

## Report of the program "Environmental Sustainability and Pollution Control in Kerala" on 28/11/2025 at Quilon Beach Hotel.

The Quilon Management Association (QMA) hosted a thought-provoking talk on "Environmental Sustainability and Pollution Control in Kerala" on November 28, 2025, at the Quilon Beach Hotel. The event, which began at 7.00 pm, featured Smt. S.Sreekala, Chair Person, Kerala State Pollution Control Board as the distinguished speaker, who shared her expertise on this pressing issue.



Kerala is blessed with unparalleled natural wealth —lush forests, pristine rivers, a 590-km coastline, unique wetlands, and the Western Ghats, one of the world’s biodiversity hotspots. However, this ecological richness also makes the state particularly sensitive to environmental pressures.

Today, we are confronted with several pressing challenges: Urban and industrial pollution, especially in rapidly developing districts. High population density, declining water quality in rivers, lakes, and groundwater sources. Solid and biomedical waste management concerns, exacerbated by population growth and consumption patterns. Air quality deterioration in select urban clusters, Climate vulnerability, manifesting as floods, droughts, and erratic rainfall patterns. Coastal erosion, threatening communities and infrastructure.



Constitutional provisions - Article 47 – State to ensure standard of living, nutrition, health improvement. Article 48-A - State shall endeavour for improvement of environment. Article 51 A(g) - Fundamental duty of citizen- to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures; Article 253 -Empower parliament to make environmental Rules.



The Kerala State Pollution Control Board is a Statutory Regulatory Authority responsible for the enforcement of Environmental Laws relating to the protection of water, air and the environment in the State of Kerala.

The vision of KSPCB is “Pure Water, Clean Air, Healthy Land” - Our Promise for Kerala’s Future. Kerala State Pollution Control Board is committed to protecting the Environment through Enforcement of Environmental statutes.

The Mission of KSPCB is To safeguard and improve the natural environment of Kerala by prevention, control and abatement of pollution upholding the constitutional provisions under Article 48 A and to promote the environmental stewardship emphasizing the ethical dimensions of civic responsibility under Article 51A(g) of the Constitution of India.

Major Statutes implemented by Board is Water (Prevention and Control of Pollution) Act, 1974, Air(Prevention and Control of Pollution) Act, 1981 and Environment Protection Act, 1986

Important Rules related to Environment are Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016, Biomedical Waste Management Rules, 2016, Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016, Battery Waste Management Rules, 2022, E-Waste Management Rules, 2016, Construction & Demolition Waste Management Rules, 2016, Noise Pollution (Regulation and Control) Rules, 2000

Role of the Kerala State Pollution Control Board (KSPCB) is As the primary environmental regulator in the state, the KSPCB is committed to safeguarding public health and ecological integrity. The mandate spans are Monitoring and managing air, water, and soil pollution, Regulating industrial emissions and Effluents, Ensuring scientific waste, management practices, Overseeing environmental compliance and enforcement, Advising the government on policy and environmental governance. All industries and establishments generating water or air pollution or any waste coming under the purview of the various Rules under the Environment (Protection) Act are regulated by the Board by means of Consent, Authorisation, Registration, etc. Industries, hospitals, hotels and restaurants, residential and other buildings (more than a specific built-up area) have to obtain consent of the Board under the Acts, Local self government bodies have to obtain Authorisation from the Board for their solid waste management systems, Agencies involved in generation and management of e-waste, plastic waste, construction and demolition waste, battery waste, biomedical waste, hazardous waste etc. are also regulated by the Board



Strategic Measures – Air Quality Management - The Board issues consent to industries with conditions to regulate the quality and quantity of emission and stipulates the frequency for monitoring the emissions. Under the Air (Prevention & Control of Pollution) Act, 1981 consent of the Board is mandatory for making emissions to the atmosphere. The consent is extended only if there is compliance to consent conditions during the previous period. Board also monitors air quality at various salient locations by means of Continuous Ambient Air Quality Monitoring Stations or manual stations; the results of monitoring are published and recommendations for improving the quality are issued.



The National Ambient Air Quality Monitoring Programme (NAMP) at 34 stations in the state. The State Ambient Air Quality Monitoring (SAMP) at 06 stations in the state. Data from the 09 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) established by the Board in 06 districts of Kerala (three at Ernakulam, two at Thiruvananthapuram, one each at Kollam, Thrissur, Kozhikode and Kannur).

### Strategic Measures – Water Body Protection

Board does regular monitoring of water quality of the rivers, lakes and other water

bodies of the state and issues recommendations for improving the quality

The National Water Quality Monitoring Programme (NWMP): A total of 209 monitoring stations which include 101 stations in 44 Rivers, 15 stations in 11 Rivulets and Tributaries, 09 in Reservoirs, 04 in Freshwater Lakes, 17 in Estuarine Lakes, 03 in Canals, 07 in Ponds, 33 stations in Ground Water, 19 in Coastal waters/ Marine outfalls and 01 Sewage Treatment Plant (STP) under this programme.

The State Water Quality Monitoring Programme (SWMP): A total of 138 stations which include 97 stations in Rivers, 07 in Rivulets/ Tributaries, 15 in Freshwater Lakes, 12 stations in Estuarine Lakes and 07 in Reservoirs under this programme.



Action plans are being prepared and implemented in 2018 to revitalize the polluted parts of 21 rivers. Accordingly, 10 will be rehabilitated in 2021. The water quality of river sections has been improved to make them suitable for bathing.

Strategic Measures – Water Body Protection - The Board is implementing a project to monitor antimicrobial resistance in water sources in Thiruvananthapuram district with the help of the Department of Environment, Kerala University. The Board is implementing a project to replace antimicrobial systems and evaluate the efficiency of wastewater treatments through the College of Engineering, Thiruvananthapuram.

The AMR Laboratory Board's central lab in Ernakulam has started operations to detect the presence of antimicrobial resistance and antibiotic residues in water and soil.

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As part of the Festival Monitoring, the Board conducts water, air and sound monitoring during festivals such as Thrissur Pooram, Maramon Convention and Attukal Pongala, in addition to the Sabarimala Mandala-Makara Vilakku festivals.

Monitoring the Water Quality of Rural Water Supply Schemes (RWSS) in 06 districts of the state. Under the leadership of the board, a sanitation survey is being conducted on the banks of polluted streams with the participation of students in the urban areas of Thiruvananthapuram and Kollam through the Mobile Application (ENVI SAN) and an action plan is being formulated.

## Strategic Measures – Waste Management.

Promotion of Alternatives to Plastic- In connection with the ban on single-use plastic in the state, the Board conducted studies including litter survey, brand survey, and dumpsite survey in various districts and published a database of plastic alternative product manufacturers in 2023.

The Board organized a special programme to promote alternatives to single-use plastics. A unique initiative of 'mobile shop of cloth bags' was set up in the premises of the Head Office, offering eco-friendly cloth bags to encourage the public to switch to sustainable alternatives.

Several Awareness programmes were conducted by the Board Officials in the schools, Industrial parks and for street vendor and retailers to avoid banned SUP and switch to eco-alternatives.

## Circular Economy & Sustainable Industry

In connection with the implementation of the Plastic Waste Management Rules, 2016 in the state and to ensure scientific disposal of plastic waste, registrations are being given to plastic packaging manufacturers, importers, brand owners, and plastic waste processors under their Extended Producer Responsibility.

The Board has developed an Integrated web portal for implementation and monitoring of various activities which have a mechanism for report generation, monitoring and evaluation along with centralized dash board and provision for drill down reporting keeping in view the objectives of quick access, efficient storage etc, have add on facilities on hot spot identification, formulation of action plan and to ascertain the progress of implementation of various activities.

Kerala PCB has developed a GPS based online vehicle tracking mechanism for monitoring interstate movement of commercial goods vehicle carrying waste.

Responsive web applications for Pollution Control Board and waste generators, transporters, receptors and mobile Applications for drivers and enforcement authority are key features.

The purpose of this system is to enable the provision to monitor the entire waste management processes starting from occupier (waste generator) to transporter and to the receiver (disposal end) with real-time vehicle tracking with help of GPS system installed in the transporting vehicle with violation detection and alerts.

The web [etracks.kerala.gov.in](http://etracks.kerala.gov.in) portal and its mobile Applications- Transporter App and Enforcement Authority App are available for transporter and Enforcement authority respectively.

Incentivizes for best practices - The Kerala State Pollution Control Board confers awards to industrial units and institutions under selected sectors annually in recognition of their exemplary performance in pollution control and environmental management. The objective of the award scheme is to promote a culture of environmental responsibility and to encourage industries and organizations to adopt sustainable practices in their operations.

A Call to Action - Integrate sustainability into business practices - Ensure compliance and transparency, Reduce–Reuse–Redesign resource use, Support local green initiatives and Lead by example within the community.

A lively Q&A session followed, with attendees engaging with Sreekala on topics like plastic waste management, renewable energy. Simple actions, like reducing plastic use and adopting eco-friendly habits, can significantly impact

environmental sustainability. The event sparked meaningful discussions, inspiring attendees to contribute to a more sustainable future.

The event started at 7.00 pm with silent prayer and QMA president Sri Madhusoodanan Pillai chaired. QMA Secretary General Sri P N Appukuttan welcomed the gathering. Sri Jayakumar Tharamel introduced the chief guest to the audience. Mementos presented to Smt. Sreekala by Sri K.Madhusoodhanan Pillai. The event concluded with a vote of thanks by QMA Secretary Admn. Sri Prathap chandran expressing gratitude to Smt. Sreekala for her insightful talk and attendees for their active participation

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