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## Pollution Of Marine Water; An Economic Threat

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### Abstract:

There is a deep relation in between pollution and economy, they affect each other equally. Air pollution, water pollution, soil pollution etc. have a negative effect on economy but the marine pollution hit differently. Pollution harm the economic growth. Even not only on economy it leaves the effects on human body and other living organisms also. Sometime medical science also fails to solve it out. Nature gives us a lot of positivity, and in return it gets a bucket of negativity.

**Keywords:** effects of pollution, harm to economy, medical science, nature, relation between pollution and economy, disaster

### Introduction:

Pollution is a social disease, and its' effects are also happened in a large scale. The relation of pollution and economy are very close. Actually, we can say that each kind of pollution are the result of economic development. From the atmosphere to the soil there is a different kind of pollution. Each play its' role significantly. Pollution has a deep economic impact on the whole Gross Domestic Product (GDP). India lost more than 8.5% of GDP in 2013 due to cost of increased welfare and lost labour due to air pollution. Air pollution cost Mumbai and Delhi 10.66 billion (approximately Rs 70,000 crore) in 2015. As per 2025, 75 to 199 million metric tons of plastics are a cause of marine pollution also & besides, 8 to 11 million metric tons of new plastic are equally engage annually to follow the pollution trend.

### What is Pollution and Economic Effect?

Pollution is the introduction of harmful materials into the environment. These harmful materials are called pollutants. Pollutants can be natural, such as volcanic ash. They can also be created by human activity, such as trash or runoff produced by factories. Pollutants damage the quality of our environment.

Economic effect means the economic impact on affected businesses by and the costs of compliance, if any, with a rule for businesses, including but not limited to the costs of equipment, supplies, labor and administration.

## **Pollution and Economy:**

“Pollution harm economy”, this is the real and very important fact in this century. The economic damage varies on the type of pollutions. Each pollution leaves its’ effects in a different way on the economy of any nation.

Marine ecosystem is a very important sourced for economic growth and also a source for food. The plastic waste coverup the surface area of the seas, and as a result the ecosystem of the seas are destroy. The living organisms are losing its’ identity. In some countries fish are the main food (like: India, Bangladesh), so absence of this fishes also harms the economy of the fisher.

Plastics pollutions are also harming the agricultural development, the economic growth. The power of fertilization of soil destroys by the plastic waste. To remake the soli fertile the farmers, have to pay more which sometime means a lot to them to afford.

Air pollutions are also as harmful. It polluted the atmosphere and the breathing prob are arise. Not only the breathing problem the ozone hole are increase more and the UV rays are coming more than previous percentage. A different kind of disease took place. The sea levels are changed the snowfields are melting. Due to extreme heat forest fire took place.

The continuous mixing of the industrial chemical waste, the poisonous oil in the water, water pollution took place. It harms the water ecosystem and make it imbalance, with also leave a very negative effect of drinking water.

## **The Marine Economic Disaster:**

The word disaster means a lot in itself for the whole generation, this word holds not only the economic or natural section but also the mental disaster.

Marine pollution is a combination of chemicals and trash, most of which comes from land sources and is washed or blown into the ocean. This pollution results in damage to the environment, to the health of all organisms, and to economic structures worldwide.

Water pollution, the release of substances into subsurface groundwater or into lakes, streams, rivers, estuaries, and oceans to the point where the substances interfere with beneficial use of the water or with the natural functioning of ecosystems. In addition to the release of substances, such as chemicals, trash, or microorganisms, water pollution may also include the release of energy, in the form of radioactivity or heat, into bodies of water.

So, it can be clearly said that the daily life wastes are deposited in the water bodies. Water pollution was responsible for 1.4 million deaths and lead pollution caused 900,000 premature deaths.

## Effects on Marine Life:



**Ingestion and Entanglement:** Over 2,150 marine species have been found to encounter plastic pollution through ingestion, entanglement in debris (especially "ghost fishing" gear), or smothering. This results in the death of approximately 100 million marine animals annually from plastic waste alone.

**Habitat Destruction:** Plastic debris increases the likelihood of disease in coral reefs by 89% and causes physical damage to critical habitats like mangrove forests and seagrass beds.

**Food Web Contamination:** Toxic chemicals (like PCBs, DDT, and heavy metals) adhere to plastics and accumulate up the food chain, causing organ damage, reproductive issues, and growth suppression in marine life.

**Dead Zones:** Nutrient runoff (eutrophication) from agriculture and untreated sewage causes harmful algal blooms that deplete oxygen, creating vast "dead zones" where most marine life cannot survive.

## Causes Of Economic Threat:

Economic threat because a huge number of people's life are economically based on water. Fishing is one of them, collecting ocean products, like; coral, fish, under water materials etc. The ocean spices are also equally important for the medical science; the cod liver oil for healthy skin, the treatment of cancer: cytarabine (Cytosar), trabectedin (Yondelis), eribulin mesylate (Halaven) and the conjugated antibody brentuximab vedotin (Acentris), The Ghol fish is known for its medicinal value and pharmaceutical companies are known to use the fish to make dissolvable stitches. But through the pollution the living organisms are in danger, they are fighting for their existence. The people who use



fish for their meal are also suffering and the fisher are also face the lack of production problems. The economic market are very high, for this the lower middleclass people are losing their body strength, decrease the pristine value.

## Effects on Human Health and Economy:

**Contaminated Food Supply:** Microplastics and associated toxins are found in most fish caught for human consumption, leading to potential health risks such as cancer, nervous system damage, and hormonal disruption in humans who eat contaminated seafood.

**Economic Losses:** Marine pollution harms industries such as tourism, fisheries, and shipping. Contaminated beaches deter visitors, while reduced fish stocks lead to job losses and significant financial burdens on coastal communities.

**Climate Change Feedback:** Plastic production contributes greenhouse gases, while ocean pollution disrupts marine ecosystems' ability to sequester carbon and produce oxygen, potentially accelerating climate change.

## **POLICIES FOR FIGHTING AGAINST THE MARINE POLLUTION:**

Fighting marine pollution involves reducing plastic/chemical use, proper waste disposal, supporting sustainable practices, and advocating for policy changes, focusing heavily on stopping land-based pollution through individual actions like using reusables and participating in cleanups, plus systemic improvements in waste management and industrial regulation.

### **Individual Actions (Reduce & Reuse):**

**Ditch Single-Use Plastics:** Say no to straws, bags, bottles, and utensils; use reusable alternatives (metal, glass, silicone).

**Proper Waste Management:** Recycle correctly and dispose of all trash, especially plastics, so it doesn't reach waterways.

**Eco-Friendly Products:** Use non-toxic, biodegradable cleaning supplies and avoid products with microbeads (found in some face washes).

**Sustainable Choices:** Support sustainable seafood, reduce fuel consumption (walk, bike, public transit), and use organic lawn fertilizers sparingly.

**Participate:** Join beach cleanups and organize neighborhood cleanups to remove existing pollution.

### **Community & Systemic Solutions:**

**Improve Infrastructure:** Advocate for better wastewater treatment and waste management systems.

**Stricter Regulations:** Support laws for industries to limit chemical/heavy metal discharge and enforce oil spill prevention.

**Education & Awareness:** Educate others about the impact of pollution and responsible behavior.

**Support Policy:** Back legislation and organizations focused on marine conservation and pollution control.

### **Conclusion:**

Ocean pollution has multiple negative impacts on marine ecosystems, and these impacts are exacerbated by global climate change. Petroleum-based pollutants reduce photosynthesis in marine microorganisms that generate oxygen. Human activities have proven to affect the marine ecosystem and care must be taken to prevent the degradation of marine life. We all can start off by first cleaning the ocean water and taking measures to prevent ocean pollution. As ocean pollution has caused in serious deformity of various marine organisms, and since we depend upon the resources from the ocean, we are obliged to make the ocean pollution free. Additionally, fishing practices such as dynamite fishing or cyanide poisoning should be banned and alternative solutions must be provided to the fishermen who depend upon fishing for life. Awareness must be raised regarding the effects of such fishing practices among the people as well as rules and regulation ought to be made and enforced upon people to use correct form of fishing. The only way we can prevent global warming is by making use of renewable resources, educating people, and saving energy. By preventing global warming, we are preventing the increase in sea levels and potential extinction of marine species.

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