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**EXIGENCY FOR THE CONVENTION TO CURB THE MENACE OF GREAT
PATCH**

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ABSTRACT

The Northern Pacific Ocean has the long and wide Great Pacific Garbage Patch. For the sake of both human and marine health, it must be cleaned as quickly as feasible. Extreme loss will occur in our society if the expansion continues to grow. All actions will adhere to the sustainable development principle. Natural resources are vitally important for both the present and the next generations. Therefore, a new convention should be developed in compliance with the regulations of each state to clean up the patch and stop it from forming. As of now, only research into this patch is being conducted; no specific rules have been developed to address how to remove or prevent patches. Our society will be healthier and more successful in the years to come once the patch has been cleared.

KEYWORDS: *Marine pollution, Marine Debris, Marine Health, Garbage Patch, London Convention.*

1. INTRODUCTION

Marine environment pollution is considered to be a serious issue that our Blue Sphere is facing today. Marine pollution is of various types and that included oil pollution, plastic pollution etc., In plastic pollution A group of marine garbage in the North Pacific Ocean is known as the Great Pacific Garbage Patch. It is an emerging issue that should be prevent and control asap. Great Pacific Garbage Patch is an increasing hazard to the Marine Environment; it enlarges day by day. Major effects caused because of the patch and the debris in it. Countless number of wastes which are in various substances were found by the researchers. Because of the wastes several living species in the ocean were died by the entanglement of the plastic debris in the digestive system of the marine species like sea birds and the animals etc.,

Due to the number of death rates of the marine species in the north Pacific Ocean, the garbage patch has been found by the researchers.

2. GREAT PACIFIC GARBAGE PATCH:

Generally, patch means a part of something marked out from the rest by a particular characteristic. The Great Pacific Garbage Patch is a group of marine debris in the North Pacific Ocean. The litter which is ended up in the seas and the waterbodies were swirl into the Ocean and forms a marine debris. Those litter comprises of rubber tyres, slippers, plastic containers, water bottles, food containers etc., This patch is an expansive and increasing one which grows day by day in the mid ocean. The debris which founded there in the patch are marked by Russian, Korean, Indian and Chinese writing.

2.1 LOCATION:

In our world's waters, there are five gyres. There are two in the Atlantic, two in the Pacific, and one in the Indian Ocean. Every gyre in the ocean has a different garbage patch. However, the trash patch in the Pacific Ocean gyre appears to be a vast area. Gyres are large, spinning water vortexes that emerge in the open ocean as a result of the interaction of water currents and wind. Gyres redistribute heat and nutrients within the ocean. The north pacific Subtropical gyre extends over 10 million square miles, in that area the earth's rotation slows the ocean currents and the currents moves the debris in the ocean, then this results in the two enormous masses of trash.

One is located east of Japan and west of Hawaii and is referred to as the Western Garbage Patch. The Eastern Garbage Patch, the second mass, is situated between Hawaii and California, close to the northwest Hawaiian Islands. The Great Pacific Garbage Patch is the name given to these two heaps. The size of the Great Patch is of the size of Texas, which is one of the countries in United States. It contains about 100 million tons of Garbage and to the depth of 100 feet not so tightly packed but bobbing up and down below the surface. These debris which is of plastic is not bio degradable is very much hard to get decompose in the ocean water. It turns into microplastics, which harms number of micro-organisms and the living species in the marine environment. Every organism in the oceans will intake the microplastics as their food and results in the severe harmness. As of now, it is very much hard to clear the patch by any means of mode. Because the patch is getting increased from various sources throughout the world.

2.2 ORIGIN:

The origin of the Great Patch is due to the debris whichever thrown in the land masses

and the which is thrown out of the vessel and the ships travelled in the ocean. The sorry state is 4/5th of the debris is from the land mass, whereas 1/5th of the debris from vessels and ship. The debris whichever ended in the shores are flown through the wind and through the ocean current forms the great patch. In this case each and every country in our world is highly responsible for the crucial patch that formed in the great Pacific Ocean. Cleaning up the trash area would "bankrupt any country" that tried it, according to Charles Moore, the man who found the vortex. That is how the patch has been increased day by day and it harms the entire universe in all the ways.

2.3 IMPACT OF THE GARBAGE PATCH IN HUMAN HEALTH AND MARINE ENVIRONMENT:

The impact of the garbage patch is highly crucial both for the human health and marine environment. The term 'plastic' is a large group of versatile products which is highly used in our current world. Because of its durability, lightweight, inexpensiveness, strongness rules all over the world today. Clothing, footwear, food, medicine, packaging, transportation, architectural materials, and public health applications are just a few of their many uses. As a result, it was anticipated that the yearly global demand for plastics would exceed 300 million tons. In this case it harms all the marine and the human health.

2.4 HUMAN HEALTH:

Worldwide, maximum of the people eats fish as their primary food in day-to-day life. When the ocean is polluted by plastics then the fish eaters also consume plastics automatically. The plastics ingested are derived from petroleum which harms the humans badly. The intake of plastic contained food results in cancer, infertility etc., we are always more concerned about the sustainable development in all the environmental causes. But if the intake of

food harms the fertility, then the concern of sustainable development is useless forever in the future. Human are also get entangled in the marine debris by undergoing common activities such as boating, swimming etc.,

2.5 MARINE LIFE HEALTH:

Ingestion and digestion as well as entanglement of plastic ocean debris affects the marine health. Plastics in the patch broken into millions of micro plastics which can be filled in a bottle with number of small pieces. Those micro plastics are ingested by the sea birds, sea gulls, albatross and other organisms. Intake of plastic through food by the species has been found by the researchers by dissecting the dead birds and animals. When it is dissected, they found that the plastic debris has been entangled in the intestine of the birds. Huge number of marine animals such as seals, sea lions, whales, dolphins, sea turtles and other marine mammals are caught through the net found dead because of the marine debris. The ocean provides other wealthy natural products that are highly needed and important for global economy. Those products are from mining materials and sea food. The natural resources are contaminated to the extent with marine plastic debris; people depend on it is suffering with economy and health wise.

3. LONDON CONVENTION:

The London Convention 1972 is another name for the Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matters. One of the first international agreements to safeguard the marine environment from human activity, it went into force in 1975.

3.1 BACKDROP OF THE CONVENTION:

The convention has been in force from 1975, and it kept open for signing in London, hence it is also named as London Convention. Currently there are 87 states are parties to the convention. The convention is made to ban the intentional disposal of some hazardous substances, but it also permits the dumping of wastes under a permit process. The International Maritime Organization (IMO), in London, is the supreme authority to undergo all the administrative work which regarded with dumping of wastes under the said convention. The IMO serves as an organization to protect all of the documents pertaining to waste disposal licenses provided by signatories. The IMO is also in charge of overseeing the convention's signatories, periodic meetings, and secretariat. To further modernize and eventually replace the Convention, the London Protocol was agreed upon in 1996. There are now 53 parties to the Protocol, which came into effect on March 24, 2006.

3.2 OBJECTIVE OF THE CONVENTION:

To strengthen marine environment protection by enticing nations with shared interests in specific regions to sign suitable agreements in addition to this convention. Promoting efficient methods to reduce the sources of marine pollution and taking all necessary precautions to stop the dumping of waste and other materials into the sea are the main goals of the London Convention. This convention allows dumping of wastes in the ocean with special permits and ordinary permits. The regulation formulates the approach of black and grey list for disposal of wastes according to the hazard they present to the environment.

3.3 IMPORTANT FEATURES OF THE CONVENTION:

Before the convention every State have dumped all their wastes without any criteria in the ocean. After the convention it has been categorized for the dumping of wastes. The important features of the London Convention were, the black and grey list approach has been followed under the convention, the items whichever listed under the blacklist are prohibited for dumping in the ocean. Any objects that are on the grey list must be disposed of in the sea with a special permit from a recognized national body, under tight supervision, and according to specific requirements. Other materials which are not under black or grey list can be dumped under general permit that has been issued under proper authority.

Other important features of the convention are based on the protocol of the convention. The protocol is completely based on the Precautionary principle. It forbids exporting waste for disposal or incineration at sea as well as dumping without permission.

3.4 IMPACT OF LONDON CONVENTION ON GREAT PACIFIC GARBAGE PATCH:

The London Convention is mainly focused on categorization of dumping of wastes under various category. But there is no remedy or the sanction for the State which dumps the wastes which creates the great patch. Dumping of wastes is not only the sources of creation of great patch. But dumping of wastes is also a reason for the patch. When there is a usage of something in common benefit, it should not create any trouble or hazards to the common mankind, or the usage should be compensated by the one who degrades the natural resources. The tenets of international environmental law state as much. It discusses the precautionary principle and the polluter pay principle, which all those involved in the industry should adhere to.

The signatory parties ratified the convention in their own country. US ratified the convention through a legislation called U.S. Marine Debris Research, Prevention, and Reduction Act (MDRPRA) were combined to create a functional approach to marine debris clean up. Some other States who were the signatories of the convention were ratified in their own state. But our very own nation India is not a signatory of the convention. And it has not ratified it. Every State bears a great deal of responsibility for the formation of the Great Patch, as we already mentioned. Additionally, cleaning up the patch is the responsibility of every nation.

The convention is mainly focused on the dumping of wastes on permits but the convention has not spoken about the cleaning of the patch. The convention came into enforcement from the year 1972 but the patch is discovered on 1994, though the creation of the patch is later than the convention it has not been amended yet for the control of the patch.

4. CONCLUSION:

The Great Pacific Garbage Patch is an extending and expansive patch in the northern Pacific Ocean. It needs to be clean as soon as possible for the benefit of human health and the marine health. If the expansion increases further there will be extreme loss in our society. The principle of sustainable development will be followed in all the ways. For the future generation and for the present generation the natural resources are very much important.

So, new convention should be framed under the guidelines of every state for the cleaning of the patch and to prevent the formation. So far there only the research study is only progressing regarding this patch but no regulation was particularly formulated for the cleaning or preventing the patches. When the patch has been

cleaned, our society will be healthier and more prosperous in forthcoming years.

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