



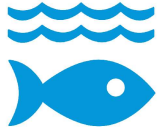
# SUSTAINABILITY 2023-2024

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COMMUNICATION ON  
ENGAGEMENT (COE)







# 14 LIFE BELOW WATER

## WORKSHOPS ON LIFE BELOW WATER

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The Institute of the Environment IOE at the University of Balamand has been actively involved in various environmental initiatives and workshops. These include contributing to the 30x30 IndyACT campaign for marine protection, participating in regional water quality and biodiversity workshops, and conducting technical training for fisheries management. They have also engaged in aligning Lebanon's biodiversity strategies with global frameworks, supported the EU-funded MPA Network Project, and prepared for the COP 16 United Nations Conference on Biodiversity. Their efforts reflect a strong commitment to marine conservation, sustainable fisheries management, and biodiversity protection.

### DR. NADER HIGHLIGHTS MPAS' ROLE IN FISHERIES MANAGEMENT

Dr. Manal Nader, Director of the IOE, participated as a panelist in a seminar on the Role of Marine Protected Areas (MPA) in Fisheries Management on September 4, 2024, at the Smallville Hotel Beirut. It was organized by the Ministry of Environment, IndyACT, and the Lebanon Environment Forum (LEF). Part of the 30x30 IndyACT campaign, the seminar aimed to achieve 30% marine area protection by 2030 and support the National Campaign for an MPAs Network. Experts' insights were crucial for advancing marine conservation and sustainable fisheries management.



### IOE PARTICIPATES IN REGIONAL WORKSHOP ON WATER QUALITY AND BIODIVERSITY

IOE participated in the workshop 'Protecting Water Quality and Biodiversity for Improved Water Management' organized by ESCWA in collaboration with the World Bank on July 10th. The workshop gathered member state representatives from Iraq, Jordan, Lebanon, Syria, and Türkiye at the UN-House in Beirut, focusing on regional water quality and freshwater biodiversity issues. Dr. Nader virtually presented the case of 'Estuaries as Marine Protected Areas: Importance of managing river basins from source to sea in Lebanon', while Dr. Mitri participated in person and discussed 'Watershed Reforestation, including Opportunities for Reducing Stormwater Runoff'.



## FLEET CENSUS TRAINING FOR FISHERIES MANAGEMENT IN TRIPOLI

As part of the project “Strengthening PINR’s role as a fisheries management tool” funded by MedPAN and in partnership with IndyAct, and under the activity entitled “Technical Integration of Catch and Effort System for Fisheries Management in the Palm Islands Nature Reserve”, the MCR team held the first fleet census technical Fleet Census Training for Fisheries Management in Tripoli training in Siyaq, Tripoli on the 18th of July, 2024.

Members of Siyaq were introduced to the IOE and its various programs, then to the FLOUCA COOP system and finally started with technical training on the fleet census data collection process.



## IOE PARTICIPATES IN NATIONAL BIODIVERSITY STRATEGY ALIGNMENT MEETING

The IOE team participated in the “First Thematic Consultation Meeting as part of the Alignment of the National Biodiversity Strategy and Action Plan (NBSAP) and Relevant Policy Framework in Lebanon with the Post-2020 Global Biodiversity Framework (GBF)” on April 23, 2024.

Followed by another one in 27 June 2024.

All IOE members contributed to roundtable discussions on NBSAP goals and National Targets, aligning them with GBF targets aimed at halting and reversing biodiversity loss by guiding national policies.



## DR. MANAL NADER PARTICIPATES IN 'DIALOGUE NATIONAL SUR LA BIODIVERSITÉ'

Dr. Manal Nader, Director of the IOE at UOB participated as a panelist in the ‘Dialogue National sur la Biodiversité’ organized by the Lebanon Eco Movement in preparation for COP16 United Nations Conference on Biodiversity that will be held in Columbia from 21 October to 1 November 2024. At COP 16, governments are expected to show the alignment of their National Biodiversity Strategies and Action Plans (NBSAPs) with the Kunming- Montreal Global Biodiversity Framework. The event, supported by the French Institute in Lebanon, took place on December 15 at FABRIKA, Beirut. Dr. Nader contributed to the debate in exploring Lebanon’s role in the upcoming COP 16, strategies and perspectives.



## MEETING ON ENHANCING MPA NETWORK SECURITY

As part of the EU-funded MPA Network Project, the IOE's Marine and Coastal Resources Program team and the Lebanese Environment Forum met with the Maritime Operation Room on May 30, 2024. They assessed the capacity to support the MPA Network, identifying gaps and distributing a survey to gather data and recommendations for improving collaboration and protection efforts.



## SEMINAR ON MPA NETWORK

As part of the EU-funded MPA Network Project, a partnership between the Lebanese Environmental Forum and the Marine and Coastal Resource Program (MCR) at IOE, Dr. Manal Nader and Ms. Rawan Al Jamal participated in a seminar on February 13 at Central Military Club, Manara.

Ms. Al Jamal discussed designing MPA networks for Lebanon, while Dr. Nader highlighted the importance of estuaries and advocated for declaring the five estuaries in the Ministry of Environment's MPA strategy as Marine Protected Areas.

## PUBLICATIONS

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In the past two years, the University of Balamand has conducted significant research aligned with SDG 14: Life Below Water. Key studies include developing an economic vessel to clean polluted waterways, directly enhancing aquatic ecosystem health. Research on groundwater contamination in North Lebanon provides crucial data to protect water resources from pollutants. Additionally, analyzing the chemical composition of fogwater in Lebanon helps understand atmospheric pollution's impact on marine environments. The microbial assessment of commercial pet foods aims to prevent water contamination. These efforts demonstrate the university's commitment to supporting the sustainability and health of marine and freshwater ecosystems.

1. Shantha Kumari, K.G., Jaheer Mukthar, K.P., & El Rahhani, G.N. (2024). **Green Finance in India: Driving Sustainable Development and Economic Growth**. In Studies in Systems, Decision and Control.
2. Hadid, M., Alwan, N.H., Dimassi, H.I., Serhan, M., & Hassan, H.F. (2024). **Microbial assessment of commercial pet foods marketed in the United Arab Emirates**. Frontiers in Veterinary Science. Open access.
3. Houry, D., Millet, M., Weissenberger, T., Delhomme, O., & Jabali, Y. (2024). **Chemical composition of fogwater collected at four sites in North- and Mount-Lebanon during 2021**. Atmospheric Pollution Research. Open access.
4. Khatib, M., & Mahmoud, B. (2024). **Economic Vessel to Clean the Polluted Water by Solid Waste in Waterway**. In Lecture Notes in Civil Engineering.
5. Arai, W., Khatib, M., Saba, M., Kassem, H., & Absi, J. (2023). **Characterization of Groundwater Contamination in the North Lebanese Aquifer**. In Environmental Science and Engineering.

## IOE SDG 14 PROJECTS

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### **Strengthening PINR's Role as a Fisheries Management Tool**

Objective: To introduce and implement the Flouca - COOP system for representatives of the fisher Cooperative of Tripoli (CoP) and the Appointed

**Funding Agency:** MedPAN

**Budget & Period:** 3,000 USD (2024, 6 months)

**Implemented By:** Indy



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### **National Integrated Coastal Zone Management (ICZM) Strategy, Legislation, and Plan Development**

Objective: To update the national ICZM strategy of 2015, update the draft ICZM law of 2015 and enhance Lebanon's governance framework for coastal zone management

The ICZM Platform is <https://lebanoncp.com/>

**Funding Agency:** PAP/RAC (<https://paprac.org/>)

**Budget & Period:** 26,000 USD (2024, 8 months)

**Implemented By:** Earth Link & Advanced Resources Development

**Partners:** Marine and Coastal Resources Program – IOE – UOB (MCR-IOE-UOB)

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### **To Strengthen the Capacities of Lebanese Non-State Actors to Enhance the Use of Evidence and Science in Environmental Policy-Making and Regulation (National)**

Objective: The establishment of an effective MPAs network in Lebanon's EEZ is enhanced for the protection of Lebanon's coastal and marine biodiversity and ecosystems.

**Funding Agency:** European Commission

**Budget & Period:** 526,978.98 EUR (2022-2026) Implemented By: Lebanese Environmental Forum (LEF)

**Partners:** Marine and Coastal Resources Program – IOE (MCR-IOE-UOB)

Learn more by viewing the videos below from October 2023, and October 2024.



## **Assessment of Commercial Fish Species**

Objective: A resource center for fisheries data on the Lebanese coast and beyond.

**Funding Agency:** IOE, UOB

**Budget & Period:** (2005-Present)

**Implemented By:** Marine and Coastal Resources Program