

The Marine Ecosystem of the Persian Gulf Is Under Critical Environmental Condition and Destruction

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ABSTRACT

The waters of Persian Gulf and Oman Sea are environmentally unique with an unusual faunal assemblage. The Persian Gulf is a semi-closed water body connected to the Oman Sea through Strait of Hormuz in which is restricted to 56 km at its narrowest point. The maximum width is 640 km with the average depth of 35m. The Oman Sea with an area of 94000 km², and a depth reaching 3400 m, connects the Persian Gulf to the Indian Ocean through the Arabian Sea. The Persian Gulf and Oman Sea are in the subtropical zone lying almost entirely between the latitudes of 24° and 30°N and longitudes of 49° to 61° 25'E^{1,2}.

During last two decades, there is an ascending trend on entering different pollutants in these two-water body (esp. the Persian Gulf) such as:

- a) Industrial and Domestic Sewage;
- b) Ballast tank waters of freighter and cargo ships, industrial vessels, oil and gas Tankers,
- c) Entrance of Oil and Gas into the sea through drilling and exploitation;
- d) Microplastics and Nanoplastics

On the other hand, the humans cause many damages to these two-ecosystem leading to make it serious changes to be far from natural one. One of the main problems in the Persian Gulf is increasing of building of Artificial islands such as Palm Island and World Island in UAE, Pearl Island in Qatar, Green Island in Kuwait, and the size of each island is more than 9 * 6 km area and 50-100 m height.

Next to oil, fisheries represent the second most important natural resource, and the most important renewable natural resource the overfishing and increasing the number of fishing gears (traps, gillnets, trawlers) are the other reasons that has caused to have serious documents on changes of the Persian Gulf feature and ecosystem³.

All above-mentioned changes in the ecosystem have caused to have harmful Blooms in the region of which some of the are poisonous and have destroyed aquatic resources including fishes, crabs, shrimps and even marine mammals and turtles⁴.

Now, what should we do as marine biologists, lecturers, and researchers. It is our duty to advise all policy-makers and stake-holders in the region that we are approaching to acritical point and many actions should be stopped or decreased or it is better to say that to be under-control for further rehabilitation of the marine ecosystems including the Persian Gulf and the Oman Sea.



Figure 1. Adding the huge amount of sands and soils into the sea for building artificial island.

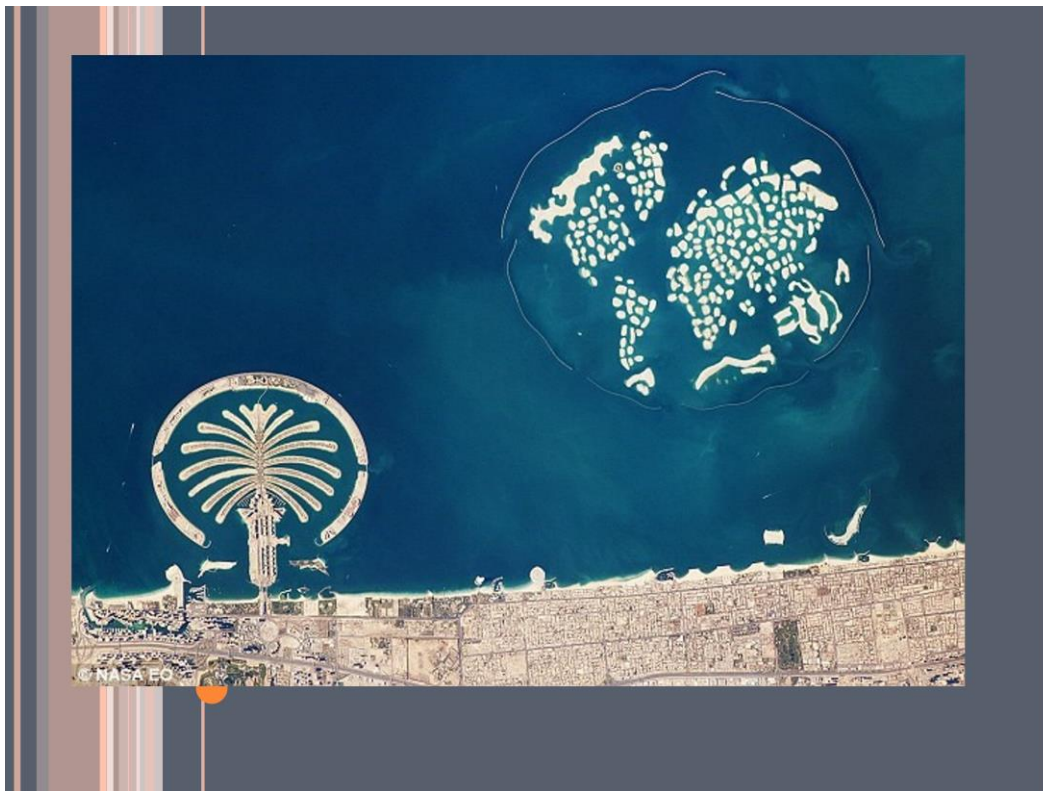


Figure 2. Building the Artificial Islands in the Persian Gulf.

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