



THE DISREGARDED DILEMMA OF OCEAN DUMPING

By Akanksha Sharma
From School of Law, UPES

Abstract

The ocean is a compound and interwoven ecosystem with each biotic and abiotic part influencing every other component directly or indirectly. However, it has become a tin for significant quantity of waste produced on land. Among all types of activities that adulterate the ocean and impedes the marine health and ecosystem, garbage debris and other waste material dumping, tops the list. Dumping includes accumulation of all types of waste materials from factories and industries, sewerage waste materials, tankers and ships into the water bodies. This paper will define ocean dumping by also covering its current status national as well as internationally. The Author will try to understand the laws on ocean dumping and how it has evolved in the modern times with variant approaches of climate crisis in our lives.

Where it constitutes as a major cause for water pollution and contamination, some of the substances emitted by the industrial and sewage wastes contain matters like mercury, cryolite and Dichloro Diphenyl Trichloroethane (DDT) also threatens the lives of aquatic animals. Even minute amounts of substances like radioactive materials from these wastes tend to have an offset effect on not just the ocean, but the environment at large. Through this paper the author will attempt to scrutinize, analyze and

review the causes and effects of ocean dumping in India.

The scale and the magnitude of the ocean dumping are not just so extensive but are so immense, that our entire civilisation could be wiped out with the intensity of careless dumping. The paper will delve into the approaches to curb this problem firstly, on international basis, secondly, on national basis and finally, on Local grounds. The author has also proposed plausible solutions for this problem to belittle its consequences.

Key Words: Ocean, Ocean Dumping, Water Pollution, Climate, waste dumping

1. INTRODUCTION

"The ocean is our resource; It is not our garbage depot.

It is our life-sustaining reservoir.

If man alters it useless once, We may then return back to

Abiotic, God-less world."

We all know the established fact that more than two-third of the Earth is covered with water. Now imagine that much area being covered by plastic, sludge and other solid wastes. Such an indispensable and crucial part of our existence is on peaky threat and the major reason behind it, is human intervention and the continuous exploitation of the water resources. Topping the causes of such threat is the act of Ocean Dumping.

As defined by the Organisation for Economic Co-operation and Development(OCED), Ocean Dumping is defined as *"the deliberate disposal of hazardous wastes at sea from vessels, aircraft, platforms or other human—*

¹ 12 P. KILHO PARK & THOMAS P. O'CONNOR, OCEAN DUMPING OF INDUSTRIAL WASTES 3 (Kester D.R., Park P.K. ed., Springer, Boston 1981).



made structures. It includes ocean incineration and disposal into the seabed and sub-seabed".² The increase in the level of contamination of not just the surface of water bodies but also the beds and other ecological organisms living under water are therefore creating an imbalance in entire ecosystem. Ocean Dumping of wastes, chemical or biological, organic or inorganic degrades the habitation of a number of aquatic species and affects their well being adversely.

Oil spillage, plastic waste disposal, mercury wastes and pesticides are some of the common examples of wastes that are dumped in the water bodies. The worst of all is issue of plastic debris. A report indicated an accumulation of nearly 414 million plastic bits in the India Ocean and even remote islands are not excused from this debris.³ Another important factor for increasing cases of water pollution is oil spillage. Ships or vessels from different ports take the waste oil from heavy industries and construction sites to dispose it off at the sea. It also includes waste oil spill from ships that are already in the sea. These industrial and sewage dumps like DDT and other chemicals have huge negative impact on the sea water.⁴ Apart from the huge loss to marine ecosystem that Ocean Dumping causes, one of its very ill effects is eutrophication. Eutrophication,

also known as the growth of the algae in the water bodies, is basically due to excessive nitrogen and minerals which might also result in decreasing the level of oxygen in water. This leads to toxicity in fishes and other living creatures and thus, rises higher up in food chain creating an imbalance to the entire ecosystem.

Another important contributor to the hazards of Ocean Dumping is the unstoppable port activities that persist by the cargo. The slag, coal and sometimes, limestones are removed as wastes from the cargo by sweeping from the ships. After they leave the port, these wastes are, without a thought, dumped into the water.⁵ Similar is the case with the metal ore, which when the mining get done is removed and discharged into the nearby water body.⁶

As wastes gets blended with the sea water, a number of chemical processes takes place including acid-base neutralization, dissolution or precipitation of waste solids, particle adsorption and desorption, volatilization at the sea surface which ultimately results in changing of the oxidation state and the one that settles at the seabed encounter distinct geochemical and biological activities.⁷ Hence, it all results in

² *Ocean Dumping*, GLOSSARY OF STATISTICAL TERMS (March 7, 2020), <https://stats.oecd.org/glossary/detail.asp?ID=1882>.

³ PTI, *414 million plastic pieces found on Indian Ocean islands: Study*, THE ECONOMIC TIMES (March 7, 2020), <https://economictimes.indiatimes.com/news/environment/pollution/414-million-plastic-pieces-found-on-indian-ocean-islands-study/articleshow/69370183.cms?from=mdr>.

⁴ Shamseer Mambra, *Ocean Pollution: 6 Things That Make It Worse*, MARINE INSIGHT (March 8, 2020),

<https://www.marineinsight.com/environment/causes-and-effects-of-ocean-dumping/>.

⁵ Rinkesh, *Causes, Effects and Solutions of Ocean Dumping*, CONSERVE ENERGY FUTURE (March 16, 2020), <https://www.conserve-energy-future.com/causes-effects-solutions-ocean-dumping.php>.

⁶ *Id.*

⁷ Robert M. Engler, *Ocean Dumping*, ENCYCLOPEDIA.COM (March 16, 2020), <https://www.encyclopedia.com/earth-and->



creating an imbalance in the marine ecosystem.

In India, the major wastes that get disposed into the water body is agricultural wastes and it is very unfortunate that water bodies have become a dumping base for our human civilisation.⁸ The chemicals and other non biodegradable substances from farms deposit into the water and increases the probabilities of fatal marine health. Rivers in our country are prayed as holy deities and are the main source of human fulfilment in every way but human activities, industrial discharges, toxic effluents and other pesticides are increasing with the same pace as the population of our country.

Disposal of waste pollution is indeed a problem in India, just like any other country on the globe. As much as the government is trying their level best to work out a land-fill method, it is getting difficult because of decreasing availabilities and uptake land rates. Beaches on the shore of the ocean have strikingly become a major reason for Marine litter as well. With increasing number of tourists per year on the beaches of different shores around the country, the increasing cases of litter are on its peak too.

After being treated as an 'out of sight, out of mind' matter, the government have finally started to work towards the awareness of threat that has been posed to the water bodies of this country. The estuaries, beaches and continental shelf are on its prime target and several measures have been taken to protect its marine environment⁹.

environment/geology-and-oceanography/geology-and-oceanography/ocean-dumping.

⁸ Marci L. Bortman, *Id.*

There has been a number of public institutionalised action plans dealing with the problem of marine litter like the National River Conservation Plan, National Marine Litter Policy and other initiatives signed by government. Keeping at par is various private institutions fighting ocean dumping in its own way. Keeping in mind this positive note, the author has tried to deal with changing trends of laws internationally and in India and has drawn a theoretical difference between laws of other countries and that of India.

2. INTERNATIONAL CONVENTIONS AND BODIES

CONVENTION ON INTERNATIONAL MARITIME ORGANISATION, 1948:

The 1948-Convention on International Maritime Organisation adopted in Geneva, Switzerland embarks the history of International Conventions on Maritime Environment Protection. Article 37 of the Convention calls for all the members of the Convention to assemble forming, 'The Marine Environment Protection Committee'. Article 38 is concerned with restraining and supervision of the pollution caused by the ships. It provides for accession of scientific, technical or any other empirical knowledge for such prevention of pollution. Through Article 39, the Committee is required to submit proposals, recommendations, guidelines and finally a report of states under the organisation working towards the same. The convention came into force in next 10 years of its adoption. Further, one of its amendments¹⁰ talked about how oil spill is

⁹ R. A. Malviya, *Marine Pollution Control: An Appraisal*, COCHIN UNIVERSITY LAW REVIEW, 244, 227-245 (1984).

¹⁰ *Convention on International Maritime Organisation*, IMO (March 20, 2020),



one of the major causes of marine pollution and techniques to deal with it.

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF THE SEA BY OIL(OILPOL), 1954:

OILPOL, 1954 was a Treaty signed in London with its main objective as to regulate the water pollution caused by the ships via oil spills. It ceases and imposes penalty for oil or any other oil mixture spillage done by ships or cargo into just the prohibited zones or territorial waters but the entire maritime¹¹. Other than the oil-hinged pollution, the Convention takes into account the supervision of hazardous substances into the water bodies and accounts for parties to work towards the same.

1ST UNITED NATION CONFERENCE ON THE HIGH SEA, 1958:

Held at Geneva in 1958, the Convention on the High Sea mainly dealt with the territorial waters. It takes into account proper measures to steer the water pollution. It further concurred to consider prevention of water pollution by dumping radioactive materials¹² and other harmful agents outside the water bodies¹³. Though excluding the coastal state organisms, the conference through including Article 24 did talk about the resources attached directly to the bed of the sea while

taking into account the prevention of contamination of water bodies.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION, 1960:

Introducing the concept of Sustainable Development in the “ocean and the coasts”, the Established in 1960 by the UNESCO, IOC came out to be the only competent consortium for marine science within the UN body. Intergovernmental Oceanographic Commission focussed on climate change by talking about healthy ecosystems of the Ocean¹⁴. Some major works of IOC includes conducting conferences and reviews on how to prevent and mitigate the after-effects of environmental hazards.

UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT(STOCKHOLM CONFERENCE), 1972:

Safeguarding the environment was final declaration of the Stockholm Conference¹⁵. Amongst the 26 principles of the Conference for the protection of the Environment, prevention of Oceanic Pollution was one¹⁶. It makes it mandatory for the states to take all possible initiatives for stopping harm to marine life and resources done by polluting the sea.

<http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-on-the-International-Maritime-Organization.aspx>.

¹¹ ELIZABETH A. WILMAN, EXTERNAL COSTS OF COASTAL BEACH POLLUTION: AN HEDONIC APPROACH 72 (Routledge 2015).

¹² Convention on the High Sea, Art 25.

¹³ Arthur H. Dean, *The Geneva Conference on the Law of the Sea: What was Accomplished*, 52 CAMBRIDGE UNIVERSITY PRESS 607, 616 (1958).

¹⁴ Kamil A. Bekiashev & Vitali V. Serebriakov, *Intergovernmental Oceanographic Commission (IOC)*, SPRINGER LINK (March 20, 2020), https://link.springer.com/chapter/10.1007%2F978-94-009-8261-1_32.

¹⁵ Philippe Boudes, *United Nations Conference on the Human Environment*, ENCYCLOPAEDIA BRITANNICA (March 20, 2020), <https://www.britannica.com/topic/United-Nations-Conference-on-the-Human-Environment>.

¹⁶ United Nations Conference on the Human Environment, Principle 7.



CONVENTION ON PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTERS, 1972:

Also known as the London Convention, 1972, it was the first official convention made specifically for tackling the problem of dumping of wastes into the water bodies. The London Convention had an objective to promote prevention of ocean dumping, however, did not include discharges from land-based sources of pollution¹⁷. It follows the approach of segregating the states under grey and black list in order to regulate ocean dumping by them. The items under blacklist are prohibited from dumping and the ones under grey list is required to seek special permission under special circumstances by a designated authority¹⁸.

LONDON PROTOCOL, 1972:

Adopted as a protocol to Convention on Prevention of Marine Pollution by Dumping Wastes and other matters, London Protocol note only modernized but ultimately, replaced the London Convention in 1996. Coming into force in 2006, unlike London Convention, it prohibits all dumping of wastes except the ones mentioned under 'reverse list'¹⁹. It added a transitional period of 5 years for allowing developing countries becoming contracting states for its binding. Further, taking a step forward, London Protocol added new approaches of 'Polluter Pay Principle'

and 'Precautionary Principle' to address the problems of Ocean Dumping²⁰. Although, London Convention was the first ever International Convention to deal with the problem of Ocean Dumping, London Protocol has succeeded in solving the issue at hand more effectively.

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL), 1973:

Adopted by IMO in 1973, MARPOL is a combination of convention held in 1973 and a protocol implementing its recommendations in the year 1978²¹. It basically deal with the maritime pollution caused by ships into the oceans and the seas and targets cutting back of accidental discharge of harmful substances by them.

CONFERENCES ON THE LAW OF THE SEA, 1973-1982:

The conferences on the Law of the Sea had a wider ambit including sea bed and floor of the ocean regime, divergent jurisdiction of exclusive economic zone, territorial water and the continental shelf. The third conference, however, had to deal just with the preservation of marine life. United Nations Convention on the Law of the Sea (UNCLOS) turned out to be an end-product of the 3rd conference on the Law of the Sea,

¹⁷Keyuan Zou & Lei Zhang, *Implementing the London Dumping Convention in East Asia*, RESEARCH GATE (March 21, 2020), https://www.researchgate.net/publication/321764810_Implementing_the_London_Dumping_Convention_in_East_Asia.

¹⁸ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, IMO (March 21, 2020), <http://www.imo.org/en/OurWork/Environment/LCLP/Pages/default.aspx>.

¹⁹ *Id.*

²⁰ Gi HoonHong & Young JooLee, *Transitional measures to combine two global ocean dumping treaties into a single treaty*, 55 MARINE POLICY 47, 47-49 (2015).

²¹ *The International Convention for the Prevention of Pollution from Ships (MARPOL)*, DEPT OF INFRASTRUCTURE, GOVT. OF AUSTRALIA (March 21, 2020)

<https://www.infrastructure.gov.au/maritime/environment/MARPOL.aspx>.



adopted by the United Nations in 1982²². Amongst other laws working towards the impeding of degrading marine health, cleaning and forestalling water pollution came out to be the final consideration of the Convention.²³

THE MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC), 1974:

Implementing the Precautionary Principle in the Maritime Law, MEPC is a subsidiary of International Maritime Organisation²⁴. The Committee basically inscribes marine environment protection under IMO's umbrella.

REGIONAL SEAS PROGRAMME, 1974:

An aftermath of the Stockholm Conference (UNEP), Regional Seas Programme has been a milestone for sound environmental management. This programme works with Global targets, Action Plans and Regional Activity Centres for its functioning. The contracting parties are legally bound by a convention²⁵ and other conventions of UNEP.

THE GLOBAL PROGRAMME OF ACTION FOR THE PROTECTION OF MARINE ENVIRONMENT FROM LAND-BASED ACTIVITIES (GPA), 1995:

Adopted by 108 governments since its inception, GPA mails deals with the impact of land-based activities like sewage, persistent organic pollutants, radioactive substances, heavy metals, oils (hydrocarbons), nutrients, sediment mobilization, litter, and physical alteration and destruction of habitat on the aquatic environment²⁶. Not just governments, the programme inspires the private ventures, NGOs, and various environmental committees to come forward and work towards this common goal.

UN'S CLEAN SEAS CAMPAIGN, 2017:

An initiative launched by the International Maritime Organisation (IMO) and covered under the UNEP, Clean Seas Campaign is a tool to reduce and finally, ban the major cause of marine litter i.e. plastics. It encourages not just the government, but also private sectors and general public to come together and fight against this issue. By giving a consortium for developing creative ideas and new innovations, this initiative brings a wholesome community of activists and leaders to share experience and build effective system for tackling the problem.²⁷ Implementing the trending #CleanSeas on the Social Media platforms, the campaign has been a success all over the globe.

²² Katelyn Young, United Nations Convention on the Law of the Sea (UNCLOS III), Environment and Society Portal (March 22, 2020), <http://www.environmentandsociety.org/tools/keywords/united-nations-convention-law-sea-unclos-iii>.

²³ Milenko Milic, *Third United Nations Conference on the Law of the Sea*, 9 CASE WESTERN RESERVE JOURNAL OF INTERNATIONAL LAW 168, 183 (1976).

²⁴ C. ODIDI OKIDI, REGIONAL CONTROL OF OCEAN POLLUTION: LEGAL AND INSTITUTIONAL PROBLEMS AND PROSPECTS 42 (Brill Archive 1978).

²⁵ UNEP Regional Seas Programme, BIODIVERSITY A-Z (March 22, 2020), <https://www.biodiversitya-z.org/content/unep-regional-seas-programme>.

²⁶ *Governing the Global Programme of Action*, UNO (March 22, 2020), <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/governing-global-programme>.

²⁷ *One year after the launch of #CleanSeas, the tide is turning*, UNO (March 22, 2020), <https://www.unenvironment.org/news-and-stories/story/one-year-after-launch-cleanseas-tide-turning>.



Laws of Ocean Dumping in India

The first legislation that talked about water polluting laws can be traced back to **The Water (Prevention and Control of Pollution) Act, 1974** which aims to keep a check on Water Pollution by creating Pollution Control Boards, both at National²⁸ as well as State levels²⁹. Keeping at par with the Public Trust Doctrine, the Act imposes penalties and imprisonment for people not abiding by its laws³⁰. **The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976** make specific laws for protecting the territorial waters³¹, continental shelf³² and EEZs³³ from getting polluting. In order to protect the marine environment, the act provides for jurisdiction to the Government to take any necessary action to control the contamination³⁴. **The Coast Guard Act, 1978** is the only act which caters to constituting an official armed force of the Union³⁵, one of whose duties is to take actions for the protection of maritime environment³⁶. Framing punishments in relation to the Water (Prevention and Control of Pollution) Act, 1974, **The Water (Prevention and Control of Pollution) Cess Rules, 1978** was implemented. Not later in time, India ratified the **United Nations Convention on the Law of the Sea (UNCLOS), 1982** as soon as it was adopted.

It not only created obligation on the state to protect the marine ecosystem, but also its related resources. Amendments made in the year **1983** in **The Merchant Shipping Act, 1958** enforced the polluter pay principle by providing for civil liability incumbent against the contamination of not just coastal areas, but also the territorial waters and its adjacent areas by oil³⁷. It also included the preventive principle by incorporating mandatory law for issuance of Pollution Prevention Certificate from the Central Government.³⁸ **The Environment Protection Act, 1986** was enforced as the agglomeration for saving environment of all life kind. Amongst the laws incorporated to safeguard the nature, the act provides for constituting bodies, analysing reports and taking preventive measures by the Government for the same. In the year **1993**, the committee of secretaries approved the **National oil spill Disaster contingency plan (NOS-DCP)** specifically for combating oil pollution into the water bodies.³⁹ Implemented by the Earth System Science Organisation (ESSO), **Indian National Centre for Ocean Information Services (INCOIS), 1999** is an autonomous body of Government of India whose one of the main objectives is to sustain ocean life and encourage other private and government

²⁸ Water (Prevention and Control of Pollution) Act, Act No. 6 of 1974, §3.

²⁹ *Id.*, §4.

³⁰ *Id.*, §41, 42, 43, 44.

³¹ The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, Act no. 80 of 1976, §4.

³² *Id.*, §6.

³³ *Id.*, §7.

³⁴ *Id.*, §15.

³⁵ The Coast Guard Act, Act No. 30 of 1978, §4.

³⁶ *Id.*, §15.

³⁷ The Merchant Shipping Act, Act No. 44 of 1958, INDIA CODE, §352G.

³⁸ *Id.*, §356C.

³⁹ *Salient features of the National Oil Spill Disaster Contingency Plan*, IAS PLANNER (March 16, 2020), <http://www.iasplanner.com/civilservices/ias-main/gs-model-answer-salient-features-of-the-national-oil-spill-disaster-contingency-plan>.



bodies towards this objectivity⁴⁰. Under the **17th Law Commission, 2003**, the proposal of constituting environment courts were put forward under 186th report by Law Commission of India, which would indeed be a new beginning for laws to deal with ocean dumping too.⁴¹ The rules in regard to water pollution under The Merchant Shipping Act, 1958 was introduced, these were:

- Merchant Shipping (control of Pollution by Noxious Liquid Substance in Bulk) Rules, 2010⁴²
- Merchant Shipping (Prevention of Pollution by Harmful Substances carried by Sea in Packaged Form) Rules, 2010⁴³
- Merchant Shipping (Prevention of Pollution by Sewage from ships) Rules, 2010⁴⁴
- Merchant Shipping (Prevention of Pollution by Garbage from Ships) Rules, 2010⁴⁵
- Merchant Shipping (Prevention of Pollution by Oil from Ships) Rules, 2010⁴⁶

These rules impacted the culture of dump by ships in the best effective manner. A major revolution brought up in the history of environment protection laws was the constitution of **National Green**

Tribunal(NGT) in 2010. NGT, as its function, handled cases of water dump in the most effective and prompt manner.

In the case *Abhay Dahiya & Others v State of Haryana*⁴⁷, NGT ordered dumping of solid waste and discharge of untreated water as an act of water pollution and requested necessary action to be taken against it by the authorities in charge.

In *Naresh Kumar Parmar v Union of India & Others*⁴⁸, The NGT ordered the authorities in charge to submit reports for dumping of mining overburden in Banas Kantha, Gujrat.

In 2017, NGT had put an absolute ban on dumping and burning of solid wastes on the flood plains of river Ravi as it was the paramount source of serious water pollution and adverse bad health of people living near its bed.⁴⁹

Facilitating corporation and mutual assistance of the South Asean countries, India braced the **South Asia Cooperative Environment Programme (SACEP)** for protecting and preserving the aquatic

⁴⁰Major Objectives of INCOIS, ESSO-INCOIS (March 16, 2020), https://incois.gov.in/portal/rti2005_1.

⁴¹One Hundred Eighty Sixth(186th) Report on Proposal To Constitute Environment Courts, LAW COMMISSION OF INDIA (March 18, 2020), <http://lawcommissionofindia.nic.in/reports/186th%20report.pdf>.

⁴²Merchant Shipping (control of Pollution by Noxious Liquid Substance in Bulk) Rules, 2010.

⁴³Merchant Shipping (Prevention of Pollution by Harmful Substances carried by Sea in Packaged Form) Rules, 2010.

⁴⁴Merchant Shipping (Prevention of Pollution by Sewage from ships) Rules, 2010.

⁴⁵Merchant Shipping (Prevention of Pollution by Garbage from Ships) Rules, 2010.

⁴⁶Merchant Shipping (Prevention of Pollution by Oil from Ships) Rules, 2010.

⁴⁷Abhay Dahiya & Others v. State of Haryana, 2019 SCC OnLine NGT 373.

⁴⁸Order of the National Green Tribunal regarding mining in Ambaji, Banas Kantha district, Gujarat, 25/07/2019, INDIA ENVIRONMENTAL PORTAL (March 17, 2020), <http://www.indiaenvironmentportal.org.in/content/465264/order-of-the-national-green-tribunal-regarding-mining-in-ambaji-banas-kantha-district-gujarat-25072019/>.

⁴⁹National Green Tribunal Bans Waste Disposal, Burning Plastics On River Ravi Plains, NDTV INDIA (March 18, 2020), <https://swachhindia.ndtv.com/national-green-tribunal-bans-waste-disposal-burning-plastics-river-ravi-plains-9104/>.



environment in March 2018.⁵⁰ Only after sometime, Prime Minister Narendra Modi announced **Shared Vision of India-Indonesia Maritime Cooperation in the Indo-Pacific, 2018** considering the issues of Marine Environment safeguarding the well being of oceans and seas.⁵¹ It also talked about the plastic litter on Bay of Bengal.⁵² Under the UN's Clean Seas Campaign, India launched a **National Marine Litter Policy in 2018** to monitor plastic waste sliding into the ocean. The Prime Minister, Mr Narendra Modi and the Minister of Environment, Forest and Climate Change, Dr Harsh Vardhan claims it to be the first step towards making 'Dream India' as the cleaner state.⁵³

India has been working determinedly in order to curb the problem of ocean dumping and some of its very important strategies involve collaborations made with the developed countries like Germany and Norway in 2019. "*Cleaner Air, Greener Economy: Capacities and Technologies for Implementing NDCs⁵⁴ and SDGs⁵⁵*" is the title given to the

collaboration made under **3rd Indo-German Environment Forum**. The Indian Minister of Environment, Forest and Climate Change has announced marine litter as one of its major focus. The **India-Norway Ocean Dialogue** has decided to work closely on oceans maintenance, thus introduced the concept of 'Blue Economy'. It will comprise of the statistics and analysis on Indian Ocean region's maritime economic activities and will work for its sustainability with not just government, but also, private corporations.⁵⁶

Challenges to Counter Ocean Dumping in India

1. **ownsides of The Water (Prevention and Control of Pollution) Act, 1974:**

Water (Prevention and Control of Pollution) Act, 1974 is one of the most crucial acts when it comes to preservation of pollution of marine resources and thus, holds the maximum burden of countering the problem of Ocean Dumping. The effectiveness of the

⁵⁰Cabinet approves MoU between India and South Asia Cooperative Environment Programme for Co-operation on the response to Oil and Chemical Pollution in the South Asian Seas Region, PRESS INFORMATION BUREAU, GOVT. OF INDIA, (March 18, 2020), <https://pib.gov.in/newsite/PrintRelease.aspx?relid=178177>.

⁵¹*Shared Vision of India-Indonesia Maritime Cooperation in the Indo-Pacific*, Press Information Bureau, GOVT. OF INDIA, (March 18, 2020), <https://pib.gov.in/newsite/PrintRelease.aspx?relid=179630>.

⁵² Vijay Sakhuja, *Marine Debris Worry Indian and Indonesian Leaders*, VIF (March 18, 2020), <https://www.vifindia.org/2018/august/02/marine-debris-worry-indian-and-indonesian-leader>.

⁵³Karanveer Singh, *National Marine Litter Policy: Government Begins Work On An Action Plan To Check Plastic Waste Flowing Into Oceans*, NDTV

INDIA (March 18, 2020), <https://swachhindia.ndtv.com/national-marine-litter-policy-government-begins-work-action-plan-check-plastic-waste-flowing-oceans-21330/>.

⁵⁴ Nationally Determined Contributions (NDCs) is a term used under the United Nations Framework Convention on Climate Change (UNFCCC) for reductions in greenhouse gas emissions.

⁵⁵ Sustainable Development Goals (SDGs) were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

⁵⁶ Aishwarya Upadhyay, *#BeatPlasticPollution: India Paves The Way To Combat Marine Pollution With Latest Partnerships*, SWACHH INDIA NDTV (March 18, 2020), <https://swachhindia.ndtv.com/india-combats-marine-pollution-new-partnerships-norway-germany-31252/>.



Act is subjected to the penalties and punishments imposed by the act. The Act, however, provides liability only in cases where there is a subsisting knowledge on the part of the polluter and not if his act is negligent. It also hampers the rationale behind not only the 'Polluter Pay Principle' which enforces an absolute liability of the polluter to pay, compensate and enhance for the pollution caused by him in any direct or indirect way, but also the 'Precautionary Principle' which provides a strict liability against the polluter who cannot comply to a basic 'Duty to Care' as a preventive approach. In the Span Motel case⁵⁷, the court declared that,

*"one who pollutes the environment must pay to reverse the damage caused by its acts".*⁵⁸

Further, the penalties or punishment charged by the Act is so low that the offenders choose pay them and continue their acts instead of taking any precautionary course of action towards restoring the environment.⁵⁹

2. Downsides of The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976:

The Act provides "*exclusive jurisdiction to preserve and protect the marine environment and to prevent and control marine pollution*"⁶⁰ to the Union. While doing so, there is no prescribed limit as to what values or standards will the effluents and discharge

of pollutants into the territorial waters, continental shelf, EEZs or other Maritime Zones will be responsible to cause the water pollution. The Act formulates no rules towards procedure or time limit for the water purification or cleaning of such discharges before it exploits a wider area of such zones. A substantial part of territorial waters includes beaches and organised public bathing spaces. There is no specific demarcation done in order to separate the two of them and hence, no divergent rules for them. The act does not provide for any installation or maintenance of any agencies taking care of investigation or surveillance in cases of water pollution.

3. No Specific law dealing with Ocean Dumping in India:

The US legislation Ocean Dumping Ban Act, 1988 which amended the Marine Protection, Research and Sanctuaries Act (MPRSA) or the Ocean Dumping Act, 1972 is a law which regulates the concerns in relation to Ocean Dumping. It segregates the matters causing water pollution to ones that don't and makes specific laws for areas that require priority consideration.⁶¹ The Act incorporates rules for maintenance and surveillance by the US Environmental Protection Agency (EPA) in order to address the problem of Ocean Dumping.⁶²

In India, there are various zone of water bodies which makes the ambit of Ocean Dumping very wide and thus, makes it

⁵⁷ M.C. Mehta v. Kamal Nath, (1997) 1 SCC 388.

⁵⁸ Hemant More, *Polluter Pays Principle*, THE FACT FACTORY (March 25, 2020), https://thefactfactory.com/facts/law/civil_law/environmental_laws/polluter-pays-principle/1503/.

⁵⁹ R. A. Malviya, *supra* note 9.

⁶⁰ The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, No. 80 of 1976, §6,7.

⁶¹ EPA History: *Ocean Dumping Ban Act of 1988*, EPA PRESS RELEASE (March 26, 2020), <https://archive.epa.gov/epa/aboutepa/epa-history-ocean-dumping-ban-act-1988.html>.

⁶² Claudia Copeland, *Ocean Dumping Act: A Summary of the Law*, CONGRESSIONAL RESEARCH SERVICE (March 27, 2020), <https://fas.org/sgp/crs/misc/RS20028.pdf>.



difficult to address the issue with a great deal of contrasting laws. With one specific law for the regulation of Ocean Dumping, covering not just water bodies, but also territorial waters, Coastal Areas, EEZs, etc, the problem could be easily tackled under the same umbrella which would then, increase the efficiency of the working.

4. Inconclusive nature of Definition:

When we say Ocean Dumping, the first thing that comes into our minds is dumping wastes into the ocean. The word, however, covers much more than just its literal interpretation. Ocean Dumping is not just about Oceans, but is considerable towards other water bodies including seas, coastal water bodies, territorial waters etc. This problem of inconclusiveness of its definition makes it difficult for the researchers and other scholars to work upon the matter and pose solutions towards the issue.

5. Government Oversight and Unchecked Water Pollution

With tonnes of plastic accumulation over the surfaces and bottoms of the water bodies which continues to spread their deterioration, the government being inactive towards the same has been a trend since forever. While the events of climate change are increasing in both frequency and intensity, the government's stance on the issue was more alarming. When the matter of unchecked water pollution comes into picture, no voice is ever represented by the House or the

government, which ultimately leads to activists knocking the doors of Judiciary.⁶³ The Judiciary has, no doubt, dealt the issue in the most effective way, but the entire process of litigation is prolonged and extensive. The current government has been a little more active when it comes to solving the problems of ocean dumping with their recent implementations⁶⁴, but the problem, when it was overlooked for a longer time, has created some major irreversible problems to the marine environment.

Conclusion and Suggestions

The boost in the number of cases of ocean dumping or marine litter is been on rise since a long time back and in order to achieve a better place to live in, mere words would not matter until actions does. There have been a lot of local approaches that are dealing with the problem of ocean dumping in their own creative, yet effective manner. A small chain of juice in Malleshwaram, Bengaluru became India's first zero-waste juice bar, committed to cutting out plastic cups, cutlery and straws and using fruit's natural shell instead.⁶⁵ This innovative idea not only works towards sustainability, but also prevents the need of water for dish washing. Further, a fisherman from Kollam, India has innovatively made an entire road by using just the plastic after pulling the waste into a net, setting the most creative precedent of recycling plastic waste.⁶⁶ Another such example is initiated by a global company UCO Gear, under the

⁶³ Environment Minister to Reply in Both Houses on Pollution Crisis on Thursday, NEWS 18 INDIA (March 20, 2020), <https://www.news18.com/news/india/parliament-live-updates-jnu-students-protest-air-pollution-sonia-gandhi-narendra-modi-congress-2392101.html>.

⁶⁴ As cited under footnoting 53 and 56.

⁶⁵ The Hindu Net Desk, Eat Raja, A zero-waste juice shop in Bengaluru, THE HINDU (March 30, 2020), <https://www.thehindu.com/news/cities/bangalore/eat-raj-a-zero-waste-juice-shop-in-bengaluru/article30821892.ece>.

⁶⁶ Maanvi Singh, How India's Fishermen Turn Ocean Plastic Into Roads, NATIONAL GEOGRAPHIC (March



guidance of Steven Reinhold who have worked upon towards a new trend on social media. It challenges people to come forward by using #trashtag and clean the litter around the beaches and other natural resources.⁶⁷ These local approaches are not just commendable, but when implemented on a larger scale can impact the ecosystem in its entirety.

Being the major cause behind the Ocean Dump and the having extremely subversive effects on the environment, plastic usage must take the edge off. With consultation to the general public, the environment officials in UK have decided to put a complete ban on plastic-usage as an urgent need to conserve and restore the environment.⁶⁸ A similar step was taken by governments in Philippines⁶⁹ and Victoria⁷⁰. A lot of other countries have already banned the single-use plastic items. In the month of November 2019, the Indian Government too has banned 8 single-use plastic items completely including plastic cutlery, plastic bags and certain Styrofoam items.⁷¹ Even though our country has a long journey to cover, but every step counts and this step by the government to work towards

the minimisation of plastic use would definitely bring a change.

US has its own special law dealing with Ocean Dumping only⁷². The water resources in and around India are very widespread and substantial at the same time, and thus, requires a distinct legislation. The persisting acts dealing with water pollution have quite a number of loopholes and very weak punishments.⁷³ To curb this problem, India, too, needs to draft laws dealing with the problems of Ocean Dumping only. A legislation that would not just stop and prevent marine litter and other water pollution, but also look over the process of maintaining and installing agencies taking care of investigation or surveillance in such cases. With such distinct legislation, the better and stricter penalties and punishments must be imposed so that people could not get away with the harm they do to the environment.

There must be a bridge between functioning of the government and functioning of other agencies, working directly or indirectly towards the similar goal. Like in Netherlands, a teenage boy Boyan Slat founded a non-

30, 2020), <https://www.nationalgeographic.com/news/2018/05/fishermen-kerala-india-recycle-plastic-pollution-culture/>.

⁶⁷ Trevor Nace, *#TrashTag Challenge Goes Viral As People Share Before/After Photos Of Their Cleanup*, FORBES (March 30, 2020), <https://www.forbes.com/sites/trevornace/2019/03/12/trashtag-challenge-goes-viral-as-people-share-beforeafter-photos-of-their-cleanup/#27e6646e95e8>.

⁶⁸ Jack Guy, *The final straw: England bans plastic items from April 2020*, CNN WORLD (March 30, 2020), <https://edition.cnn.com/2019/05/22/uk/uk-straw-ban-scli-intl-gbr/index.html>.

⁶⁹ Jed Alegado, *Philippines: Banning Single-Use Plastics at the National Level and Strengthening Existing Laws Needed to Curb Plastic Pollution*

Crisis, HEINRICH BOLL STIFTUNG (March 30,2020), <https://th.boell.org/en/2020/01/20/philippines-banning-single-use-plastics-national-level-and-strengthening-existing-laws>.

⁷⁰ Jemma Costa, *Plastic bags are banned in Victoria from today*, ABC NEWS (March 30,2020), <https://www.abc.net.au/news/2019-11-01/victorian-plastic-bag-ban-explained/11658360>.

⁷¹ Anubhuti Vishnoi, *Government may list 8 single-use plastic items*, THE ECONOMIC TIMES (March 30,2020), <https://economictimes.indiatimes.com/news/politics-and-nation/government-may-list-8-single-use-plastic-items/articleshow/72324377.cms?from=mdr>.

⁷² *supra* note 61.

⁷³ *As mentioned under Chapter- Challenges to Counter Ocean Dumping in India.*



government funded organisation called 'The Ocean Cleanup' that works to extract plastic out of the water bodies.⁷⁴ Founded in 2013, the organisation is using its best advanced technologies for the same. In India too, a Delhi-based technological company called 'Omnipresent Robot Tech Pvt. Ltd.' uses its 'Ro-Boat' to collect all the waste and sludge from the Holy waters of Ganga and Yamuna by environment friendly techniques to detect and eliminate these wastes.⁷⁵ Another example is the Guided Ultrasonic Monitoring of Pipe Systems (GUMPS). Founded by a college student Daniel Raj David, this machine is the first ever to monitor industries and detect oil leaks from pipelines near the Ganga river.⁷⁶ In today's era, environmental regulations need not to remain confined within the purview of national government. The Government, on the other hand, needs to build an interconnected web combining the local approaches, the public as well as private operational agencies in order to produce desirable results.

Another most important system to be implemented is the system of timely check of deteriorating standards of marine resources and other water pollutions. With proper techniques and global connection through internet and satellites, a proper government check-ins is the need of the hour.

Public opinion and a responsible human conduct is directly proportional to mass

education and thus, awareness plays a major role in dealing with environmental concerns.⁷⁷ Effective means of communication like television, radio and the super trending social media should be used as a toolbox for promoting the need and importance of saving the water resources from the wastes and litter. More chains like #trashtag⁷⁸ must be promoted and suitable slogans preventing Ocean Dumping must be broadcasted.

The Judiciary works in its most effective way when it comes to cases of water pollution. As seen in various cases like, *K.N. Unnikrishnan v Cochin Port Trust*⁷⁹, where a plea was filed in the Kerala High Court against waste discharged from ships on the public places and nearby the Cochin Port, the court has issued necessary directions towards prohibiting the disposal of plastic anywhere into the sea or near the port and to carefully manage other garbage and wastes. Establishing the relationship between health and sustainability, the Supreme Court, in the case *M.C. Mehta v Union of India*⁸⁰ has issued directions to install sewage treatment plants in a time-bound manner. But the issue of lethargic court proceedings continue to create a problem and that is the reason that the change, majorly, depends on how the legislative and executive bodies work upon it. Over the years, both of these bodies have not turned out to be most effective when it comes to environmental governance. The two major implementation of these bodies include

⁷⁴ Daniel Boffey, *Ocean cleanup device successfully collects plastic for first time*, THE GUARDIAN (March 31, 2020), <https://www.theguardian.com/environment/2019/oct/03/ocean-cleanup-device-successfully-collects-plastic-for-first-time>.

⁷⁵ Sanchari Pal, *How Three Startups Are Using Innovative Methods to Clean and Restore River Ganga*, THE BETTER INDIA (March 31, 2020),

<https://www.thebetterindia.com/81881/clean-ganga-innovative-technology-startup/>.

⁷⁶ *Id.*

⁷⁷ R. A. Malviya, *supra* note 9.

⁷⁸ *supra* note 66.

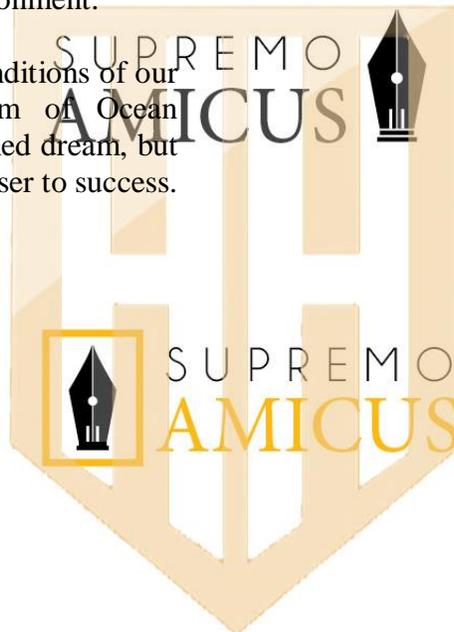
⁷⁹ *K.N. Unnikrishnan v. Cochin Port Trust*, 2001 CriLJ 4558.

⁸⁰ *M.C. Mehta v. Union of India*, (1997) 2 SCC 411.



Article 51A(g) of the Indian Constitution which thrives a fundamental duty on the citizens of the country to *‘protect and improve the natural environment and have compassion for the living creatures’*⁸¹ and Art 48A as a Directive Principle of State Policy(DPSP) directing the state *‘to protect and improve the environment and to safeguard forests and wildlife of the country’*⁸². But even with these laws being implemented, these organs have not put in their best efforts to conserve environment.⁸³ Therefore, just judiciary cannot work entirely and the three pillars have to work together to bring out the best for our environment.

Currently, with the present conditions of our country, solving the problem of Ocean Dumping looks like a far-fetched dream, but a step forward is still a step closer to success.



⁸¹ INDIAN CONST., Art. 51A(g).

⁸² INDIAN CONST., Art. 48A.

⁸³ Karan Bhasin, *Environmental Governance: Who Is Best Equipped, Executive Or Judiciary?*, SWARAJYA

(April 2, 2020), <https://swarajyamag.com/economy/environmental-governance-who-is-best-equipped-executive-or-judiciary>.