BHOO0MITHRASENA CLUB

Annual Report
2024-25

DEPARTMENT OF ENVIRONMENTAL SCIENCES
UNIVERSITY OF KERALA
TVM/2010/23

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Department of Environmental Sciences, University of Kerala

BHOOMITHRASENA CLUB ACTIVITIES

(2024 April to 2025 March)

Institution Code: 610

BMC Code/ID: TVM/2010/23

PROGRAM I

1. Program Activity Type: Awareness Program
2. Program Category: Observance of Environmentally Significant Day
3. Program Title: Observance of World Environment Day
4. Program Date: June 6, 2024
5. Program Objective: Foster environmental awareness and proactive participation among the student community.
6. Expected Outcome: Bridging the gap between academic knowledge and environmental action among students.

The Department of Environmental Science organized a special commemorative event on June 6, 2026, to celebrate World Environment Day. Recognizing the urgent need for environmental stewardship, the program was conducted in partnership with OISCA International (Organization for Industrial, Spiritual and Cultural Advancement). The event aimed to foster environmental awareness and proactive participation among the student community. Mr. Satheesan N.V., Range Forest Officer (Retd) and OISCA International South Kerala Secretary, gave an inspiring talk on the need to preserve forest resources, focusing on land restoration, desertification, and drought resilience. A competitive quiz competition was organized on 5th June 2024 to test and expand the students' knowledge of global environmental issues, conservation strategies, and sustainable development goals. The quiz saw enthusiastic participation, serving as an effective tool for educational outreach. Winners of the quiz competition were presented with mementos and certificates as a token of appreciation.

Mr. Satheesan N.V., Range Forest Officer (Retd) and OISCA International South Kerala Secretary, giving a talk on the Observance of World Environment Day-2024

PROGRAM II

1. Program Activity Type: Action Program
2. Program Category: Biodiversity Garden
3. Program Title: Tree plantation Drive
4. Program Date: June 6, 2024
5. Program Objective: to emphasize the importance of increasing green cover and carbon sequestration in the fight against climate change
6. Expected Outcome: Ecological improvement of the campus micro-climate. Environmental Stewardship.
7.

In association with World Environment Day celebrations, to mark the occasion with tangible action, a tree-planting drive was held on the department's premises. Faculty members and students participated in planting saplings of indigenous species. This initiative was designed to emphasize the importance of increasing green cover and carbon sequestration in the fight against climate change.

Tree plantation Drive-June 6, 2024

PROGRAM III

1. Program Activity Type: Awareness Program
2. Program Category: Quiz competition
3. Program Title: World Environment Day -Quiz
4. Program Date: June 5, 2024
5. Program Objective: To provide a platform for students to deepen their understanding of critical global environmental issues and current conservation strategies.
6. Expected Outcome: Students will have improved their ability to think quickly and analyze complex environmental scenarios under competitive pressure. Recognition of excellence through mementos and certificates.

An interdepartmental competitive quiz competition was organized on 5th June 2024 to test and expand the students' knowledge of global environmental issues, conservation strategies, and sustainable development goals. The quiz saw enthusiastic participation, serving as an effective tool for educational outreach. First, second, and third winners of the quiz competition were presented with mementos and certificates as a token of appreciation.

Prize distribution to the competition winners

PROGRAM IV

1. Program Activity Type: Awareness Program
2. Program Category: Observance of Environmentally Significant Day-Seminar-hybrid mode
3. Program Title: World Wetland Day Observation
4. Program Date: Feb 4 2025
5. Program Objective: To discuss critical issues related to wetland conservation and management
6. Expected Outcome: Highlight the urgent need for conservation initiatives and sustainable management practices to protect wetland ecosystems.

The Bhoomithrasena Club of the Department of Environmental Sciences, University of Kerala, successfully organized a one-day symposium on February 4, 2025, in observance of World

Wetlands Day. The event, held in hybrid mode, brought together distinguished experts and scholars to discuss critical issues in wetland conservation and management.

Shri. Sunil Pamidi, Director, DOECC, graced the occasion as the Chief Guest and delivered an insightful inaugural address emphasizing the importance of wetlands in maintaining ecological balance and supporting biodiversity. He highlighted the urgent need for conservation initiatives and sustainable management practices to protect these vital ecosystems. A team of Professionals from the State Wetland Authority Kerala (SWAK), namely, Amritha KM (Project Scientist), Dr. Nimmi N (Wetland Specialist), Niveditha (Wetland Analyst), Akhila V Ashok (Project Assistant), Selvi T. R (Project Assistant), and Akshara Ashok (Wetland Analyst), graced the occasion. Dr. Sabu Joseph, Prof. and Head, Dept of Environmental Sciences, presided over the function.

The symposium featured a series of scholarly discussions by eminent experts in the field. Dr. Srikumar Chadopadya (Retired Scientist, NCESS), Dr. K. Soman (Retired Scientist, NCESS),, Dr. Eric Volanski (Prof. James Cook University, Australia), and Dr. Tim Jennerjen (ZMT, Leibniz Centre for Tropical Marine Research, Germany). shared their expertise on various aspects of wetland ecosystems, including their ecological significance, threats, and conservation strategies.

A major highlight of the event was the release of the book titled "Ecohydrology of Kerala" (published by Elsevier), authored by Prof Dr. Salom Gnana Tanga Vincent et al. The book, Ecohydrology of Kerala: River Catchments and Coastal Backwaters, draws on two decades of research to offer suggestions for sustainable management strategies to address challenges arising from human impacts on surface water systems. Analysing the current water system in Kerala alongside global trends such as climate change aims to enhance the region’s database and facilitate the transition to a knowledge society as part of the Navya Kerala (New Kerala) initiatives, which were highly appreciated by attendees for their comprehensive research and contributions to wetland ecosystem studies.

Shri. Sunil Pamidi, Director, DOECC inagurated the program World Wetland Day 2025

PROGRAM V

1. Program Activity Type: Awareness Program
2. Program Category: Resource materials/Publications
3. Program Title: Book Release- Ecohydrology of Kerala by Prof.Dr.Salom Gnana Thanga
4. Program Date: Feb 4 2024
5. Program Objective: Aims to enhance the surface water system's database and facilitate the transition to a knowledge society as part of the Navya Kerala (New Kerala) initiatives.
6. Expected Outcome: River Catchments and Coastal Backwaters draw on two decades of research to provide suggestions for sustainable management strategies addressing challenges arising from human impacts on surface water systems

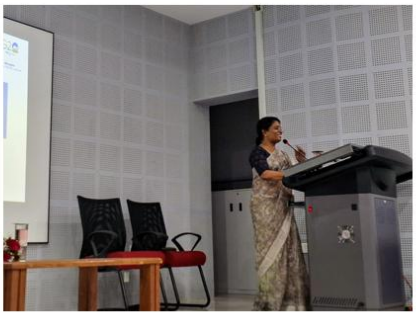
In association with World Wetland Day, the book titled "Ecohydrology of Kerala" (Elsevier), authored by Prof Dr. Salom Gnana Tanga Vincent *et al*., was released. The book, Ecohydrology of Kerala: River Catchments and Coastal Backwaters, draws on two decades of research to offer suggestions for sustainable management strategies to address challenges arising from human impacts on surface water systems. Analyzing the current water system in Kerala alongside global trends such as climate change aims to enhance the region's database and facilitate the transition to a knowledge society as part of the Nava Kerala (New Kerala) initiatives, which were highly appreciated by attendees for their comprehensive research and contributions to wetland ecosystem studies.

PROGRAM VI

1. Program Activity Type: Awareness Programme
2. Program Category: Observance of Environmentally Significant Day
3. Program Title: World Water Day
4. Program Date: March 24, 2025
5. Program Objective: Emphasizing the urgent need to protect the world's glaciers as they play a crucial role in maintaining the planet's water cycle
6. Expected Outcome: Awareness and knowledge on the need for preserving glaciers.

Dept of Environmental Sciences and Bhoomitrasena Club, University of Kerala, observed World Water Day 2025 on 24th March with the theme “Glacier Preservation”, emphasizing the urgent need to protect the world's glaciers as they play a crucial role in maintaining the planet's water cycle.

Mrs. Mini Chandran, Director, Central Ground Water Board (CGWB), was the Guest of Honour and delivered the keynote address, detailing the topic “Impact of climate change on water resources”. Dr. Sukanya, a Postdoc of the Department of Environmental Science, also delivered a lecture on "Cutting-edge AI in water resources management". Faculty, Research scholars, Post Doctoral Fellows, and PG students from the Department of Environmental Sciences and Geology participated in the event.



World Water Day 2025 Inaugurated by Mrs. Mini Chandran, Director, Central Ground Water Board (CGWB)

PROGRAM VII

1. Program Activity Type: Action Program
2. Program Category: Waste Management
3. Program Title: Bio-Regenerative Waste Management
4. Program Date: 1-08-2025
5. Program Objective: To demonstrate a "circular economy" within the department, where food waste is converted into biofertilizer.
6. Expected Outcome: To produce nutrient-rich organic fertilizer that can be used for departmental indoor plants and butterfly/biodiversity garden

In a significant step toward achieving a "Zero Waste Department," the **Bhoomitrasena Club** of our department has spearheaded a daily bio-composting initiative that converts organic waste generated by students, faculty, and office staff into nutrient-rich compost. Every afternoon, student volunteers collect food scraps and organic waste from designated "Green Bins" located in the department staff rooms, student lounges, and office areas. The collected waste is transferred to the **Bio-Composting Unit**. The food waste is then mixed with the inoculum, dried leaves, and previous compost. The unit is monitored weekly and ensures proper aeration by turning the food waste and maintaining moisture levels to facilitate aerobic decomposition. This hands-on involvement provides students with a practical understanding of organic waste management. After approximately 30 to 45 days, the organic matter undergoes complete biological transformation and becomes a sustainable source of manure for the department's indoor plants and outdoor garden.

Bio-Composting Unit