LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES JAMSHORO

Knowledge • Service • Excellence

SUSTAINABLE DEVELOPMENT GOALS



SDG 14

LIFE BELOW WATER

LUMHS' Commitment for Healthy Oceans and a Sustainable Planet

14 LIFE BELOW WATER

Our Contribution for a Healthier Ocean



- Promoting Water Conservation
- Supporting Marine Biodiversity Research
- Raising Awareness for Clean Oceans
- Collaborating for Ocean Sustainability

Together for a Sustainable Future

LUMHS – SDG 14

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LUMHS Contribution to SDG 14: Life Below Water

Awareness Session on Protecting Life Below Water Held for School Students

An awareness session was held on 12 October 2025 at LUMHS Auditorium for SOS village school students, to promote understanding of the importance of protecting aquatic life in young minds. The session was organized in line with UN Sustainable Development Goal 14 (Life Below Water).

Participants learned about the role of rivers, lakes, and seas in sustaining biodiversity and livelihoods, and about the threats posed by plastic waste, pollution, and overfishing. They were encouraged to adopt simple, responsible habits, such as reducing single-use plastics, avoiding littering near water bodies, and spreading the message in their families and communities.

The session was led by LUMHS students and faculty members. It reflects LUMHS's commitment to sustainability education and to engaging young people in environmental stewardship.




HOW TO SAVE
OUR OCEAN


HOW TO SAVE
OUR OCEAN





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Field-Based Water Quality Testing and Monitoring Activity for Environmental Sustainability and the Protection of Aquatic Ecosystems

Introduction

In its commitment to environmental sustainability and the protection of aquatic ecosystems, Liaquat University of Medical & Health Sciences (LUMHS), through its Water Testing & Surveillance Laboratory (WT&SL), conducted a field-based water quality testing and monitoring activity at Kotri Downstream of the River Indus on 22 May 2025.

The activity involved the collection of surface water samples from the downstream section of the River Indus for laboratory analysis and assessment of water quality. Conducted under the supervision of Dr. Zafar Ali Seenharo, Director, WT&SL, the initiative aimed to examine water quality and identify potential contamination that could adversely affect aquatic ecosystems and communities dependent on river resources.

Contribution to SDG 14: Life Below Water

This initiative contributes to United Nations Sustainable Development Goal 14 (Life Below Water), which emphasizes the conservation and sustainable use of oceans, seas, and marine resources. Although the activity focused on the freshwater ecosystem of the River Indus, its downstream water quality has important implications for connected aquatic environments and the ecological health of receiving waters.

By conducting scientific water-quality monitoring, LUMHS contributes to the identification of potential pollution threats, generation of environmental evidence, and promotion of responsible water-resource management. Monitoring river water is particularly important in downstream areas where communities, including those in under-resourced regions of Sindh, depend on river water for their daily needs and livelihoods.

The initiative supports the broader objectives of SDG 14 by strengthening environmental surveillance and contributing to efforts to reduce water pollution and protect aquatic biodiversity.

Environmental and Community Significance

The River Indus is a vital natural resource supporting human communities, aquatic organisms, and ecological systems across Sindh. Water contamination can threaten aquatic habitats, affect biodiversity, and create serious public-health concerns, particularly for vulnerable communities with limited access to safe alternative water sources.

Through this activity, LUMHS extended its scientific and laboratory expertise beyond conventional healthcare services to address environmental challenges affecting both

ecosystems and human populations. The collection and analysis of downstream water samples provide an evidence-based foundation for understanding potential water-quality concerns and supporting future environmental protection initiatives.

Institutional Contribution and Impact

This activity reflects LUMHS's commitment to environmental stewardship, scientific research, and sustainable management of natural resources. Through the technical capacity of WT&SL, the university contributes to:

- Monitoring the quality of river water and identifying potential contamination.
- Supporting efforts to prevent and reduce aquatic pollution.
- Generating scientific evidence for environmental assessment and water-resource management.
- Protecting aquatic ecosystems and biodiversity through improved environmental surveillance.
- Highlighting water-quality challenges affecting vulnerable downstream communities.
- Promoting awareness of the relationship between healthy aquatic ecosystems and community well-being.

Alignment with SDG 14 Targets

The activity particularly supports:

- Target 14.1: Preventing and significantly reducing marine pollution, including pollution from land-based activities, through upstream and downstream water-quality surveillance.
- Target 14.2: Supporting the protection and sustainable management of aquatic ecosystems through environmental monitoring.

Suggested Supporting Evidence for THE Impact Rankings

1. Photographs of field-based water sample collection at Kotri Downstream.
2. Photographs of laboratory water-quality testing and analysis.
3. Water-quality testing reports and laboratory results.
4. Field monitoring records and sampling documentation.
5. Reports highlighting identified water-quality concerns and recommendations.

Overall Contribution: Through its Water Testing & Surveillance Laboratory, LUMHS demonstrates how a health sciences university can contribute to the protection of aquatic ecosystems through scientific monitoring, environmental research, and evidence-based water-resource management, supporting the objectives of SDG 14: Life Below Water.







