

SEMBANAD ENVIRONMENTAL RESEARCH CENTRE **(VERC)**

Vembanad Environmental Research Centre (VERC), an extension research Centre of the School of Environmental Sciences, aims to monitoring of Vembanad lake ecosystem. The areas identified for the overall activities of the Centre include Environmental monitoring of the wetland system, Ecological studies, Hydro-meteorological studies, water and sanitation studies with a Socio-economic approach.

For this, Government of Kerala has sanctioned Rs. 2.64 crores worth project entitled “*Environmental Monitoring and Sustainable Utilisation of Vembanad Wetland Ecosystem*”. The project envisages various research aspects of Vembanad Lake such as environmental monitoring (Heavy metal, pesticides and emerging pollutants etc.) and assessment of socio-economic and sustainable livelihood of the inhabitants adjacent to the Vembanad Lake. This project is also aimed to link the academic community with local people and transfer the knowledge of wise use of wetlands to create proper awareness among the people on proper sanitation and waste management practices through proper research and appropriate training programmes.

CURRENT RESEARCH ACTIVITIES

Vembanadu Lake is the largest lake in Kerala and forms a part of the Vembanad wetland system which has been recognized as a Ramsar site, such sites are of international significance designated under the Ramsar Convention, ensuring the conservation and wise use of wetlands. Vembanadu Lake receives discharge from seven major rivers plus many streams and canals, and is a sink for many contaminants including heavy metals, pesticides and various pollutants. The major focus of the centre is an assessment of Emerging pollutants in water and sediment, assessing the abundance and distribution of Micro plastics in various environmental matrices, Heavy metals and pesticide residues in the environmental samples. Under the school, the researchers already published a research paper regarding micro plastics in peer reviewed international journal. Mercury is a global pollutant and Vembanad backwaters, one of the largest Ramsar site in India are now considered as one of the mercury hot spots in India. Under the School, various researchers conducted research on mercury pollution in Vembanad lake. Research papers were also published in various national and international journals regarding Mercury pollution in the water, sediments and biota of Vembanad Wetland ecosystem. The Centre also carried out socio-economic survey at Nazarat Village (Ward IX) at Kumarakom Panchayath and Achinakom Village at Vechoor Panchayat. The Centre also focused research on the

ecological studies, assessment of phytoplankton and zooplankton, sustainable utilization of weeds etc.

