

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust

### **Activities of the Environmental Science Department**

## ENVIRONMENTAL SCIENCE ACTIVITIES, 2018- 2019

### CHELLANAM VISIT-03/01/2018

On 3<sup>rd</sup> January 2018, students of 1<sup>st</sup> year MSc. Environmental Science, SH College Thevara along with faculty visited Chellanam coastal area which was affected by the recent Ockhi cyclone. Interacted with the local community members to understand the impact of the disaster, emergency response and the post disaster recovery and relief, which was carried out by the community, local, state and central administrations.



### Patha yatra 2018-11/01/2018

On 11<sup>th</sup> January 2018, students of 1<sup>st</sup> year MSc. Environmental Science, along with faculty and Bhoomithrasena club and NSS of Sacred Heart College, Thevara attended a short meeting held at 9:00 am near Shanthi Nagar as part 'Patha yatra 2018' which was held from January 1-15 as part of Suchitwa Bodhana Yajnam 2010-2025.



## Re-branding of botanical garden at Puthoorvayal in Wayanad to a biodiversity heritage centre -11/01/2018

On 11<sup>th</sup> January 2018, 2<sup>nd</sup> year MSc. Environmental Science, SH College Thevara attended the M.S. Swaminathan Research Foundation (MSSRF) re-branding its botanical garden at Puthoorvayal in Wayanad to a biodiversity heritage centre as part of expanding the scope of the facility. The project was inaugurated by M.I. Shanavas, MP, at Puthoorvayal on Thursday, which seeks to involve 'custodian farmers' across the Western Ghats in it.





### **'Let Male Speak'-A session by Rahul Easwar-12/01/2018**

Department of Sociology as part of National Youth Day organised an interactive session on the topic 'Let Male Speak' by Rahul Easwar on 12<sup>th</sup> January 2018. Students of 1<sup>st</sup> year MSc. Environmental Science, SH College Thevara along with faculty attended the session. The session focused on the need to understand the gender differences so as to live harmoniously.



### **General Forum on Puthuvype LPG terminal issue-23/01/2018**

On 23<sup>rd</sup> January 2018, students of 1<sup>st</sup> year MSc. Environmental Science, SH College Thevara along with faculty attended general forum organised by Puthuvype LPG Terminal Virudha Janakeeya Samara Samiti at C. Achutha Menon Hall ,Ernakulam where experts from different sectors and politicians expressed their opinions and suggestions regarding the various study reports .





- **World Environment day Programme**

Students Celebrated World Environment day on 5<sup>th</sup> June, 2018, by planting saplings in College premises.

- **Science Day Celebration**

All students participated in Science Day Celebration and attended the talk by Dr C T Aravinda kumar, Head of the Department of Environmental Science, MG University, organized in the College on 5<sup>th</sup> June, 2018.

- **Mangrove Field Study– 2018 (Kannur Kandal Project)**

As part of the MSc field study on mangrove ecosystem, the students and faculty of 3<sup>rd</sup> semester M.Sc Environmental Science visited Kannur Kandal Project site on 11<sup>th</sup> to 14<sup>th</sup> July 2018. An extensive study on the physico-chemical and biological parameters of the mangrove ecosystem was carried out along with water and soil quality analysis.



- **Mangrove Day celebration**

As part of Mangrove Day celebration, MSc Environmental Students visited the mangrove ecosystem near Nettoor railway station on 26<sup>th</sup> July, 2018. Students identified that the Mangrove ecosystem in this area is facing varying levels of pollution. Mangroves ecosystem in this region is often used for dumping waste, including plastics that do not biodegrade, harming both the ecosystems and the species living there. Further action plans have also been decided in this regard.



- **Ozone Day Celebration**

As part of Ozone Day Celebration, a seminar on “Flood or Drought? How the Ozone Layer is Our saviour?” conducted by Centre for Environmental studies focusing to spread awareness of the depletion of ozone layer and to search for solution to preserve it. Dr.E.P.Yasodharan, Emeritus Professor, School of Environmental Studies, CUSAT delivered a speech, and poster presentation was also incorporated with the seminar. As part of the seminar, CIAL (Cochin International Airport Limited) visit was also conducted on 6<sup>th</sup> October, 2018 to study the green power project in the airport, and provided an exposure to study its effectiveness in reducing the carbon footprint.



- **Visit and survey of Flood impact region**

Students went to the flood impacted region in Varappuzha Panchayath and visited flood victims. Collected data regarding the impacts of flood and recorded the details.

- **Waste Management Survey- Thevara Ward No. 52**

3<sup>rd</sup> semester students conducted a waste management survey on 9<sup>th</sup> August 2018, in ward number 52 of Thevara Municipality. A questionnaire was prepared and household survey was conducted. All the collected data were recorded and the survey to be continued for further assessment

- **Talk on Disaster Preparedness**

Students attended a talk in the College, led by Dr. Murali Thummarakudy, Chief UN (DRR) of Disaster Preparedness, on 4<sup>th</sup> September, 2018.



- **Teachers Day Celebration**

Students organized a small function in the presence of teachers and distributed sweets on this day, 5<sup>th</sup> September, 2018.

- **Volunteers for Mercy Corps (IGO) - Flood Relief on 7<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup> and 18<sup>th</sup> September**

Two students of II<sup>rd</sup> semester, Ms. Amitha Unnikrishnan and Ms. Laya Rose, were selected as volunteers for Mercy Corps (IGO) as part of flood relief. They worked with them for 4



days and lent a hand to flood victims. Through the activities students trained in environmental issues related field work.



- **Invited talk entitled “Ozone Depletion: Causes and Remedies”**

Dr. T.J.James, Co-ordinator, delivered an invited talk entitled “Ozone Depletion: Causes and Remedies” during the World Ozone Day Celebrations 2018, organized by Department of Physics, St.Paul’s College, Kalamassery on 25<sup>th</sup> September 2018.

- **World Wildlife Week Programme**

Students attended a Programme on ‘World Wildlife Week’ in the College.

- **Talk on “My life is my Message”**

Students attended the talk by Ms. Medha Patkar, Environmental Activist, on “My life is my Message” on 1<sup>st</sup> October, 2018, arranged in the college.



- **Solid Waste Management- Discussion and Interaction**

Students interacted in the three day session conducted in the college on “Solid Waste Management- Discussion and Interaction” led by Dr Manoj and Dr. Priya Rao of Pelican Biotechnology Pvt. Ltd.

- **Fresh Water Ecosystem Study, 2018**

As a part of MSc field study on fresh water ecosystem, 1<sup>st</sup> semester students conducted a three day( 15/10/2018 to 17/10/2018) extensive field trip to study Periyar River. The 3 days extensive study covered seven spots in Periyar River such as Manjummal Kadavu, Kunnumpuram, Cheranelloor ferry, Keezhmadu, Chowara, Marampally and Thattekkad. An extensive study on the physico-chemical and biological characteristics of the freshwater ecosystem was carried out along the Periyar River stretch from Majummal Kadavu to



Marampally.

- **A Common Session on Methodology of Science**

1<sup>st</sup> sem students attended a Common Session on “Methodology of Science” led by Dr. Babu Joseph, in the college on 29<sup>th</sup> November, 2018.

- **One day Seminar**

1<sup>st</sup>sem students attended a One-day Seminar on “The Role of Intellectual Property Rights in Academic Research” in the collage.

- **BREAKTHROUGH SCIENCE SEMINAR**

Students attended common session held in the college on Methodology of Science titled “**Breakthrough Science**”,led by Dr.Babu Joseph on 4<sup>th</sup> December, 2018 .

- **Educational Expo, from 17<sup>th</sup> to 21<sup>st</sup> December 2018**

As part of 75<sup>th</sup> Jubilee celebration of the college, students participated in the ‘Education Expo’ by installing a stall with the theme of ‘Waste To Wealth’, which provided information on proper management and use of recyclable products. The stall exhibited several recycled products and different handmade crafts made up with used plastic bottles collected from nearby areas of the college. Explanation regarding the methods and installation of various waste management equipment, such as Bio digester, Pipe compost, Biogas, Vermi compost, exhibited in the stall, provided a massive awareness to the public on the value of renewable energy source in our modern society and its contribution to reduce greenhouse gases emission.





## ENVIRONMENTAL SCIENCE ACTIVITIES- 2017-18

### PROTEST AT MANGALAVANAM, KOCHI (05/08/2017 & 16/08/2017)

The students of first and second year MSc Environmental Studies, Sacred Heart College, Thevara along with our Course Coordinator Dr.T.J. James and faculty Dr. Remya R had gone to Mangalavanam in Kochi on August 5 at 4:30 p.m in support against felling of 182 trees for the development of the Southern Railway. A short meeting was conducted which was inaugurated by the former Minister of State for Forest and Wildlife, Binoy Viswam. And in continuation with it, on 16<sup>th</sup> August human chain movement held in the premise of Mangalavanam at 4:00pm in the presence of Madhav Gadgil, the famous Indian ecologist where students from various colleges joined in along with many environmental enthusiasts'



### **NATIONAL TREE DAY-01/08/2017**

Students of MSc Environmental Studies organized National Tree Day programme on 01.08.2017 in our College portico at 12:35pm. Banners, charts with relevant quotes for the occasion were displayed. Tree saplings for distribution among students and staff with their respective botanical names were arranged.

An announcement was made during lunch break regarding the programme. Ms. Devika gave the welcome speech. Principal, Fr. Johnson X Palackappillil addressed the gathering and appreciated the initiative taken. And the programme was formally inaugurated by our beloved Rev. Fr. Principal by planting a *Hopea parviflora* (Thambagam) sapling. All saplings were placed in cloth bag instead of plastic bags. The saplings were sold out to students and staff other departments of the college.



### **INTERNATIONAL OZONE DAY 2017-25/9/2017**

On 25<sup>th</sup> August 2017 ,as part of International Ozone Day, Bhoomithrasena Club of SH College in collaboration with Centre for Environmental Studies, Kerala State Council for Science Technology and Environment (KSCSTE) and Directorate of Environment and Climate Change (DoECC) had conducted a poster design and elocution competition in the forenoon which was continued by an afternoon seminar session on "Caring for All Life under the Sun" by Linto Alappat, Department of Geology, Christ College, Irinjalakuda .During the session, Linto Sir spoke on Origin of life on Earth, Primitive Earth's atmosphere, Ozone layer formation, Ozone layer depletion leading to ozone hole formation and various International Conventions for protection of Ozone layer with special emphasis on Montreal Convention.



### **Visit to Puthuvype mangrove forest ecosystem-27/9/2017 & 28/9/2017**

On 27<sup>th</sup> and 28<sup>th</sup> of September 2017, the students of III Semester MSc Environmental Science of Sacred Heart College, Thevara, along with their faculty visited Kerala University of Fisheries and Oceanic Studies centre (KUFOS), Puthuvype to study Mangrove ecosystem. We set off at around 9:30am from the College. KUFOS station is located at a distance of 16kms from Thevara.



### **AROOKUTTY VISIT-20/09/2017**

On 20.09.2017 students of 1<sup>st</sup> and 2<sup>nd</sup> year MSc. Environmental Science, SH College Thevara together with the NSS volunteers of the college along with few faculty members and Principal Rev. Fr.Prashant Palackkappilly had gone to Arookutty to visit the residence of Mr.Nasar who has successfully turned his 10 cent residential area to an integrated farming spot. A short meeting was held and a meal was served (using the produces that were cultivated in that area).



### **KANATHALLORE VISIT-30/09/2017-2/10/2017**

Students of 1<sup>st</sup> year MSc. Environmental Science, SH College Thevara along with the NSS volunteers of the college under the supervision of Principal Rev. Fr.Prashant Palackkappilly undertook a three day long trip from September 30th to October 3rd, 2017. The main agenda was to estimate the different varieties of fruits and vegetables which were cultivated in five different spots of that region. It was a great opportunity to interact with local residents who gave valuable information regarding the area's unique climate and vegetation.



### **IISF Curtain Raiser Seminar on Climate Change and Sustainability of Ocean Resources - 04/10/2017**

The students of 1st year M.Sc. Environmental Science, SH College, Thevara attended a seminar on "Climate Change and Sustainability of Ocean Resources" on 4th October 2017 at The Renai, Palarivattom. The seminar was a curtain raiser to IISF 2017. It was organized by Centre for Marine Living Resources and Ecology (CMLRE) along with Ministry of Earth Science (MoES)



### **SEMINAR AND EXHIBITION ON WILDLIFE CONSERVATION-6/10/2017**

On account of Wildlife Week celebrations, a Seminar and Exhibition on Wildlife Conservation was organized on 6/10/2017 jointly by the Centre for Environment and Natural Resource Management Kochi, Primose Nature Club, Sacred Heart College, Thevara and KSCSTE in SH College, Thevara. The first session of the day was by Mr. Basil on Wildlife Photography followed by a talk on Environmental Movements by Mr. Jameson, Dean of Research where he discussed various milestones from Apollo mission to the Sardar Sarovar Protest. The afternoon session comprised of quiz competition where students from various schools and colleges around Ernakulam district participated. Poster designing competition was also conducted. It was followed by valedictory ceremony where the winners of the competitions were rewarded.





### **Periyar Ecosystem Field Study-23/10/2017-25/10/2017**

As part of the MSc field study on fresh water ecosystem, the students of 1<sup>st</sup> MSc Environmental Science, Centre for Environmental Studies, Sacred Heart College, Thevara set forth for a three-day extensive field trip to Periyar from 23.10.2017 to 25.10.2017. The field study of fresh water ecosystem was carried out for three days extensively covering areas viz., Manjummel kadavu, Kunnumpuram, Cheranalloor ferry, Keezhmadu, Chowara, Marampally and Thattekkad. On the third day we visited Thattekkad Bird Sanctuary and the biodiversity was studied.





### **NATIONAL CONCLAVE ON MANGROVE CONSERVATION-10/12/2017**

On 10-12-2017, students of 1<sup>st</sup> year MSc. Environmental Science along with the faculty attended a national conclave on Mangrove Conservation at Bolgatty Palace in Cochin.

After registration, the program started with the inaugural session at 10 am continued by the Technical session on the Role of mangroves in biodiversity conservation. After noon sessions gave focus on Mainstreaming Biodiversity Conservation into Action Agenda and the Role of Business in Biodiversity Conservation. The conclave aimed at enlightening the public mainly the youth on the significance of mangroves in the ecosystem as well as its socio-economic aspects. Major focus was given to the sustainable projects aimed at conserving mangroves, namely the one undertaken by Apollo group in Kunhimagalam village of Kannur district.



**Dr. Johnson X Palackappillil**  
Principal  
Sacred Heart College (Autonomous)  
- Thevara, Kochi-682 013

## Inauguration of M.Sc. Environmental Science

On September 7 2016 MSc environmental science programme was inaugurated by Dr. George Francis (Managing Director, Live Energies, Germany)



Dr. Johnson X Palackappil  
Principal  
Sacred Heart College (Autonomous)  
Thevara, Kochi-682 013



EVS LOGO OF THE YEAR 2016-17





ORGANIC FARMING: We started an organic farm near to the lake view and we planted lady's finger, brinjal, papaya, cauliflower, cabbage, green chilli, yam and colocasia.



**BUTTERFLY GARDEN:** We took the initiative to grow a butterfly garden near to the lake view.





**BIRTHDAY CELEBRATION BY PLANTING SAPLINGS:** We celebrated our friend's birthday by planting *Allamanda cathartica*, *Hibiscus rosasinensis*, *Catharanthus roseus* and *Rauvolfia serpentina*.





SAVE PERIYAR CAMPAIGN: We participated in the save Periyar campaign.

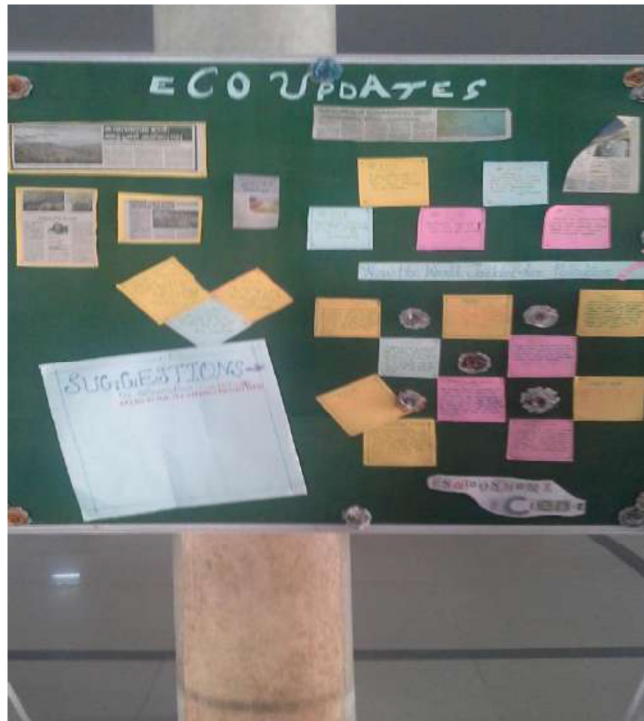


#### FIELD STUDY SEMESTER 1: FRESH WATER ECOSYSTEM

We the students of 1<sup>st</sup> MSc Environmental Science set forth to study the fresh water ecosystem of three different fresh water bodies namely, Manjummal Kadavu, Vattekunnam and Cheranalloor Ferry which are some of many tributaries of Periyar river during 15<sup>th</sup>-17<sup>th</sup> December 2016.



## Eco Magazine



SHANTHI NAGAR CLEANING- Suchithwa bodhana yajnam, 2016





We also took part in a cleaning campaign at Shanthi nagar, Thevara as a part of Suchithwa bodhana yajnam, 2016



OUR FIRST YIELD- In the month of February we the students of EVS obtained our 1<sup>st</sup> yield from the organic agro farm.







## FIELD TRIP SEMESTER 2: MARINE ECOSYSTEM

On 21<sup>st</sup> March 2017, we the students of 1<sup>st</sup> MSc Environmental Science got the golden opportunity to board a fishing research vessel own by CIFNET as a part of our Marine Ecosystem study.





Participated in the save Periyar Dharna at High court jn. Ernakulam, on 23<sup>rd</sup> March, 2017.  
Delivered felicitation on the occasion by Dr. James T.J.

Attended the Organic Kerala Exhibition and Seminar on Climate change on 7<sup>th</sup> April, 2017.



**Dr. Johnson X Palackappillil**  
**Principal**  
**Sacred Heart College (Autonomous)**  
**- Thevara, Kochi-682 013**