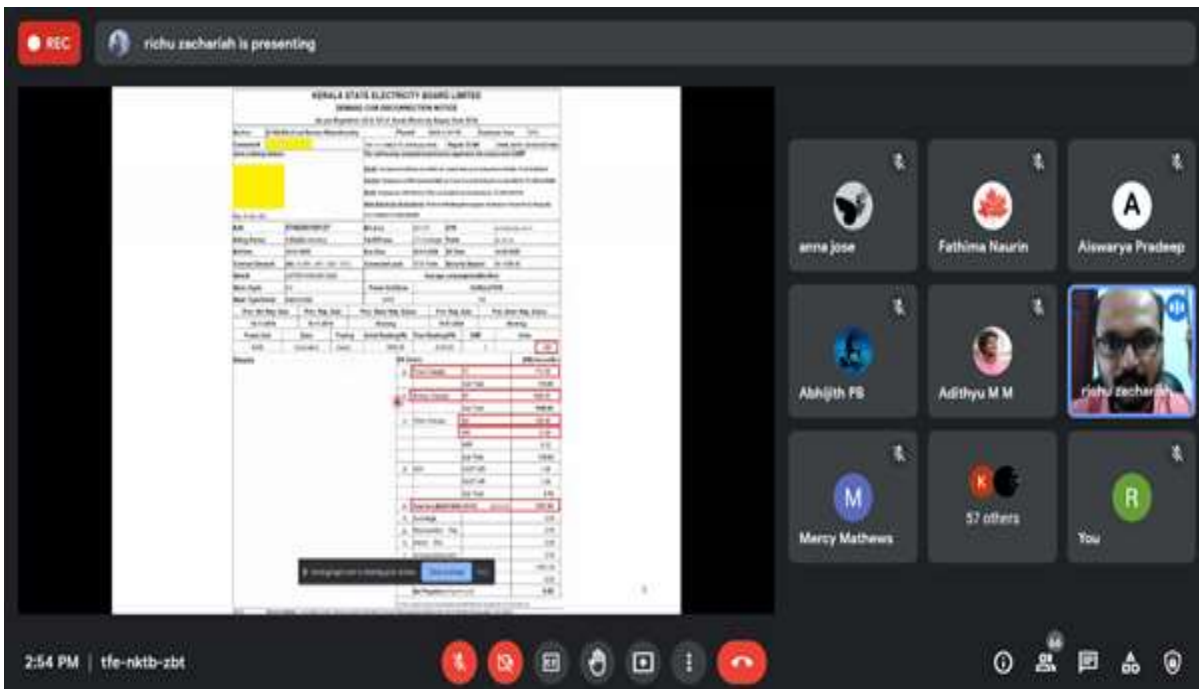




- **Webinar on ‘Understanding and Managing Your Residential Energy Bills’**

On October 1st, 2021, the Encon Club, operated by the Department of Physics at K.E. College, Kottayam and sponsored by BPCL-Cochin Refineries, organized a significant webinar titled ‘Understanding and Managing Your Residential Energy Bills.’ This hands-on training session was tailored for both Postgraduate (PG) and Undergraduate (UG) students, aiming to equip them with practical knowledge on conducting home energy audits and optimizing energy use to achieve savings.

The webinar saw active participation from 73 students who engaged with the topic enthusiastically. The session was led by Mr. Richu Zachariah, a Certified Energy Auditor and Assistant Professor at Amal Jyothi College of Engineering, Kanjirappally. Mr. Zachariah's expertise provided valuable insights into effective energy management strategies that can be implemented in residential settings.





- **Oil and Gas Mass Awareness Campaign (SAKSHAM- 2020)**

ENCON club along with student members organized an ENCON week in February 2020. ENCON week was started by the inauguration of ENCON Club on 11th February 2020. The guest of honour was **Dr. Benny Joseph Thullisseril, Professor, KMEA Engineering College, Aluva**. The event provided an awareness regarding energy conservation among UG and PG student.



Various Competitions like interdepartmental essay, quiz and drawing competition on the successive days in February based on the theme chosen by Cochin refinery. There was active participation by the students from various departments in the college.



- **Oil and Gas Mass Awareness Campaign (SAKSHAM- 2019)**

Under the sponsorship of BPCL-Cochin Refineries, the Oil and Gas Mass Awareness Campaign (SAKSHAM-2019) , in collaboration with the Department of Physics' Encon Club. ENCON Club frequently arrange competitions and lectures for university students on environmental subjects.

- **Inauguration of ENCON Club (2018-2019) and Seminar on Conservation of Natural Resources**

Encon Club is run by the Department of Physics, K.E. College, Kottayam, under the sponsorship of BPCL- Cochin Refineries. The club organizes various competitions and seminars regularly for college students on environment related topics.

A one day seminar was conducted by the chief guest, Dr. N. C. Induchoodan, Ret. Dy. Conservator of Forest on “*Conservation of Natural Resources*” on 15th October 2018 .In the present realm of deteriorating resources, students as well as teachers were enlightened with the need of preserving it.





● **Energy Conservation Awareness Program at Schools**

As part of the campus outreach initiative for green practices, the Department of Physics with Applied Electronics of K.E College conducted a successful Energy Conservation Awareness Program on February 9 and 10, 2021 aimed at educating nearby schools about effective energy use and cost reduction. The program aimed to raise awareness about energy conservation, focusing on the efficient use of electronic and electrical equipment to help reduce electricity bills and promote sustainable practices. The initiative was led by a team of dedicated faculty members, including Mr. Anish Kumar PS, Ms. Sruthi S, Ms. Sunu Ann Thomas, and Ms. Soniya N.V. The team worked under the guidance of the Head of Department, Ms. Deepthi S Nair. On February 9 and 10, 2021, the team visited approximately 20 schools in the area. During these visits, they conducted interactive sessions and provided practical tips on energy conservation. Each school received an energy conservation awareness notice. This notice contained valuable information on how to effectively use electrical appliances and implement practices to save energy





C. K. E. Energy Conservation Cell (KE ECC)

K. E. Energy Conservation Cell (KE ECC) was constituted to create awareness among general public about conservation of energy and environment. KE ECC aims to equip the public with capacities for an effective management of all forms of energy in air, land, water, living organisms, habits etc. KE ECC considers it as its prime responsibility to instil interest in students on energy conservation and sustainable development. KE ECC conducts programmes enabling the students to organise events for achieving objectives of the cell.

- **Competitions**

Interdepartmental essay, quiz and painting completions were conducted by the KE ECC on 27/2/2019 based on the theme chosen by *Cochin Refinery*- 'Fuel Conservation through Public Participation'. There was an active participation of the students from various departments in the college.

Environmental awareness is to understand the fragility and sensitivity of our environment. Promoting environmental awareness is an easy way to become environmental steward and participate in creating a brighter future for our next generations. A one day seminar on *Environment and Human Rights & Overseas Education* was conducted by the KE ECC in collaboration with the Department of Chemistry on 08-07-2019. Dr. Antony Thomas, Principal, K.E College presided over the inaugural ceremony for the seminar, Dr. Aji Peter, Brunel University London was the chief guest for the day. He inaugurated the seminar.

He talked about the natural resources, environmental pollution and social issues; he also explained human rights of different countries and national perspective. This was very much beneficial to students to aware about the environmental aspects with some glimpse of contemporary issues. This will help them foster a sense of responsibility and proactive citizenship.

- **ESMART 2018 - 19: Led Bulb Assembling Workshop**

People squander a lot of energy in their daily lives by failing to turn off lights when not in use, using out dated, inefficient appliances that take a lot of electricity, or failing to turn off cars when the light is really long. Energy conservation is necessary to protect resources for future usage in addition to reducing costs.

The majority of energy produced today comes from power plants that run on hydro power or coal. Although these plants provide electricity, they also contaminate the surrounding air through the release of hazardous chemicals. In addition to being bad for the environment, these hazardous gasses pose a major risk to both human and animal health. Because of the poisonous materials in the air we breathe,



millions of people die each year. Therefore, one of the major environmental problems we are currently experiencing is air pollution.

The resources we have now should be used wisely to preserve them for future use because they are finite and will eventually run out. The unfortunate thing is that because of how quickly people have been utilizing these resources, it's possible that we will run out of them much sooner. These non-sustainable resources include coal, oil, and gas. The next generation may not have access to them. As a result, it is our duty to preserve energy as much as we can for the benefit of our children and to stop further environmental deterioration.

The Department of Electronics and the K.E Energy Conservation Cell (KE ECC) took the lead in promoting energy conservation and resource preservation for future use. In order to do this, the Electronics department hosts a session on "making LED bulbs." In conjunction with the *Urjakiran* Program run by Devamatha College, Kuravilangad, Kottayam, Mr. Anish Kumar P.S., faculty member in the Department of Electronics, organized an LED bulb making workshop at Alphonsa College Pala, K.E. College Mannanam, and St. Sebastian Church, Mannackanadu.

- **LED Bulb making workshop at Alphonsa College Pala**

On December 18, 2018, Mr. Anish Kumar P.S. gave a lecture and workshop at Alphonsa College Pala. 60 students took part in the session, and about 120 students attended the lecture. The parts and assembly of LED bulbs were explained to the students. They were instructed to put together each LED light individually, and the event was a success.





- **LED Bulb making workshop at St. Sebastian’s Church, Mannackanadu**

On March 18, 2019, Mr. Anish Kumar P.S. led a training session at St. Sebastian's Church in Mannackanadu in conjunction with the Devamatha College in Kuravilangad's *Urjakiran* 2018–19 programs. The workshop on creating LED bulbs drew around sixty participants. The participants gained familiarity with the parts and assembly of LED bulbs. Each person created an LED bulb, and the event was a huge success.





- **LED Bulb making workshop at K.E. College Mannanam**

On February 4 and 12, 2019, Mr. Anish Kumar P.S. gave a workshop at K E College Mannanam. 35 students took part in the workshop on creating LED bulbs. The parts and assembly of LED bulbs were explained to the students. The kids contributed to the success of the event by making individual LED bulbs.





GREEN INITIATIVES WITHIN AND OUTSIDE THE CAMPUS

A. GREEN PROTOCOL

The College has implemented green initiatives that align with the standards set forth by the Haritha Kerala Mission. These initiatives cover various aspects related to sustainability.

1. Promote and advocate for the adoption of the 'respect, rethink, reduce, reuse, and recycle (5R's) principle within the campus community.
2. Cultivate a culture of responsibility among the campus community to prevent the wastage of resources.
3. Encourage a mindset that discourages the use-and-throw culture and excessive consumerism.
4. Support the use of reusable utensils for dining and beverages on campus, particularly during events and functions.
5. Facilitate the proper separation and management of waste into categories such as biodegradable, non-biodegradable, and hazardous materials.
6. Promote the responsible disposal of used sanitary napkins and other sanitary waste through scientific methods like incineration.
7. Advocate for the composting of biodegradable waste to create organic manure, following a "waste to wealth" approach.
8. Promote the conversion of organic waste into valuable resources like vermicompost manure or biogas.
9. Encourage recycling by segregating non-degradable materials, such as plastics, and sending them for recycling through "Haritha Karma Sena."
10. Discourage the use of non-degradable decoration items like plastic-covered bouquets, flex banners, and pharmacol during functions.
11. Advocate against the use of plastic or rexine-coated binding materials for projects and proposals.
12. Recommend alternatives like cloth banners, metal boards, and electronic displays instead of flex and other non-eco-friendly hoardings.
13. Promote the use of reusable items like ink pens and bags made from jute, cloth, or paper during workshops and seminars.



14. Advise on the proper storage, handling, and disposal of electronic waste in compliance with e-waste management regulations.
15. Instill a sense of personal responsibility regarding resource utilization, waste generation, and reducing one's carbon footprint.
16. Foster a sense of belonging, encourage minimalism, and promote eco- sustainability throughout the campus.
17. Encourage students to observe "clean-up drives" concerning environmentally relevant days.
18. Provide training programmes to the students on L.E.D. bulb making, paper bag making, etc. to make them self-reliant in an eco-friendly lifestyle.
19. Incorporate and regularly conduct environmental audits.
20. Enhance and expand existing green initiatives and best practices to achieve environmental sustainability.
21. Ensure the engagement of campus green teams to monitor and maintain environmental health.
22. Introduce programs and initiatives that cultivate environmental stewardship and awareness.
23. Promote community responsibility and engagement by fostering increased cooperation among students, staff, and the local community on environmental initiatives and extension programs.
24. Setting up functional rainwater harvesting systems to mitigate the water scarcity issue in summer and water recharge pits to ensure groundwater supply year- round.
25. Encourage students and staff to reduce the use of automobiles and follow energyconserving modes of transport like cycling, walking, vehicle pooling, and more reliance on public transport systems.
26. Provide tree-lined pathways and landscaping on the college campus to ensure stress relieving, relaxing strolls for the students and staff.
27. Conduct nature conservation programmes in the neighborhood communities through the extension activities of cells or clubs
28. Inspire students to develop environmental responsibility through nature camps and field trips.
29. Support the green initiatives of the Government of Kerala and the Union Government.



B. International Day Observances in Campus Related to Environment & Energy

In our college's ongoing dedication to environmental stewardship, we commemorate several crucial environment-related days throughout the year, each highlighting a specific aspect of our planet's health and the urgent need for action. These include World Environment Day, World Ozone Day, World Nature Conservation Day, as well as days focused on Water Pollution Prevention, Ozone Protection, Rainforest and Water Conservation, Disaster Risk Reduction, and Recycling.

World Environment Day on June 5th and World Nature Conservation Day on July 28th encourage us to reflect on the importance of preserving our natural ecosystems and biodiversity. World Ozone Day on September 16th reminds us of the global efforts to protect the ozone layer, while Water Pollution Prevention and Rainforest and Water Conservation Days underscore the critical need to protect our water resources and vital rainforests. Disaster Risk Reduction Day highlights the importance of preparedness and resilience in the face of environmental hazards, and Recycling Day promotes sustainable waste management practices.

Through educational seminars, interactive workshops, awareness campaigns, and hands-on activities like tree planting and clean-up drives, our college engages the entire community in these observances. These days serve as powerful reminders of our collective responsibility to protect the environment and inspire us to take concrete actions that contribute to a sustainable and resilient future for all.

1. Observances of World Environment Day

2018-19

In recent years, our college has taken significant strides in promoting environmental sustainability and awareness among students and staff. Through a series of well-coordinated activities and initiatives, we aim to foster a culture of environmental stewardship within our academic community. The activities of N.S.S and NCC for the year 2018-2019 commenced with the observance of World Environment Day on June 5, 2018. The green volunteers of the college gathered in the auditorium to take an oath to protect the environment and planted 20 saplings on the campus.



Environment day Observance by the Department of Botany

The Environment Day in June 2018 was marked by the successful execution of the "*Green and Clean Campus Initiative*," an environmental campaign led by the Department of Botany. This initiative aimed to elevate environmental awareness and promote sustainable practices within the campus community. The launch of this initiative focused to create a cleaner and greener campus environment, to educate students and staff on the importance of waste management and recycling to engage the campus community in sustainable practices and to promote biodiversity on campus.

2019-20

Under the auspices of the NSS unit, the college observed World Environment Day on June 5, 2019. College administrator Rev. Dr. Joseph Ozhukayil CMI gave a speech emphasizing the importance of leading a sustainable life. A rain gauge was installed on the college grounds to commemorate the day. 70 NSS volunteers took part in the activity. The Commerce Department's NSS volunteers were given the responsibility of measuring rainfall.





2020-21

In collaboration with *KEDAS* and *ASWEM*, the Postgraduate Department of Social Work commemorated World Environment Day on June 5, 2020. Recognizing that nature is the foundation and sustenance of all life, the department emphasized that protecting it is not just a duty but an urgent calling for future generations. To honor World Environment Day, *KEDAS* and the Department of Social Work distributed 500 tree saplings to the teachers and students of K.E. College, Mannanam, and planted an additional 250 trees in the Neendoor region. In celebration of Nature Observation Day, *KEDAS* also organized an essay competition themed "*Protect Our Environment.*"





Environmental Day Celebration by the NSS Unit

The N.S.S. unit of the College, celebrated World Environment Day on June 5th with an eco-friendly initiative. An online quiz competition was organized to raise awareness among students about environmental protection. The event was open to all students of our college. We were delighted to witness the enthusiastic participation of students, each eager to demonstrate their knowledge and commitment to preserving our planet.. This event not only underscored the importance of environmental conservation but also inspired students to embrace sustainable practices in their daily lives. All the volunteers were also requested to plant a tree at their homes and post the photos .



Planting of Tree Saplings in the campus as part of the World Environment Day celebrations

2021-22

In alignment with the college's long-standing commitment to green initiatives and the vital importance of recycling, the Department of Botany, celebrated World Environment Day by hosting an Intercollegiate Recycled Arts Competition themed '*Recycle for a Life Cycle.*'

This innovative competition, conducted via an online platform, invited students to engage in creative recycling practices by repurposing and transforming waste materials into functional and artistic creations. Participants were provided with detailed guidelines, which included submitting photographs of their recycled art, recycled items, or refurbished materials.

Entries were evaluated based on three key criteria: creativity, the selection of materials, and the practical utility of the final product. The competition drew significant participation from various colleges, with students showcasing a wide range of inventive and eco-friendly projects.

The Intercollegiate Recycled Arts Competition not only marked World Environment Day but also cultivated a culture of sustainability and environmental responsibility among students. By promoting



the reuse and repurposing of materials, the competition highlighted the critical role of recycling in conserving resources and protecting the environment. The event stood as a testament to the creativity and dedication of young individuals striving for a more sustainable future.

**KURIAKOSE ELIAS COLLEGE
MANNANAM**

Department Of Botany



WORLD ENVIRONMENT DAY
June 05 2021

Celebrations
"Recycle for a life-cycle"
**Recycled Arts
Competition**

Rules:

- 1) Students from any college can participate in the competition.
- 2) Participants can send picture of their recycled arts, upcycled materials, recycled and renovated materials.
- 3) Each participant can submit one picture.
- 4) Everyone has to submit the picture in JPEG/PDF to the e-mail: botanykee0@gmail.com (Name, Phone Number, Department and Name of the college of the participant must be included)
- 5) Last date of submission: 5 June 2021 10 am.
- 6) The best two will be awarded with data packages.
1st prize: 298.1.5 GB/day, 84 days
2nd prize: 249.2 GB/day, 28 days

For Enquiry
Student Coordinators: Aaha : +91 70002 24706, Alex : +91 75939 87945

Principal : Anthon
Dr. Xavier Chemmanur CM

Head Of Department
Dr. Anthony T Theby

Association Director
Mrs Mathila Baby

**KURIAKOSE ELIAS COLLEGE
MANNANAM**

DEPARTMENT OF BOTANY

**ENVIRONMENT DAY
CELEBRATIONS**

**RECYCLED ARTS
COMPETITION**

5th June 2021

CONGRATULATIONS TO THE WINNERS !!!

1st "RECYCLE 2nd

**FOR
A
LIFE
CYCLE.."**



ANUPRIYA S
Department of Zoology
Sree Narayana College,
Alathur, Palakkad



NAJAH P. K
Sree Narayana College
Nattika

The N.S.S unit of the college observed Environment Day with 'Plant a Tree Campaign' on June 5th. The campaign was inaugurated by Rev. Dr. Xavier C. S by planting a sapling of 'Rambutan' fruit in the Butterfly Garden of our campus. Since the colleges were closed due to Covid 19, All of us, the second-year volunteers also planted a tree at our homes as part of the campaign

**KURIAKOSE ELIAS COLLEGE
MANNANAM**

NSS UNIT NO. 20

**PLANT A TREE
CAMPAIGN**

IN OCCASION OF
**WORLD ENVIRONMENT DAY
JUNE 5**

"THE TRUE MEANING OF LIFE IS
TO PLANT TREES, UNDER WHOSE SHADE
YOU DO NOT EXPECT TO SIT"





2022-23

World Environment Day, celebrated annually on June 5th to raise environmental awareness and encourage action, was marked this year with collaborative efforts from the N.S.S. units of K.E College, Mannanam, M.G. University, B.K. College Amalagiri, and Ettumanoorappan College. Dr. Sabu Thomas, Vice Chancellor of M.G. University, inaugurated the event by planting a sapling in the university’s biodiversity park. He was joined by Dr. Shivadasan N, the N.S.S. Coordinator at M.G. University, along with district coordinators, program officers, and 20 volunteers from each participating college. The volunteers played a crucial role by planting various saplings throughout the park, underscoring the importance of environmental stewardship and enhancing environmental awareness among all participants.

Glimpses of the Environment Day Celebration, June 05, 2022





The cadets of the N.C.C. Army wing of the College also observed the day by planting tree saplings at the premises of their houses and locality under the caption "Only One Earth". This was an event that showcased the concern of the cadets toward the future generation.



The Department of Botany, in association with the Bhoomithrasena Club, observed World Environment Day on June 8, 2022, by conducting an organic vegetable sale and food fest. Organic vegetables produced by our students at their homes were exhibited and put for sale. Students also prepared food items from underutilized vegetables and tubers in Kerala. The event successfully evoked the importance of organic farming and the use of underutilized food resources in Kerala for a healthy lifestyle.





2. World Bicycle Day - June 03, 2022

Bicycle Day is being observed as a reminder of the bicycle's potential to contribute to sustainable development and create a healthier and more environmentally friendly world. The use of bicycles among college students will help in building physical fitness, well-being and a healthy body. In connection with the world bicycle day to create an awareness among the students of the benefits of cycling and to the society our unit conducted a cycle rally to the Mannanam on June 3rd at 10.00 am. The rally was flagged off by Principal Dr. Ison V. Vanchipurackal in the presence of programme officers and volunteer leaders.



3. World Environmental Health Day Celebrations - 2019

On September 30, 2019, the Department of Botany observed World Environmental Health Day with a series of engaging activities aimed at promoting environmental health awareness. The day featured an invited talk and various competitions designed to involve students creatively.

The program commenced with a thought-provoking lecture titled *"Maintaining Environmental Health,"* held at 10:00 AM in the College Auditorium. Dr. Prakash Kumar, DCDC, M.G. University, was the guest speaker. Dr. Kumar addressed key issues such as the impacts of pollution, climate change, and unsustainable practices on human health. He emphasized the crucial role of both



individual and collective actions in fostering a healthier environment. The talk was well-received, offering attendees valuable insights into environmental health and practical measures to support a sustainable future.

Poster-making competition was also held with the theme *"Burning Lungs, Shrinking Kidney, Tired Mother."* Students from various departments participated, and their creations were judged on creativity, relevance to the theme, clarity of message, and visual appeal. The competition saw enthusiastic participation, with students producing impactful posters that highlighted the severe consequences of environmental degradation on human health and the planet.

As part of the events for the day, the Waste Material Craft Competition showcased students' creativity in repurposing materials such as plastic bottles, old newspapers, cardboard, and metal scraps. Judged on creativity, effective use of waste materials, aesthetic appeal, and functionality, the competition demonstrated innovative ideas for transforming waste into useful and decorative items, reinforcing the importance of recycling and waste reduction.

The World Environmental Health Day celebration by the Botany Department was a significant initiative in advancing environmental and health awareness. The successful execution of these activities underscores the college community's dedication to environmental stewardship and sustainable practices.



4. World Ozone Day Observances

2019-20

On September 24, 2019, the Research and Postgraduate Department of Chemistry organized an Ozone Day celebration themed *"Get in the Zone to Save Ozone."* The event was inaugurated by Dr. Aji Peter, Senior Consultant Scientist at Brunel University London. The celebration saw participation from 110 students of our college and 50 students from other institutions. Prof. Aravind Krishnan, Assistant



Professor in the Department of Chemistry at S.B. College Changanassery, conducted a session on the ozone layer and its significance. His talk covered the importance of the ozone layer, its depletion causes, and related issues, with an engaging discussion that saw active participation from nearly all attendees.

A quiz competition led by Prof. Tony Francis, Assistant Professor in the Department of Chemistry at St. Mary's College Manarcadu, took place. The event also featured online digital poster design and slogan writing competitions.

GUIDELINES FOR THE COMPETITION

Quiz Competition

- A book (maximum of four students). There is no restriction on the number of years that participants from a college (SGAP).
- Participants need to submit their name and college name on the form for the final round.
- Final round will be conducted on 24/09/2019.
- Subject topics will follow: Ozone, CFC, PVC, Green & Environment.

Digital Poster Design

- Theme of the competition is "GET IN THE ZONE TO SAVE OZONE". There is no restriction on the number of students that can participate from a college (SGAP).
- Software that can be used: Microsoft, CorelDRAW, Elements, Designer, Photoshop, Procreate, Paint and Procreate.
- It should be PDF format and should be less than 10 MB.
- Poster should be original both design and content.
- The poster must be A3 size (297 x 420 mm or 11.69 x 16.53 inches). Use high quality and suitable images etc. to avoid blurring.
- Completed posters must be sent to ksap@stmaryscollege.com before 23rd September, 2019 before 8 pm. Along with poster there should be brief description of the poster which include Name, College and Contact of student, Mobile Number. E-mail id.

Online Slogan Writing

- Theme of the competition is "OZONE DAY". There is no restriction on the number of students that can participate from a college (SGAP).
- It must be sent to ksap@stmaryscollege.com before 23rd September, 2019 before 8 pm. Along with poster there should be brief description of the poster which include Name, College and Contact of student, Mobile Number. E-mail id.

Central Poster: OZONE DAY CELEBRATIONS - 2019. GET IN THE ZONE TO SAVE OZONE. INTER COLLEGIATE QUIZ COMPETITION. 24th September 2019. Venue: New Seminar Hall.

Programme: 10:30 AM Inaugural Session. Chief Guest: Dr. Aj Peter, Environmentalist, Brunel University, London. Session I: 11:30 AM INVITED TALK. Prof. Anand Krishnan, Assistant Professor, S.B College Changanassery. Session II: 01:30 PM INTER COLLEGIATE QUIZ COMPETITION. PRIZE DISTRIBUTION. Organizing Committee: Dr. Jincy Thomas, Dr. Sandhya C, Ms. Sindha Matha Jose, Dr. Ajay Augustine, Dr. Lily Joseph, Ms. Reemol C C, Ms. Anu Cherian, Ms. Megha Jose.

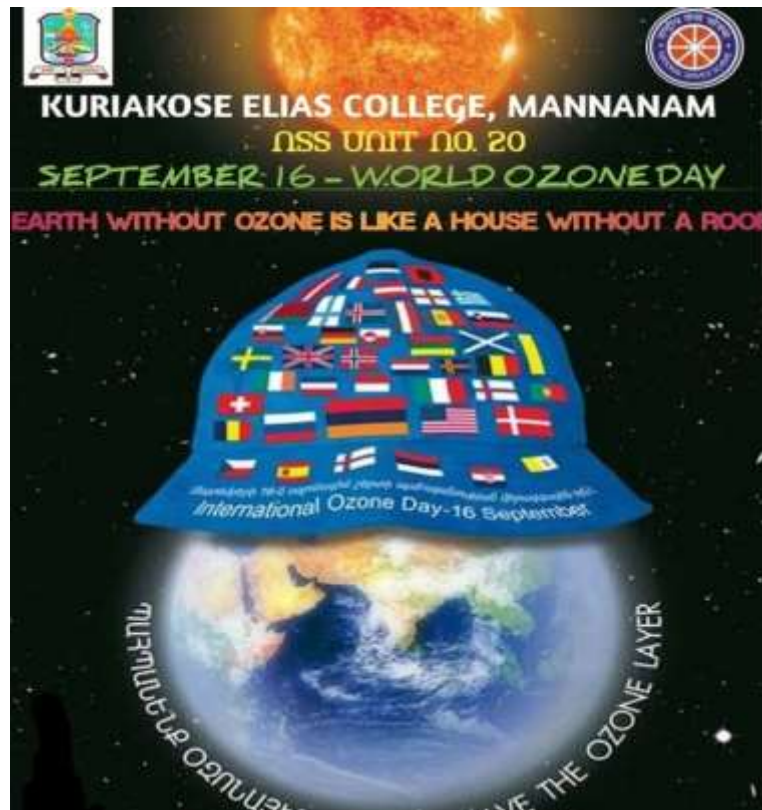


Ozone day Talk Session, September 24, 2019

2020-21

On September 16, 2020, the NSS Unit commemorated Ozone Day, dedicated to recognizing the crucial role of the ozone layer as our planet's invisible shield. The Earth Protecting Program focused on conveying the essential message of preserving our environment by limiting the production and use of harmful chemicals like chlorofluorocarbons and greenhouse gases.

In celebration, students created informative posters that emphasized the importance of Ozone Day and the urgent need to safeguard the ozone layer. This initiative effectively heightened awareness among students about ozone protection and reinforced our shared commitment to environmental conservation.



2021-22

On Ozone Day, September 16th, the NSS unit organized a cycle rally to raise public awareness about reducing motor vehicle use and promoting eco-friendly transportation alternatives. Featuring 12 bicycles, the rally traversed an 11-kilometer route from the college through Mannanam, Ammanchery, Medical College, and Vaarimuttom. The event aimed to highlight the benefits of cycling as a sustainable mode of transportation while encouraging community participation in environmental conservation.

The rally was further inspired by the involvement of former program officer Mr. Prajod Sunny. Looking ahead, the NSS unit plans to continue its efforts with regular awareness campaigns, collaborations with local authorities, educational programs, and the promotion of green initiatives. This event marked a significant step towards environmental conservation, and the NSS unit remains committed to fostering sustainable practices for future generations.



2022-23

World Ozone Day, observed annually on September 16, aims to raise awareness about the depletion of the ozone layer and explore solutions for its preservation. To highlight the importance of this critical layer and its protection, second-year BSc Zoology students engaged in several educational activities.

On September 22, students from the UP section of St. Joseph's School, Mannanam, were invited for a special session. Mareesha Devi and Veena Gayathri from II BSc Zoology presented a PowerPoint presentation, explaining that the ozone layer is a vital component of our atmosphere that protects Earth from the sun's harmful ultraviolet (UV) rays. The presentation emphasized the potential damage UV rays can cause to plants, animals, and humans alike.

The students were also informed about the consequences of ozone depletion, including increased global temperatures, melting glaciers, a rise in ocean levels, and an increased risk of cancer. Following the presentation, a short quiz was held, during which the students demonstrated enthusiastic and active participation.

Overall, the session was both creative and engaging, effectively raising awareness among the students about the critical importance of protecting the ozone layer and the seriousness of its depletion.



5. World Nature Conservation Day Observances

2020-21

World Nature Conservation Day emphasizes that a healthy environment is essential for a stable and thriving society. To ensure the well-being of present and future generations, it is crucial for everyone to participate in protecting, conserving, and sustainably managing our natural resources.

In alignment with this mission, the P.G Department of Social Work of K.E. College, Mannanam, in collaboration with KEDAS, ASWEM, and IQAC, observed World Nature Conservation Day on July 28, 2020. As part of the event, a "Crafts from Scraps" competition was organized. A total of 104 participants enrolled, and competition guidelines were shared via WhatsApp. Special emphasis was placed on using non-biodegradable materials like plastic in the crafts. Certificates of excellence were awarded to the participants who secured the First, Second, and Third positions.





6. World Rainforest Day Commemoration

2021-22

Rain forests are the green cover that sustains life and energy on Earth. June 22 every year is observed worldwide as World Rainforest Day to raise awareness and encourage action to protect these vital ecosystems.

In observance of this day, the Department of Botany at Kuriakose Elias College, Mannanam, organized an expert session on *'The Importance of Rainforests'* along with two competitions for students. The expert session was led by Shri Noyal Thomas IFS, Principal Chief Conservator of Forests (Forest Management) of Kerala, who emphasized the crucial role rain forests play in maintaining the delicate balance of nature. He highlighted their importance in regulating the climate, sustaining biodiversity, and supporting the livelihoods of millions of people.

Two inter-collegiate competitions; Logo making and Caption writing, were also conducted for the students. Students from different colleges in Kerala participated in these contests. These competitions provided a platform for students to showcase their creativity and knowledge related to rainforest conservation. The observance of World Rainforest Day by the Department of Botany, Kuriakose Elias College served not only to educate and inform but also to inspire students to take an active role in environmental conservation. By highlighting the importance of rain forests and promoting sustainable practices, the event contributed to a broader understanding and appreciation of these vital ecosystems.





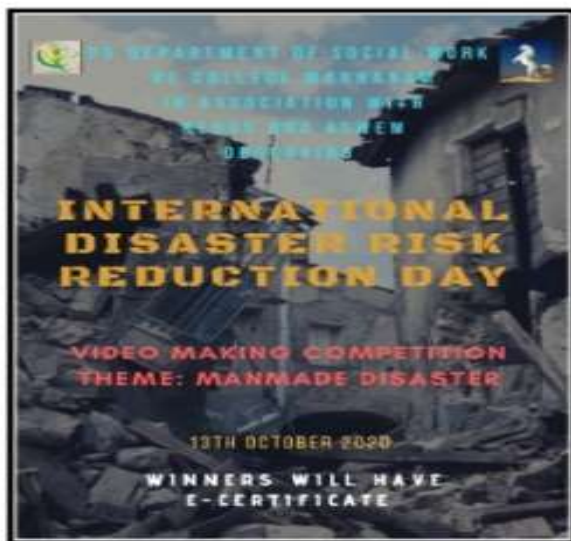
7. International Day for Disaster Reduction (IDDR)

2020-21

The International Day for Disaster Reduction (IDDR) is observed annually on October 13. In 2020, the focus was on 'Man-Made Disasters,' emphasizing the importance of recognizing and mitigating risks associated with human-induced disasters, particularly in the context of the ongoing COVID-19 pandemic.

This year's theme aimed to highlight the potential dangers of man-made disasters, which can often be overlooked or underestimated. The observance was a crucial step in shifting the discourse on disaster management to include a broader range of human-induced risks.

To engage the public and raise awareness about this important issue, an online Short Video Making Competition was organized by Department of Social Work. Participants were invited to create a video up to 2 minutes long, addressing the theme of man-made disasters. The competition was conducted via WhatsApp and Instagram platforms to facilitate easy participation and sharing.





2022-23

Mock Drill by Fire Force

In connection with the observance of International Day of Disaster Reduction our N.S.S unit organised an awareness programme in association with Kerala Force Unit Kottayam and Civil Defence Unit. They conducted a mock drill on giving first aid and how to turn off the fire of L.P.G cylinder.



INTERNATIONAL DAY FOR DISASTER REDUCTION

6. National Pollution Prevention Day Observance

2022-23

On December 2nd, 2022, the team of HEI observed National Pollution Prevention Day with a dedicated effort to combat environmental pollution. In line with this observance, our N.S.S team undertook a meaningful initiative to enhance local environmental conditions.

Our team focused on two key activities: we cleaned the Mannanam - Chaathunnippara link road and collected plastic waste from the college premises. This hands-on approach aimed to not only to improve the cleanliness of our surroundings but also to raise awareness about the importance of reducing pollution and protecting our environment. By actively participating in these clean-up efforts, we sought to engage the community in meaningful dialogue about pollution reduction strategies. Our goal was to foster a collective sense of responsibility towards preserving nature and promoting



sustainable practices. Through these actions, we hope to inspire others to take similar steps in their communities and contribute to a cleaner, healthier planet for future generations.



7. World Forestry Day Observation-‘PUTHUNAMPU’-2023

"Puthunampu" is an extension program conducted by Bhoomitrasena Club in association with the Department of Botany, K.E College, Mannanam as a part of "World Forestry Day Observation" on 27th March 2023. The distribution of vegetable saplings and sale of organic vegetables grown by student volunteers of the Bhoomitrasena and Botany department was the focal event. A pamphlet of instructions on sowing and raising the vegetables was also distributed along with the saplings. The student members of the Bhoomitrasena club also provided awareness of the importance of organic farming.





8. Water Day - Chavara Kadavu Cleaning - March 22

Water Day is observed for creating attention among the public on the importance of fresh water and advocating for the sustainable management of fresh water resources. Maintenance and cleaning of Chavara Kadavu is one of the projects undertaken by our unit from 2018. During every rainy season Mannanam jetty will get covered with water weeds from Meenachil river. Even though it's a tedious task our volunteers will take part in this with great interest. Programme Officers Ms.Neethu Jose, Ms.Chinchu Rani Vincent and Mr.George Sebastian gave leadership to the programmes

Kuriakose Elias College, Mannanam
NATIONAL SERVICE SCHEME
 ചാവറ കടവ് ശുചീകരണം

March 22 Water Day യോടനുബന്ധിച്ച് **NSS** വോളണ്ടിയേഴ്സിന്റെ നേതൃത്വത്തിൽ മാനാനം ചാവറ കടവിൽ ശുചീകരണ പ്രവർത്തനങ്ങൾ നടത്തപ്പെട്ടു.



Green Audit and Recognitions

The numerous awards and recognitions received by Kuriakose Elias College offer clear evidence of its successful environmental and social initiatives. The recognition by **Haritha Kerala Mission** as a **Haritha Institution** for green initiatives in May 2023 reflects the college's dedication to sustainable practices, achieving the benchmarks set by the state's environmental mission. The consistent Outstanding Performance awards received from Mahatma Gandhi University for its NSS unit in 2021, 2022, and 2023 demonstrate the college's ability to meet and exceed targets in community service and social outreach.

The college's active role in the Swachh Bharat Abhiyan Drive, recognized by the Rotary Club of Ettumanoor in 2022, highlights its impact on promoting cleanliness and environmental awareness. Recognitions from the Mahatma Gandhi National Council of Rural Education for both Social Entrepreneurship and the Swachhta Action Plan in 2022 further validate the college's commitment to social responsibility and its success in implementing key national initiatives.

Furthermore, the college's collaboration with local bodies, such as the Thiruvappu Grama Panchayat, Athirampuzha Panchayat and Arpookkara Grama Panchayat for cleaning drives and hand sanitizer preparation, illustrates its strong community engagement. These results indicate the college's excellence in environmental sustainability and social responsibility, consistently achieving targeted outcomes and positively impacting both the campus and the wider community.





Haritha Keralam Mission Recognised Kuriakose Elias College Mannanam as a Haritha Institution for Undertaking Green Initiatives in the Year 2023.



Recognitions Received by N.S.S from M.G University



Certificate of Appreciation from Mahatma Gandhi National Council of Rural Education, Government of India Social Entrepreneurship activities in the year 2022



ROTARY CLUB OF ETTUMANOOR
ROTARY INTERNATIONAL
DISTRICT 3211, 2021-2022
CLUB NO: 55196

CERTIFICATE OF APPRECIATION

This is to certify that the Rotary Club of Ettumanoor in association with the NCC Army wing unit of K.E. College Mannanam organized a Swachh Bharat Abhiyan drive by cleaning the premises of Ettumanoor Municipality and Athrangapada Grama Panchayath during the period 2021-22. The programme was well organized and was very well appreciated by the native community.

We, the President, Secretary and entire Rotary family express our sincere gratitude to the NCC Army wing Officer Capt. John Varghese P and to the Cadets for conducting such a wonderful social service activity. We wish them all the very best.


Hon. P.M. Thakkannal J. Thakkannal
President


Hon. P.M. Unkangal S
Secretary



ROTARY CLUB OF ETTUMANOOR
ROTARY INTERNATIONAL
DISTRICT 3211, 2019-2020
Club No. 55196

CERTIFICATE OF APPRECIATION

This is to certify that the Rotary club of Ettumanoor in association with the NCC Army wing unit of K.E. College Mannanam have cleaned various premises of Ettumanoor Municipality and Athrangapada Panchayath during the period 2018-2019.

We, the President, Secretary and entire Rotary family express our sincere gratitude to the NCC Army wing Officer Lt. John Varghese P and to the Cadets for conducting such a wonderful social service activity. We wish them all the very best.


Hon. P.M. Thakkannal J. Thakkannal
President


Hon. P.M. Unkangal S
Secretary

Certificate of Appreciation by Rotary Club of Ettumanoor, Kerala for Swachh Bharat Abhiyan Drive 2022

Community Centred Green Initiatives

2018-19

Swachh Bharat Pakhwada

In connection with the observance of Swachh Bharat Pakhwada from August 01 to 15, our green volunteers took the Swachh Bharat pledge on August 2nd, following the guidelines provided by M.G University.

As part of the Swachh Bharat Pakhwada observance, Ms. Nisha Maria E.G (Assistant Professor, Department of Zoology) took a session on the topic '*Health and Hygiene*' on August 14. The importance of maintaining hygiene for the preservation of good health was deliberated upon with the volunteers. A total of 74 volunteers participated in the program. 74 volunteers participated in the programme. Following the talk session, the green volunteers also cleaned the college premises and the classrooms reiterating their commitment to the cause of *Swachha Bharat Pakhwada*.



Massive Post Flood Village Cleaning Drive at Kallara Panchayat by K.E. College

The green volunteers of the college in collaboration with the NSS, NCC volunteers, teaching, non-teaching staff and the Department of Social Work of the college executed the massive cleaning drive in flood hit Kallara Grama Panchayat on 24th August 2018. Elaborate prior planning was done as the task of cleaning a large village area having more than a hundred houses was a herculean task. Based on the discussions by the Principal Dr. Antony Thomas with Mrs. Jameela Pradeep, the President of Kallara Grama Panchayat, the action plan was designed for the cleaning drive.



On August 24, 2018, a team of 73 students, 8 teachers namely, 3 members of the administrative staff and 4 alumni representatives gathered at Kallara Panchayat Office. The President of Kallara Panchayat Mrs. Jameela Pradeep and other Panchayat members were also present to provide local logistical support to the team. Tetanus Toxoid injection and other medical precautions were given to the students and teachers by Dr. Jayanthi and her team of Kallara Primary Health Centre. Personal Protection Equipment (PPE) and cleaning essentials such as mops, brooms, cleaning lotions were also provided from the Panchayat Office.

The cleaning crew focussed their activities on the Akathanthara Colony, which was the worst hit region. The area had been submerged for about a week, with the water only receding the day before the cleaning efforts began. The houses were filled with mud and water, leaving the furniture and other belongings in need of thorough cleaning. The team worked to clean the floors and walls, using lotions and bleaching powder. However, for safety reasons, the students were not allowed to clean certain areas where locals had spotted snakes earlier that morning. Despite these challenges, the crew was able to clean a total of 19 houses in Akathanthara Colony.

The team returned to Kallara N.S.S. High School, which had been converted into a flood relief camp housing approximately 350 displaced people. The team joined the camp residents for lunch, where they encountered some of their own students among the evacuees. Meanwhile, Assistant Professor Chinnu Mohan from the MSW Department, accompanied by five students, remained at the camp to provide entertainment programming for the children.

The volunteers were further divided into five groups and assigned to different locations within the Ward 9 (Chungam Bhagam) and the Ward 11 (Udayanthara Colony), accompanied by Ward Members Mr. Salim Kumar and Mr. Venugopal respectively. The courtyards, pathways, and outer walls of 32 houses, including the Anganavadi of the Panchayat, were thoroughly cleaned using quick lime. Although the cleaning work was tedious, it ultimately provided us with a sense of satisfaction and happiness.



Railway Station Cleaning

Our volunteers in association with Southern Railway organised a cleaning drive in connection with the observance of Gandhi Jayanthi.





Malarikkal Eco Tourism

Our volunteers took part in the Panchayath’s initiative to establish a new tourist destination at Malarikkal, a picturesque location characterized by its pleasant climate. This endeavour primarily aims to create employment opportunities for the local community. The volunteers contributed by constructing bamboo benches and undertaking efforts to clean the surrounding area in order to promote a plastic-free environment. Our volunteers planted 21 fruit plants within the neighbouring school compound and have also placed vegetable seedlings in grow bags.



Suchitva Mission Kerala

To implement the Green Protocol on the college campus, the Haritha Keralam trainers held a session on green campus initiatives for NSS volunteers on December 13, 2018. The classes were conducted by Ms. Anuapama Rajappan for the volunteers.





2019-20

Litter Free Village, City and Campus- University Level Inauguration

In its steadfast commitment to fostering an eco-friendly future, the K.E. College NSS Unit hosted the University-level inauguration of the Litter-Free Village, City, and Campus program on June 11, 2019. The event was inaugurated by Dr. Sabu Thomas, the esteemed Vice Chancellor of M.G. University. This initiative successfully raised awareness among students and teachers about the importance of individual and collective responsibility in creating a litter-free and healthy Kerala.



Suchitva Pakhwada Pledge

NSS volunteers of the college started Suchitva Pakhwada (*Cleanliness Fortnight*) by taking pledge on 01-08-2019. Programme Officers Dr. Brigit Paul and Ms. Neethu Jose recited the pledge. 68 volunteers participated in the event.





Mini Camp

The NSS unit organised the annual orientation Mini Camp focusing on environmental extension activities from 23rd to 25th August 2019. The IQAC Co-ordinator of the College Dr. Mathews T. Thelly, presided over the inaugural function. Dr. Antony Thomas, Principal inaugurated the Mini Camp. On 24th August volunteers undertook the cleaning of Vaarimuttam view point, a scenic spot near our college in collaboration with the NSS unit of St. Ephrem's H.S.S, Mannanam. During the camp students were given sessions on Green Protocol by Ms. Anupama Rajappan (Haritha Keralam Mission). During the camp our volunteers cleaned the sides of Sri. Babu Chazhikaadan Road, the link road between Arppookkara - Pulikkauttusserry Road and Medical College Road. They also planted medicinal plants and ornamental plants on the sides of the road.

Cleanliness Survey at Medical College Kottayam and Suchitva Sandesha Rally

During the seven-day camp organized by the NSS Unit in Mannanam in the first week of September 2019, one of the most ambitious and impactful initiatives was the cleanliness survey and awareness campaign in Ward No. VIII of Arppookkara Panchayat. The team conducted a household survey by distributing questionnaires and provided guidelines on waste management and disposal. As part of this effort, they also completed a thorough cleanliness survey of Kottayam Medical College Hospital and prepared a detailed report. On September 24th in connection with N.S.S Day a **Suchitva Sandesha Rally** was organised from college to Medical College, Kottayam and handed over the report to Medical College Superintendent

Dr. Jayakumar and to the Principal Dr. Jose James on September 24th in connection





Production of Grow Bags & Cloth Bags

To propagate and practise the principle of 3R's - Reduce, Reuse and Recycle for the waste reduction and in continuation with the efforts for reducing plastic wastes, NSS Volunteers initiated the production of grow bags using the left-over flex posters used for various functions in our college during the previous years. Sixty grow bags were thus prepared by our volunteers on 21st December 2019. Also reusable shopping bags were made of cloth, for distribution among the teaching staff in line with the official ban on plastic bags in Kerala.





Micro Forest *Miyawaki* Style

In compliance with the theme of World Environment Day 2019, ‘Air Pollution’, the NSS unit has decided to create a micro forest near the campus for improving the air quality. To fulfil this dream the NSS team contacted Miyawaki afforestation expert of Kerala, Mr. Hari M.R, Director, Invis Multimedia, Thiruvananthapuram who visited our campus to inspect the spot. His technical advice and expertise gave a new direction to our venture. Mr. Hari, on his trip to Japan, had exposure to Mr. Akira Miyawaki himself, who is the legendary Japanese Botanist who developed the planting method, to grow micro forests even in urban areas. He further supported our mission by providing training to the students to grow the saplings the Miyawaki way, under his coworker Mr. Bobin. Thus, our NSS team, fully equipped with the essential knowledge and skills, look forward to fulfil this project. As a beginning the Pachathuruth was inaugurated by planting fruit plants.



Flex Free Campus

Aligning with the theme of World Environment Day 2018, "Beat Plastic Pollution," our NSS unit introduced an innovative approach to make the campus flex-free. A beautiful display board was manually crafted using coir and traditional screw pine mats. This eco-friendly initiative was formally inaugurated during the Global Alumni Meet held at the college on January 26th, 2018. Since then, the board has been utilized by various departments and clubs for official functions, significantly reducing the use of flex on campus. The banner created by NSS



volunteers garnered significant attention during the alumni meet on January 26th, 2019, effectively promoting the message of reducing plastic usage and embracing natural materials.



Pen Drop Box

The district level inauguration of ‘Pen drop Box’ scheme of Haritha Kerala Mission was hosted by the NSS unit of K E College on 12.07.2019, which was intended to beat the main source of plastic pollution in the campus and to reinforce the idea of recycling. Haritha Keralam District Coordinator Sri. Ramesh P and Scrap Dealer Association representative Sri. Rahim. M addressed the gathering. As part of the programme two pen drop boxes were installed in the College campus which turned to be a great success as most students made it a point not to throw away pens in the campus, but to drop it in these boxes for recycling.





2020-21

Eco Hygiene Programme

During the COVID-19 outbreak, the Department of Chemistry launched an Eco Hygiene Program to support our community with sustainable and hygienic practices. Students and teachers collaborated to prepare hand sanitizer in our laboratory, strictly following WHO guidelines. This eco-friendly initiative aimed to reduce waste and promote health by distributing hand sanitizer to nearby shops and auto drivers at Mannanam junction.

The success of our efforts led officials from the Gandhi Nagar police station to request bulk quantities of hand sanitizer. In response, our department organized training sessions on hand sanitizer preparation and provided consultancy support to the Kudumbashree unit in Ward 8 of Arpookara Panchayath on June 2nd, 2020. Rosely Tomichen, Vice President of Arpookara Panchayat, expressed her heartfelt gratitude for our contributions.

Continuing our commitment to eco- hygiene, Department HOD Dr. Jollyamma Mathew led hands-on training for teachers and students of K.E. English Medium School, Mannanam, on June 3rd, 2020. Principal, Fr. James Mullassey CMI supported these initiatives, emphasizing the importance of sustainable hygiene practices during these challenging times.



Eco Cleaning Program: *Sannadhasena* Online Training

On August 27, 2020, NSS volunteers from our college took part in the *Sannadhasena* Online Training Program, organized by the Directorate of *Samoochika Sannadhasena*. This training focused on eco-friendly pre-monsoon preparations, aimed to build a volunteer force equipped to handle environmental challenges and disasters.

Around 80 volunteers participated in this online training, where they learned sustainable and eco-friendly cleaning practices to mitigate disaster impacts. Upon completion, each volunteer received a certificate, symbolizing their readiness to contribute to environmental conservation and disaster management.

This Eco Cleaning Program not only enhanced our green volunteers' skills but also reinforced our commitment to sustainable and eco-conscious community practices.



Eco Awareness: *Plogging Run*

On October 2, 2020, in celebration of Gandhi Jayanti, the NSS Volunteers of our college organized a Plogging Run. This event aimed to promote eco-awareness and contribute to the cleanliness of our community. The Plogging Run on Gandhi Jayanti was a significant initiative aimed at boosting environmental awareness and fostering community cleanliness. By combining physical activity with environmental responsibility, the NSS Volunteers not only enhanced the cleanliness of their surroundings but also serves as positive role model for others. This event underscores our commitment to the principles of *FIT INDIA* and *SWACHH BHARATH*, promoting sustainable practices and contributing to a cleaner, healthier society.



Hygiene Awareness Program for Women: Distribution of Sanitary Napkins

On November 12, 2020, our NSS volunteers undertook a significant initiative to promote hygiene awareness among women in Ward 8 of Arppookkara Panchayat, the adopted village of our unit. This program involved the distribution of sanitary napkins, aiming to encourage hygienic practices among women in the community. The sanitary napkins for distribution were generously sponsored by the Rotary Club of Kottayam Southern.



Eco-Friendly Product Making: Paper Bags and Lotion

On January 27, 2021, our dedicated green volunteers, under the expert guidance of their leaders, engaged in a hands-on eco-friendly product-making workshop. Held at Chavara Park, this event focused on the creation of sustainable paper bags and natural lotions.

The workshop was part of our training program for newly enrolled volunteers, aimed at fostering environmental consciousness and practical skills. Videos of the paper bag and lotion-making process were recorded and uploaded to the NSS YouTube channel. These resources serve as valuable training tools, providing insight into the techniques and benefits of eco-friendly product creation.

- **Paper Bags:** Our volunteers crafted paper bags from recycled materials, emphasizing the importance of reducing plastic waste. The production process was both educational and enjoyable, allowing participants to appreciate the craftsmanship involved in creating sturdy and stylish bags from repurposed paper.
- **Natural Lotion:** Alongside the paper bags, volunteers also prepared natural lotions. Made from organic ingredients, these lotions not only benefit the skin but also minimize the use of harmful chemicals. The handmade lotions were sold to teachers and staff members, promoting sustainable living and supporting our cause.

This initiative not only contributed to environmental sustainability but also empowered our volunteers with practical skills and knowledge. By supporting the use of eco-friendly products, we are making a positive impact on both our community and the environment.



Paper Bags and Lotion Making

Seed Distribution for Kitchen Garden Preparation

On February 5, 2021, a seed distribution initiative was organized by the NSS team.. This activity was an essential step in setting up a kitchen garden for the camp, aligning with our commitment to sustainable practices and hands-on learning.



Seed Distribution Process:

- **In-Person Collection:** Volunteers gathered at the college to collect vegetable seeds, which were provided to them as part of their preparation for the kitchen garden project.
- **Postal Distribution:** For those who were unable to collect the seeds in person, arrangements were made to send the seeds via post, ensuring that all volunteers had the necessary resources for their gardening activities.

The program was conducted under the leadership of NSS program officers and NSS leaders, ensuring smooth coordination and effective execution. This seed distribution not only equipped the volunteers with the tools needed for their gardening tasks but also fostered a sense of responsibility and environmental stewardship among the participants.

This initiative was a crucial part of the *SPROUT* camp of NSS, contributing to our goal of promoting sustainable agriculture and hands-on learning experiences.



Seed packing for Kitchen Garden Preparation

REDIVIVUS Recycling Day Program

To commemorate Recycling Day on March 18, 2021, the NSS Unit of K.E College organized an engaging competition titled '*REDIVIVUS*.' The program was designed to encourage innovative and creative recycling ideas among students, highlighting the importance of sustainability and waste management. The competition was designed to encourage students to create innovative recycling ideas that could both generate income and support environment



sustainability. Contestants were required to present their ideas in a concise format, either through a video or a written submission, within a limit of 2 minutes. The best ideas from the competition were handed over to the Innovation and Entrepreneurship Development Cell (IEDC) of the college



Social Responsibility Initiative: Go Organic Campaign & Seed Distribution

The 'Go Organic Campaign' was a key social responsibility initiative organized by the students of the Department of Commerce, with the goal of promoting sustainable agricultural practices and reducing reliance on harmful pesticides. This program was conducted on March 24, 2021, and aimed to foster a culture of organic farming within the local community. The campaign sought to encourage the adoption of pesticide-free, organic vegetables, enhancing both community health and environmental sustainability. Around 50 students participated in the distribution of vegetable seeds to the neighbouring community. Approximately 200 seed packets were distributed to about 200 families in the village of Mannanam.



2021-22

Barren Land Cultivation for Environmental Protection

In an inspiring initiative aimed at fostering self-sufficiency among volunteers and promoting an interest in sustainable farming, the NSS unit of our college has transformed 20 cents of barren land, belonging to our College Management and situated near our campus, into a thriving agricultural project. The NSS volunteers have been actively involved in cultivating this plot by planting tapioca and elephant yam during the year 2021-22 also. This effort not only revives unused land but also contributes to environmental protection by increasing green cover and promoting soil health. The regular activities undertaken by the volunteers include weed plucking and manuring, essential for maintaining the health of the crops and ensuring a good yield. The crops harvested from our plot, specifically tapioca and elephant yam, are sold to our teachers and non-teaching staff. The income generated from these sales is directed towards noble causes. Notably, on World Cancer Day, the proceeds were used to supply a



grocery kit to a cancer patient, demonstrating the project's social impact and the volunteers' commitment to community welfare. On the last day of harvesting, a special event is organized where the harvested tapioca is cooked in the College canteen and served to our volunteers.

NATIONAL SERVICE SCHEME



Cleaning



Tapioca Harvesting

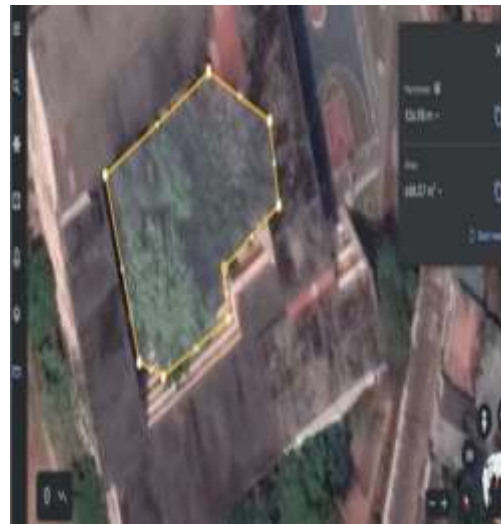


2022-23

Green Campus Initiatives:

Green Class Room

Exposure to green space has been associated with better physical and mental health. Green classrooms go a long way towards inculcating in students an appreciation for the environment and an awareness of their influence on their surroundings. The College created a green classroom for our students as a part of Environment Day celebrations on June 5, 2022. To identify a proper space for converting into a green classroom, we first conducted a survey and ground study with the help of Google Earth. We mapped the college campus, made an inventory of the plants, and assessed ways the college campus could be used for outdoor learning. The premises were cleaned. Benches were set up to provide seating for the students while ensuring not to disturb or destroy the natural surroundings.



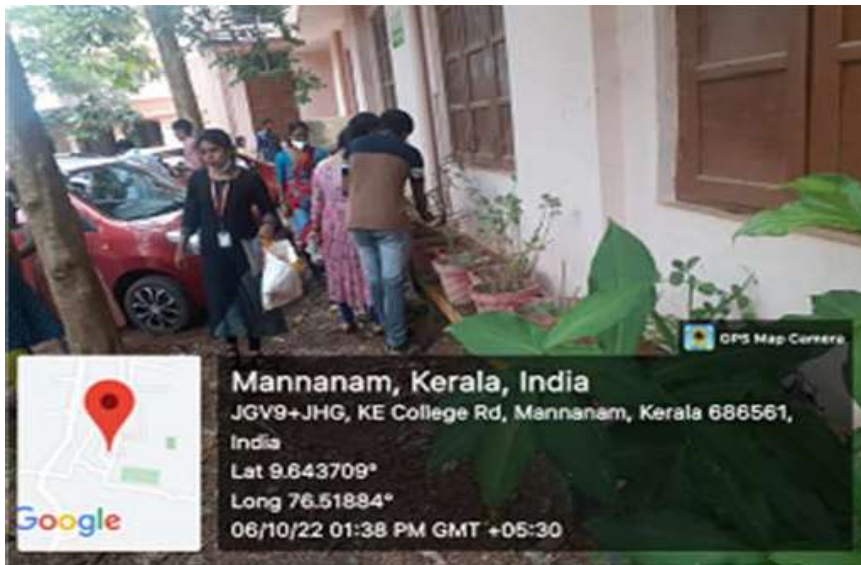
Green Cover

Our College sits on a total area of 7.23 acres, of which 4965 sq. m. are under complete green cover. Every year, faculty and students plant new saplings and take good care of them, increasing the green cover on campus over time. The campus also boasts a beautiful garden called the Sunbeam Garden and various ornamental and medicinal plants, which are maintained with the help of students and staff of the Institution.



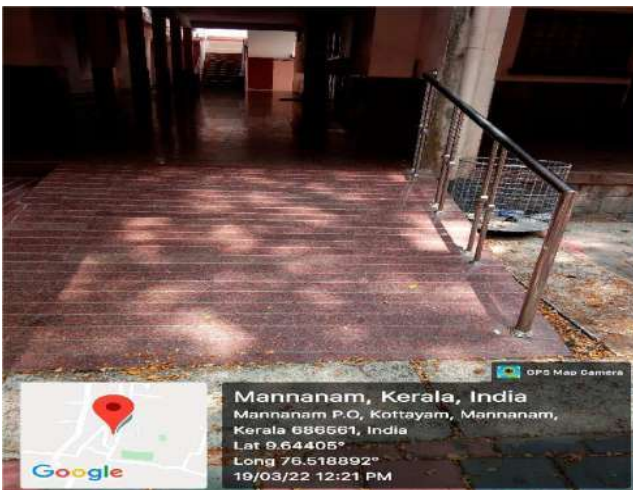
Management of Campus Nursery and Plant protection

The campus nursery of the College plays an essential role in beautifying the campus. It contains mainly ornamental plants. Two regular staff members are appointed to take care of all the plants. They water the plants daily and cater to all the other requirements of maintaining a healthy and beautiful nursery. In addition to the campus nursery, the students and staff maintain a collection of medicinal plants. Overall, our College is particularly conscious of the importance of vegetation on its campus.



Pedestrian-friendly pathways

The College has well-maintained, pedestrian-friendly pathways. Disabled-friendly ramps are also installed at specific points for easy movement through the campus. The restricted entry of vehicles on campus ensures the safety of pedestrians.





Social Entrepreneurship, Swachhta & Rural Engagement Cell

Kuriakose Elias College, Kottayam, Kerala, is recognized as a Social Entrepreneurship, Swachhta & Rural Engagement Cell (SES REC) Institution in 2020 by Mahatma Gandhi National Council of Rural Education Department of Higher Education and Ministry of Education Government of India. The Institution has successfully framed the SESREC Action Plan and constituted ten working groups for improving facilities on the Campus and the Community/Adopted Villages in the areas of Sanitation & Hygiene, Waste Management, Water Management, Energy Conservation, and Greenery post-COVID-19, along with the observation of three environments, entrepreneurship, and community engagement related days to inculcate in faculty, students, and community, the practices of Mentoring, Social Responsibility, Swachhta and Care for Environment and Resources.

Scrap Challenge

A team of students of the institution who has been actively involved in community service and environmental protection activities, planned to support the BPL (Below Poverty Line) families in the adopted village of the institution by distributing grocery kits.

To raise funds for this initiative, the team organized a scrap collection drive on our college campus. Our dedicated team collected used papers, newspapers, plastic bottles, and other recyclable materials from each department on August 23rd. This “Scrap Challenge for Environment” not only helped us raise necessary funds but also promoted environmental sustainability by recycling waste.





Eco Seminars, Workshops and Events Conducted in the Campus

2018-19

Invited Talk- "*Prakrithisamrakshanam Aarudae Chumathala*"

On 7th June 2018, a thought-provoking talk titled "*Prakrithisamrakshanam Aarudae Chumathala*" was delivered by Dr. Jomy Augustine, Head of the Botany Department, St. Thomas College, Pala. The event, organised by the Botany Department of Kuriakose Elias College, Mannanam took place at the New Seminar Hall. Dr. Augustine emphasized the interconnection of all living organisms and how each species contributes to the ecosystem's balance. The talk highlighted sustainable practices that individuals and communities can adopt to protect and conserve natural resources. He underscored the importance of environmental responsibility and the urgent need for concerted efforts to mitigate ecological degradation. The talk by Dr. Jomy Augustine was a significant educational experience, promoting environmental consciousness and sustainable practices within the campus community. The success of the event underscores the importance of such initiatives in fostering a culture of environmental stewardship.

RAIN INTERNATIONAL NATURE FILM FESTIVAL- BEST SHORT FICTION JANUARY 2019

Birds Club International is a non-commercial organization that aims at promoting global interest in birds, conservation of nature and the environment through public campaigns and education. Started in 2010, by National and International award-winning Indian filmmaker, Jayaraj Rajasekharan Nair, as part of Jayaraj Foundation, it is registered as a charitable organization to revive and conserve environment, by tapping and utilizing optimum natural resources. The Rain International Nature Film Festival focuses on films made to project the awesomeness of nature through the lens of the maker. Festival aims to provide a forum for all across countries, to share their interest in birds and preserving the nature at its best, aiming at gradual and sustainable developments in the process.

An active wing of Birds Club has been functioning in our college since 2017 under the auspices of Department of Zoology. From 25th to 27th January, 2019, the 1st edition of the festival was hosted by Mr. Jayaraj. The accomplished jury comprised of Girish Kasaravalli, Prasanna Vithanage and Bijaya Jena. A wide variety of films, from documentary to feature were



submitted from Norway, Japan, Canada, France, Russia and Sri Lanka among many others. The competition comprised of features, documentaries, animation as well as short films.

Anand E Mathew, Cairns P John, Gigin Maria Saji, Krishnapriya K.S, Anand E Mathew, Jerin Joseph, Abhijith Binu of zoology department (2016-2019 batch) were made a short film – AZHI presented in short-fiction competition and won GOLDEN OWL AWARD for the best short fiction.

The short film entitled AZHI was made by selfless efforts of students, faculty of zoology department and other supporting hands. AZHI is a Malayalam short film that shows the changing condition of our nature and society. It was Directed by - Anand E Mathew, produced by - Cairns P John and Written by - Krishnapriya K S. Director of Photography was - Albin Varghese. Production designer & Film editor was Mr. Dons N Joseph, faculty of zoology department. Location Manger was Jerin Joseph. Creative Director was Shoan. Production controller was Abhijith Binu. Art was done by Aryalakshmi R. For Dubbing Sr. Jessy Joseph Kavumkal (HOD, Zoology department & Ms. Amala Cicil John, faculty of zoology department were helped. Baby Juneeta Jose & Ms. Gigin Maria Saji were played on screen.

The festival brought a good opportunity for filmmakers, professionals and the public to meet and initiate conversation on these important issues through different meetings and conferences within the framework of the event and to enjoy films concerning nature and wildlife at the same time. Festival also brought good opportunities to school and college students and the public internationally by promoting global interest in birds, conservation of nature and the environments through public campaigns and education.





IN TO THE WOODS -AN EXHIBITION AND ALL KERALA INTER COLLEGIATE FEST

IN TO THE WOODS -An exhibition and all Kerala inter collegiate fest organised by department of zoology, was held on the 14th and 15th of February, 2019 wherein students showcased diversity of animal life as well as static and working models which can be used for learning various scientific concepts for children of the age group 13-18 years. The Museum of Zoology was one of the major attractions. Our brilliant galleries showcased the diversity of animal life from jelly fishes to human embryo. The fest and exhibition were conducted not only to inculcate a scientific attitude and research-mindedness but also knowing ourselves and environment. Student-teachers from various colleges participated in this fest to win attractive prizes.





SPROUT 2021: 'Youth for Prevention and Mitigation of COVID'

The SPROUT Seven-Day Camp of NSS for the academic year 2020-2021 commenced on February 12, 2021. In response to the ongoing pandemic, the camp was held online via Zoom, complemented by offline activities designed to engage volunteers effectively during the period of quarantine and social distancing. The theme of the camp was "Youth for Prevention and Mitigation of COVID," focusing on strengthening the mental and physical resilience of volunteers while equipping them with practical skills to navigate the challenges of the pandemic. Volunteers received vegetable seeds (Chilli, Ladies Finger, Bitter Gourd, Peas, and Spinach) from the college via post. The initial training provided on the first day inspired enthusiastic participation. Volunteers created their kitchen gardens at home. They were encouraged to submit photographs of their vegetable sprouts to Google Classroom at the end of the camp. This activity promoted sustainable living and hands-on engagement with nature.

The main activities during the camp were:

Making of Paper Bags: Volunteers were trained in making paper bags using YouTube videos prepared by the camp leaders. On the third day, participants made paper bags from used paper at home and sold them to nearby shops. This initiative aimed to promote the up cycling of materials and reduce waste by turning used paper into useful products.

Micro Green Farming: Volunteers were introduced to micro green farming, an innovative approach to cultivating organic leafy vegetables without requiring traditional land space. This method is ideal for urban settings and limited spaces, allowing individuals to grow nutritious greens at home. Volunteers were tasked with creating their own micro green gardens. They were encouraged to document their progress and share photographs in Google Classroom. This activity aimed to promote sustainable agriculture practices and foster a connection with food production.

Lotion and Phenol Making: Volunteers received training through instructional videos created by the camp leaders. These videos demonstrated the process of making natural lotion and disinfectant phenol. After completing the training, volunteers produced lotion and phenol, which were then sold to nearby communities in need. This activity not only provided practical skills but also supported local needs, reinforcing the camp's focus on community service and sustainability.



These eco-protecting activities were designed to engage volunteers in meaningful ways, encouraging them to adopt environmentally friendly practices and contribute positively to their communities.

Overall, *SPROUT* 2021 successfully combined virtual learning with practical, offline activities, fostering both skill development and environmental consciousness among the volunteers.



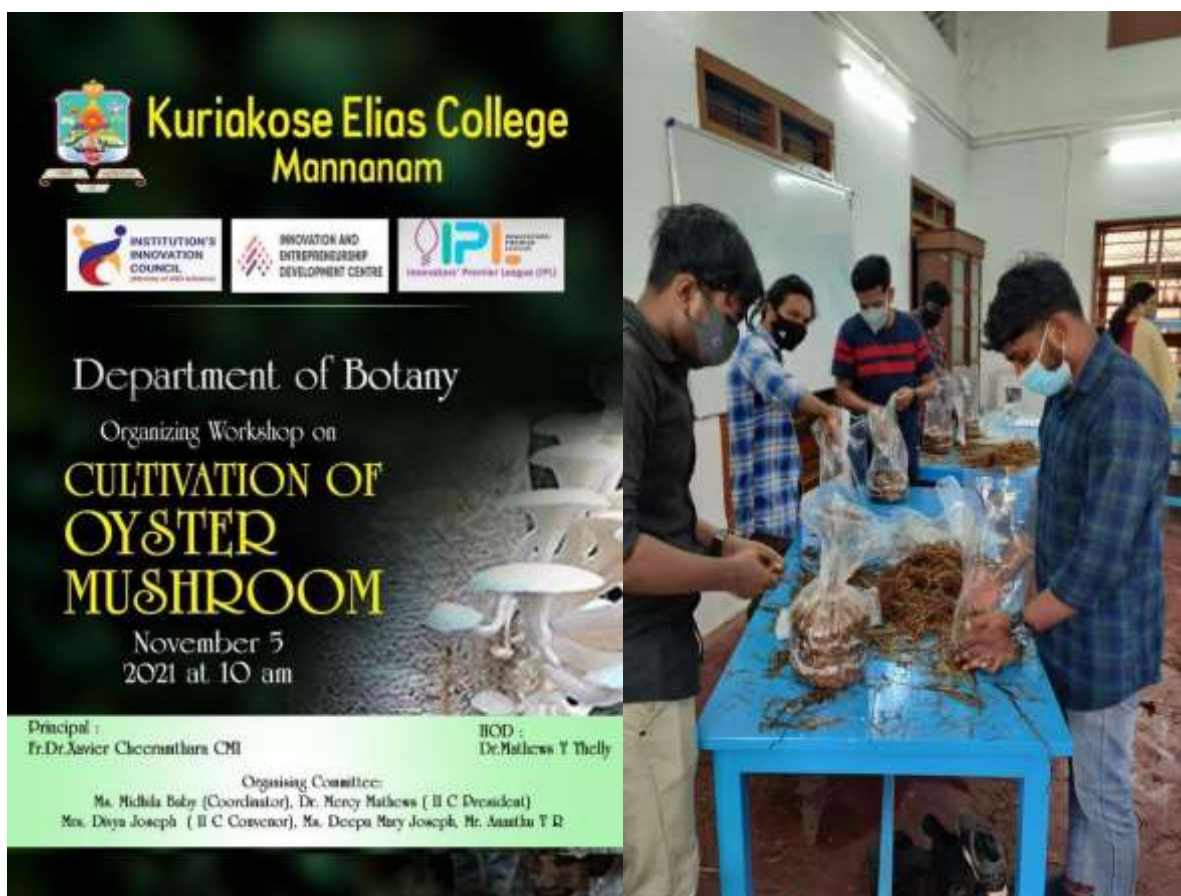




2021-22

Hands-on Training in Oyster Mushroom Cultivation

Mushrooms have been recommended by the FAO as a food item that can help developing countries meet their protein needs. Oyster mushroom cultivation has a number of advantages, including the ability to convert complex organic lignocellulosic compounds into nutritious food, aiding in the recycling of agro-waste, contributing to pollution control, not competing with agricultural land, and providing opportunities for self-employment. As a result, there is a pressing need to popularize the technology among the general public. The training programme aimed at creating awareness among students about the cultivation technology of mushrooms and thereby to develop this skill as a means of self employment and income generation. The initial training phase was given to 27 students of the Final year B.Sc. Botany Degree by the Department of Botany.





Bee Keeping – Skill Development Programme

The Eco-Friendly Beekeeping Training Program aims to provide comprehensive training in sustainable and eco-friendly beekeeping practices, enhancing students' skills while promoting environmental stewardship. The 6-month course, divided into two modules, targets NSQF students, college staff, and local community members. The curriculum covers theoretical knowledge, such as the importance of bees in ecosystems, hive management, sustainable practices, honey harvesting, and environmental impact. Practical training covers hive



management, feeding practices, seasonal care, harvesting and processing, eco-friendly packaging, and creating new colonies. The program also encourages community engagement through clean-up drives and awareness campaigns.

Six colonies of bees were placed in November with the help of alumni and N.S.S. We were able to gather 12 litres of honey from this colony during the February–March honey harvest season, and we sold it to our teaching and non-teaching personnel for Rs. 300 per litre. During the off-season, the programme officer Ms. Neethu Jose along with the leaders Athul C Sunny, Emmanuel Abraham and Ken Thomas George, regularly monitored and fed the hives. Students enrolled in the Bee Keeping Diploma course through the National Skill Quality Framework (NSQF) are also trained. By encouraging sustainable practices and community involvement, the beekeeping program seeks to combine environmental sustainability with skill development. In order to improve program impact and outreach, future plans call for partnerships, expansion, and more courses.



Honey Harvesting Event

This year, as part of our ongoing skill development program, our unit has continued its commitment to sustainable practices with the maintenance of bee hives in the Sun Beam Garden of our college. The event was officially inaugurated by our esteemed Principal, Dr. Ison V. Vanchipurackal. Following the inauguration, Programme Officer Ms. Neethu Jose provided comprehensive training to the students on the honey harvesting process. Her session covered



various aspects, including the ethical treatment of bees, proper handling of beekeeping equipment, and techniques for extracting honey without harming the hive. This training is a continuation of last year's eco-friendly program, which aimed to deepen students' understanding of sustainable practices and enhance their hands-on experience in beekeeping.

The honey harvested will be used in various college events and initiatives, promoting the benefits of locally produced, natural honey while also supporting our commitment to environmental sustainability.



RAIN INTERNATIONAL NATURE FILM FESTIVAL-JANUARY 2021

The short film entitled *VEENDEDUKKAL* was made by selfless efforts of students, faculty of zoology department and other supporting hands. *VEENDEDUKKAL* is a Malayalam short film that shows the changing condition of our nature and society. It was Directed by – Sandra Mariya, produced by – Kavya Manoj, Cinematography by – Sivaganga S. Kumar and Editing was done by – Jobin Johny.



This short film has been selected screened in 3rd Rain International Nature Film Festival organised by Birds Club International from 29th to 31st January 2021 on virtual platform.

Short film YouTube link: <https://youtu.be/gX8kytQ2VXo>



2022-23

POSTER DESIGNING COMPETITION ON WATER CONSERVATION

The PG Department of Commerce (SF) of Kuriakose Elias College Mannanam conducted a poster designing competition on March 28, 2023 on the topic of water conservation. The competition was aimed at raising awareness about the importance of water conservation and the need for everyone to contribute to this cause. The participants were required to create posters using various colours and materials, highlighting the importance of water conservation and the consequences of its depletion. The event was open for all the students of the college and a total of 27 students participated in the competition. Criteria for judging the posters included the relevance of the message, creativity, and presentation. All the posters were creative and thought provoking, and the students demonstrated a deep understanding of the importance of water conservation. Posters highlighted the various ways in which water is wasted and the impact it has on the environment and society. Overall, the event was able to create awareness among the students about the importance of water conservation and encouraged them to take an active role in conserving this vital resource.



KURIAKOSE ELIAS COLLEGE
 MANNANAM, KOTTAYAM
 DEPARTMENT OF COMMERCE (SF)
 IN ASSOCIATION WITH
 IQAC

POSTER COMPETITION ON WATER CONSERVATION

DATE : MARCH 28
 TIME : 11:00 AM
 VENUE : SELF FINANCING BLOCK

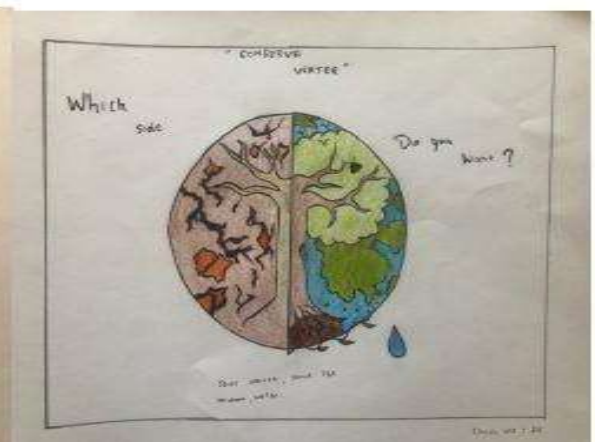
REG FEE : ₹ 50
 CASH PRIZE : ₹ 1001

ORGANISING COMMITTEE
 Prof. (Dr) Ison V Vanchipurackal (Principal)
 Rev. Fr. Xavier C.S CMI (Vice Principal)
 Rev. Fr. Biju Thomas CMI (Director of Self Financing)
 Dr. Sandhya C (IQAC Coordinator)

FACULTY COORDINATORS
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STUDENT COORDINATORS
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 Amrutha Anilkumar
 +91 96056 85314

PARTICIPATION CERTIFICATES WILL BE PROVIDED TO ALL THE PARTICIPANTS





Workshop on Climate Resilient Approaches and Practices

Ms. Sherin K. C. (Project Coordinator) and Ms. Kripa A. J., representing KEDAS, participated in a three-day residential workshop on Climate Resilient Approaches & Practices. Held from June 16th to 18th, 2022, the workshop took place at KSSS, Kottayam.

The event was a collaborative effort organized by Caritas India, the Indian Council of Social Welfare (ICSW), and CEVA, in partnership with SWECHHA and supported by the US Embassy India. The workshop aimed to equip participants with practical knowledge and strategies for enhancing climate resilience and implementing effective climate-smart practices.

Over the three days, attendees engaged in discussions, case studies, and hands-on activities focused on developing adaptive strategies to address the challenges posed by climate change. The workshop provided valuable insights into sustainable practices and fostered a platform for sharing innovative approaches to building climate resilience in communities.

Ms. Sherin K. C. and Ms. Kripa A. J.'s participation in this workshop reflects KEDAS's commitment to advancing climate resilience and contributing to sustainable development efforts.



WEBINAR ON VERMI-COMPOSTING TECHNIQUE, 29 AUGUST 2022

A Webinar on Vermi- composting Technique organized by Department of Zoology Kuriakose Elias College, Mannanam in association with IEDC and IPL on 29th August 2022 at 11.00 am in Google meet Platform. Resource person for the webinar was Dr. Sampath Kumar S, Associate Professor, Department of Zoology, Sree Sankara College, Kalady. The production of degradable organic waste and its safe disposal becomes the current global problem. Meanwhile the rejuvenation of degraded soils by protecting topsoil and sustainability of productive soils is



a major concern at the international level. Webinar focused on advocating the provision of a sustainable environment in the soil by amending with good quality organic soil additives enhances the water holding capacity and nutrient supplying capacity of soil and also the development of resistance in plants to pests and diseases. By reducing the time of humidification process and by evolving the methods to minimize the loss of nutrients during the course of decomposition, the fantasy becomes fact. Earthworms can serve as tools to facilitate these functions. They serve as “nature’s plowman” and form nature’s gift to produce good humus, which is the most precious material to fulfill the nutritional needs of crops. The utilization of vermi-compost results in several benefits to farmers, industries, environment and overall national economy. The webinar was attended by around 45 participants including students of II and III year BSc. Zoology and faculties from KE College.

Meeting link: <https://meet.google.com/qeu-wysu-ysu>

The image shows a Google Meet interface for a webinar. On the left is a sidebar with participant avatars and a 'Joining' button. The main screen displays a presentation slide with the following text:

Webinar on Vermicomposting Technique
 Organised By Department of Zoology
 In association with IEDC & IPL
Resource person
 Dr. Sampath Kumar B
 Associate Professor,
 Department of Zoology,
 Sree Sankara College, Kalady

29/08/2022 at 11 am
 Meeting code :qeu-wysu-ysu

Organising Committee:
 Dr. Jeasi V. Vanchipurackal (Principal) | Fr. Dr. Xavier C.S. (Vice Principal)
 Dr. Mercy Mathews (IEDC Nodal Officer) | Sr. Dr. Jessy Joseph Kavunkal (Head of the Department)

keczrology_ | zoology@kecollege.ac.in



Nature Education Programmes Attended

2018-19

Nature Awareness Camp, Department of English

The English Department of KE College, Mannanam organized a nature camp for 2nd DC students at Munnar Wildlife Sanctuary on 20 February 2019. This initiative, aimed at enriching the students' understanding of environmental conservation and natural beauty, was a remarkable success. Sponsored by the Kerala State government, the camp included various activities such as guided treks through lush tea gardens, exploration of the local wildlife, and educational sessions on ecological preservation. Students had the opportunity to immerse themselves in the scenic landscapes of Munnar, gaining firsthand experience of its diverse ecosystems. The camp enhanced their environmental awareness and fostered a greater appreciation for nature.





2019-20

Nature Awareness Camp, Department of Economics

The Department of Economics of K.E. College, Mannanam conducted a three days Nature Study camp to Periyar East Division, Thekkady, Periyar tiger Reserve, Thekkady,Idukki, for third semester B.A. Economics students from 13 to 15 December 2019 .

The camp was sponsored by the Kerala Forest and Wild Life Department. A total of 34 students (17 girls and 17 boys) accompanied by two teachers Miss Gincy Lukose V. and Mr. Jose Mon Joy participated in the camp. The programme for the day concluded with a session where the students got a chance to introduce them and to express their expectation regarding the next day trekking. The second day started with 'nature walk'. This was followed by trekking through the evergreen forests of Periyar Tiger Reserve. The walk lasted for almost two and a half hours. Overall a very nice experience. After the trekking the students were given an awareness class about nature and Periyar Tiger Reserve. It provided a first-hand experience to students and made them aware of the rising need of preserving nature and conserving natural resources. They also got a chance for bird watching and became aware about more birds . The second day concluded the selection of best two camper from both female and male students .They also received prizes.

The third day once again began with a refreshing morning walk along the Periyar. The camp concluded on 15th December afternoon with a formal programme. The students also shared the experiences in the Periyar.





Nature Awareness Camp, Department of English

Department of English, Kuriakose Elias College Mannanam organized a nature camp for 2nd DC students at Painavu, Idukki on 15,16&17 January 2020. Sponsored by the Kerala State government, the camp aimed to foster a deeper appreciation for natural beauty and environmental conservation among the students. The event featured a series of educational and recreational activities, including nature walks, bird watching, and interactive sessions on ecological preservation. Students engaged with local flora and fauna, enhancing their understanding of environmental issues while enjoying the serene landscapes of Idukki. The camp was a resounding success, providing valuable educational experiences and strengthening the students' connection to nature.



2022-23

Nature Awareness Camp, Department of Economics

The Nature Awareness Programme allotted to the Research and Post Graduate Department of Economics by Wildlife Division, Munnar, Kerala was held at Eravikulam National Park, Munnar located in the Western Ghats Mountain range from 3/3/2023 to 5/3/2023. Twenty eight students and two faculty members attended the camp. An introductory educational class on



Eravikulam National Park's flora and fauna was engaged by the Assistant Forest Officer Mr. Ajish. The very next day two forest guides Anand and Rohit joined with us for our trekking. The team started walking through the tea plantations to Shola Forest. During trekking the team saw many native animals such as Barking deer, Nilgiri langur, Giant squirrel, lion tailed macaque, Nilgiri flycatcher and bulbuls. On our way back we spotted a herd of Nilgiri Tahr. In the evening session in addition to the educational class, we were shown some documentaries of the national parks of Kerala and on Great Indian Hornbill and its significance in the evening session. The camp was ended on 5th March.



Nature Awareness Programme, Department of Psychology

The aim of the nature camp was to bring today's youth a little closer to nature and appreciate nature, natural resources, and its importance. The students of the psychology S.F department participated in a two-day field trip and Nature Camp at Peechi Vazhani Wildlife Sanctuary, organised by Kerala Forest and Wildlife Department on 7th and 8th February, 2023. Nineteen students and two faculty members attended the programme. The students were given classes on biodiversity and the conservation of natural resources. The beat Forest Officer, Peechi Wildlife Division, Thrissur, lead the camp. Mr Salish, forest officer, of Peechi Vazhani wildlife sanctuary



delivered the knowledge about the Peechi-Vazhani area. In the evening there was also another session conducted by Mr Samuel on 'Reptiles'. The programme aimed to bring awareness about the forest and wildlife in Kerala. And the importance of protecting nature, the present situation of forest and wildlife are alarming. The students understand this and they realize the birds and animals are struggling with the loss of their habitat.



CONCLUSION

The college has made significant efforts for adopting green protocol and promotes sustainable practices in the campus and the surrounding community. The availability of the basic facilities, the maintenance of the college garden and the integration of water, energy and waste management systems are commendable initiatives that demonstrate the college's commitment to the environment. The various cells and clubs operating within the college provide a platform for students to participate actively in the environmental conservation programmes and develop an appreciation for the environment. Moreover, the college actively engages with the local community to spread awareness about sustainable living practices and environmental conservation.



Dr. Ison V. Vanchipurackal
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