

Clean and Healthy Ocean Integrated Program

The Issue

The ocean provides \$2.5 trillion each year to the world economy in market goods and services and many times that in non-market amenities. Today, about 45% of the world's population lives within 150 km of a coastline. Meanwhile, two-thirds of the planet's largest cities are in low-lying coastal areas. While living near water—rivers, lakes, and oceans—supports livelihoods, many human activities put pressure on these same water systems by altering flows and contributing to pollution. According to recent estimates, 70-80% of global wastewater is discharged untreated into the ocean, either directly or via rivers.

Coastal pollution from land-based activities is one of the most serious threats to the world's coastal ecosystems. It directly impacts health, livelihoods, biodiversity, and ecological goods and services. One of the main threats to coastal waters is the increasing levels of nutrients reaching the ocean from point source and/or diffuse land-based sources, such as cities and agricultural activities.

Alarmingly, dramatic declines in oxygen levels in the ocean have been observed over the past 50 years. This has led to the identification of more than 500 dead zones, covering an area roughly the size of the European Union. Dead zones occur when oxygen levels drop so low that marine life is unable to survive. While dead zones likely have occurred seasonally across history, recent research has

shown they have nearly quadrupled across the globe since 1950. Climate-induced warming is adding to the severity and frequency of these events.

The Role of the Integrated Program

The Clean and Healthy Ocean Integrated Program will aim to accelerate global efforts to curb coastal pollution from agricultural, industrial, and municipal sources. These sources are directly on the coast or else reach coastal waters from often distant sources via major rivers. The program aims to accelerate both global commitments and national reforms and investments to prevent excessive and uncontrolled nutrient loads from reaching coastal waters.

Curbing the inflow of land-based pollution to the coastal environment is expected to lift the triple bottom line of ecological, social, and economic well-being in countries along the coasts of the world's large marine ecosystems (LMEs). It will deliver substantial global environmental benefits: renewed attention to the impact of untreated wastewater and nutrient run-off in the ocean; and greater knowledge to inform and incentivize national coordinated policy formulation processes and investments.

This program is one of 11 under the GEF-8 cycle. Together with other programs, it will draw attention to the need





for global commitment and action. To that end, it will accelerate a frank debate on the need for national policy coherence to address excessive pollution loads in rivers and connected coastal waters.

A Two-Pronged Approach

The program takes a two-pronged approach to address coastal nutrient pollution:

- A global multi-stakeholder platform will inform economic and social perspectives critical for understanding the drivers, opportunities, and limitations to achieving better nutrient management at global and regional scales. It will include key cross-sectoral public and private sector actors, civil society groups, and academia, among others. This global platform aims to accelerate action to curb land-based sources of pollution building on recent momentum, such as UNEA 4 and 5 resolutions. It will strengthen science-to-policy linkages; provide policy and technical advice to child projects; and aim to leverage finance for innovative approaches and investments (e.g. providing seed finance to competitive innovation grants and incubators to design and roll out innovative technologies). It will also help facilitate the exchange of knowledge, experiences, and lessons learned.
- To significantly scale up action in LMEs, the program will focus on a subset of countries that contribute significantly to pollution loads in two or three LMEs, one of which prioritizes the needs of Small Island Developing States. Focusing on a limited number of LMEs-and only those with a ministerially approved joint Strategic Action Program—will deliver measurable impact that can be scaled up across their respective regions. On the LME and country level, the program aims to focus on supporting policy and regulatory reforms, including retooling perverse/competing subsidies across sectors; incentivizing increased domestic finance; scaling up deployment of Nature-based Solutions (NBS) and efforts to combine NBS/green with existing grey infrastructure; and accelerating deployment of innovative finance tools and technology to curb pollution.



Expected Impacts

The end goal of the Clean and Healthy Ocean Integrated Program is to significantly decrease land-based pollution of the coastal environment. In so doing, it would advance ecological, social, and economic well-being in countries along the coasts of the world's LMEs. Specifically, the program aims to decrease the length and extent of hypoxic zones. It will achieve this by curbing coastal nutrient pollution from agricultural, industrial, and municipal sources through policy and regulatory measures and infrastructure investments combined with NBS.

The causes of nutrient pollution require a cross-sector approach that will improve human and environmental health beyond nutrient and dead zone reduction and restoration of biodiversity. The program will improve health by decreasing sources of nitrates, waterborne diseases, and other contaminants from cities and agriculture. It will improve livelihoods by significantly improving coastal water quality. This, in turn, will restore fish habitats, supporting local fisheries, furthering sustainable coastal tourism, and therefore enhancing local income opportunities and tax revenue. Finally, it will improve food security. In addition to increasing fish yields, it will decouple agricultural yield from inputs of industrial fertilizers and incentivize sustainable and climate-smart agriculture.

The Global Environment Facility (GEF) is a family of funds dedicated to confronting biodiversity loss, climate change, pollution, and strains on land and ocean health. Its grants, blended financing, and policy support helps developing countries address their biggest environmental priorities and adhere to international environmental conventions. Over the past three decades, the GEF has provided more than \$22 billion and mobilized \$120 billion in co-financing for more than 5,000 national and regional projects.

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