CHAPTER -II

I. HISTORICAL EVOLUTION OF LEGAL REGIME OF MARINE POLLUTION WITH SPECIAL REFERENCE TO SOLID WASTE
INTRODUCTION

The law of the sea extends back to Roman times and perhaps earlier, these laws were driven by commercial and military concerns and aimed to regulate the use and passage on maritime area, with exception of a small number of fisheries agreements. Until the Second World War environmental matters were not at all a concern for the ocean laws, because of lack of understanding of marine ecology and also the pollution remained in small scale¹.

At the beginning of the modern law of the seas, these laws were built upon a small number of basic principles like the “freedom of the seas” originally it is a part of ‘Roman Law’, but was re introduced as a legal doctrine during 1609. Again the book entitled “MARELIBE RUM” written by the Dutch Scholar Hugo Grotious, has defended the Netherlands right to sail in the Indian ocean and on eastern seas in order to promote the maritime trade with India. In the same book Grotious has mentioned about the exercise of both commercial and political dominion over this region and by the East Indies of Spain and Portugal and their desire to exclude the competitor mercantile nations from this region². Grotious has argued that peaceful navigation and fishing on the high seas is a basic right of all nations. According to Grotious “The Sea is common to all” because it is so limitless that it can not come under the possession of one and hence this

² Nico Shrijver, Institute of social studies, sovereignty over natural resources- balancing rights and duties, The Hague. United Kingdom at the University Press
region belongs to whole mankind\(^3\). By the early 1800 this legal principle was
universally accepted by major powers. Grotius principle is straightforward, which has
granted traditional freedom of the seas and has not imposed parallel responsibility to
work collectively for the conservation of marine resources. In addition, this freedom has
always been limited by a customary law of territorial seas permitting exclusive national
jurisdiction over a narrow marine zone off the coast (generally 3 miles) which is
popularly known as the cannon short rule\(^4\). However in 1930, initial attempts were
made by the League of Nations to codify the law of the seas. Aftermath of 2\(^{nd}\) word war,
the new super power United States has dramatically challenged the traditional freedom of
the seas doctrine. The Truman proclamation has extended the American coastal
jurisdiction and control over its natural resources, sea bed of its contiguous continental
shelf, fisheries in its coastal waters and the claims of sovereign authority over high seas
resources directly off the coast. These extended rights over the seas have eliminated the
traditional cannon shot approach (three mile limit) of the territorial seas\(^5\).

This precedent was quickly adopted by other nations laying similar claims, led by Latin
American Countries and by 1958 almost 20 countries had declared legal control over
their continental shelves. This “creeping jurisdiction” continued for the next 30 years
which greatly weakened the freedom of seas doctrine and causing international conflicts
between coastal states and fishing nations. United Nations held its first conference on the
law of the sea in 1958 and in this conference four conventions on law of the seas were
adopted. They are,

\(^3\) Ibid
\(^4\) At the beginning of the maritime laws the cannon shot rule was in existence. According to which the state
can exercise its jurisdiction till which a cannon shot can shoot, normally which was 3 miles.
\(^5\) Supra Note no 2

However the environment was not forgotten, as the Geneva Convention on High seas addressed specific sources of pollution, such as oil pollution, pollution from vessels and pollution from radioactive substances etc. But the protection granted by these conventions were too weak because these conventions have neither established a comprehensive duty towards the protection of marine environment nor assigned respective duties and responsibilities of states to address the marine pollution. While indicative of emerging customary international law, none of the conventions came in to force. The second United Nations Conference on the Law of the Sea held in 1960, but failed to reach agreement on the extent of the territorial sea.

In deed the fundamental conflict between UNCLOS-I and UNCLOS-II and central conflict in most law of the sea, has created tension between the interest of maritime nations who rely on the seas for commerce and navigation, and the interests of the coastal states who rely on the natural resources of the adjacent sea. Maritime nations have favored the expansive freedom of seas and limited national jurisdiction over coastal waters, as they are the title holder in both word and deed of enlarged national jurisdiction over adjacent waters. This enlarged jurisdiction over adjacent waters has important implications not only for control of resources but for compliance and enforcement of

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6 Joe Verhoeven, Phillip Sands, and Maxwell Bruce, the Antarctic Environment and Law, International law and policy series
pollution laws. By the end of 1973 over 1/3 of the ocean, equal in surface area to the land mass of the earth, had been claimed by coastal states as subject to national jurisdiction. Again United Nations Convention on law of the Sea-III, part XII has been completely devoted towards the protection and preservation of marine environment against all perceptible kinds of pollution. The convention is based on two paramount principles, the rule of law and the progressive realization of the public interest. In principle this convention uses two different means of balancing the interests of states in order to establish the required equitable regime of utilization and management of the maritime area. It partitions the maritime areas into different zones in which the competencies of the coastal states decrease in proportion to the distance from the coast. However, states rights in all zones, including the territorial seas, are not of an absolute nature, but rather functionally limited\textsuperscript{7}.

II. NATIONAL JURISDICTION OVER MARITIME ENVIRONMENT

In general, various conventions empowered the adjacent states, with greater powers over those areas which are closer to the coast. The coastal states have exclusive jurisdiction over its territorial water, provided permission to innocent passage of ships\textsuperscript{8}. However innocent passage does not include any willful and serious pollution that are

\textsuperscript{7} Supra Note no 2
\textsuperscript{8} Article 19 of the United Nations Convention on law of sea 1982 defines the innocent passage. According to this article passage is innocent so long as it is not prejudicial to the, good order or security of the coastal state, such passage shall take place in conformity with this convention and with other rules of international law. Passage of foreign ship shall be considered to prejudicial to the peace, good order or security of the coastal state if it engages in any of the following activities.

1. Any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal state, or in any other manner in violation of the principles of the international law embodied in the chapter of united nations.
2. Any kind of practice with weapons of any kind.
3. Any act aimed at collecting information to the prejudice of the defense of security of the coastal state
4. The launching, landing or taking on board of any aircraft
5. The launching landing or taking on board of any air craft etc.
contrary to the provisions of the convention, nor does it authorize any exploration and exploitation of the marine resources of territorial sea. Hence for the purpose of environmental concerns one must address both provisions of the convention. First, the provisions that deal with allocation of jurisdictional authority and secondly the provisions which deal with the question of protection of marine environment against pollution.

FOLLOWING FIGURE PROVIDES ELOBARATE IDEA REGARDING THE DEVISIONOFMARIETIME⁹

⁹ See Supra Note no 2, page no 230
A. EVOLUTION OF THE RULES RELATING TO MARITIME ZONES

1. TERRITORIAL SEA

The water adjacent to the coast is called as territorial water. The breadth of the territorial water is 12 nautical miles measured from base line. The coastal state is empowered with the exclusive right to exercise its jurisdiction not only over territorial water but also over air and space above it.

In the 18th Century the cannon shot rule was in existence where the breadth of the maritime belt extends to that distance where cannon can fire. In the 19th century the range of canon shot was generally 3 miles, and it became very much prevalent. Scientific inventions and discoveries have proved this rule as inadequate because the range of cannon shot increased considerably. According to Grotious the sovereignty of a coastal state over maritime belt should extend to that area up to which it can exercise effective control. Famous jurist vattel also agreed with the view of Grotious. Few countries have still voluntarily subscribed to 3 mile rule, but international law did not laid down any width of the territorial waters. However in order to resolve the confusion and to determine the exact width of territorial water, the first effort was made in Hague conference of 1930, but was failed. The second attempt was made in Geneva Conference on the Law of the Sea 1958, but not accomplished any agreement, because each state has claimed different width of territorial waters. The Chile, Peru, Equator, has claimed extreme width of 200 miles, however generally agreed measures were ranged form 3 miles to 12 miles.
In 1960, United States of America has submitted a compromise formula, which envisaged 6 miles of territorial waters and in addition to this another 6 miles given to the coastal state for fishing or other like activities. But this proposal was also failed because of majority of a single vote.

However, finally this uncertainty was ended with the adoption of the United Nation Convention on the Law of the Sea 1982. According to this convention, 12 nautical miles measured form the baseline is the territorial water and the coastal states can exercise its exclusive jurisdiction over this part of the marine. Further part XII of same convention obligates the coastal states to adopt their own environmental laws, rules and regulations for the protection and preservation of the marine environment.

2. EXCLUSIVE ECONOMIC ZONE OR PATRIMONIAL SEA

For the first time, the concept of economic zone or patrimonial sea was advocated by Kenya in the Asian African Legal Consultative Committee at its Colombo session, held in January 1971. Subsequently, Kenya submitted a working paper in the Lagos Sessions of the committee held in January, 1972. Finally Kenya submitted the draft of exclusive economic zone concept in the 1972 Geneva Session of the United Nations Sea Bed Committee. Later it has attracted many adherents. Ultimately the matter was settled in UNCLOS III 1982 in its article 55.

This article has defined the Exclusive Economic Zone as an area beyond and adjacent to the territorial sea and article 56(1) (b) stressed on the protection and preservation of marine environment of this area belongs to the coastal state. According to this convention the breadth of the exclusive economic zone shall not exceed beyond 200

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10 Article 55 to 75 of the UNCLOS III 1982 deal with the various aspects relating to the Exclusive Economic Zone, including the definition of the exclusive economic Zone.
nautical miles, from the base line from which the breadth of the territorial sea is measured\textsuperscript{11}. The coastal states have limited rights over this area. It does not have full authority to control navigational uses. Its power over the exploitation of the natural resources of the sea is comprehensive\textsuperscript{12}, but subject to obligations towards other states\textsuperscript{13}. Articles 61 and 68 deals with the rights to utilize and manage marine living resources\textsuperscript{14}.

3. HIGH SEAS OR OCEAN SEA

The closed sea concept was proclaimed by Spain and Portugal in the fifteenth and sixteenth centuries and supported by the Papal Bulls of 1493 and 1506 dividing the seas of the world between the two powers, was replaced by the notion of the open seas and the concomitant freedom of the high seas during the eighteenth century\textsuperscript{15}. High Sea can be defined as “the part of the sea that is not included in the territorial sea or in the internal water of a state\textsuperscript{16}. But the emergence of Exclusive Economic Zone has proved this definition as inadequate. The UNCLOS 1982 defines the High Sea as “All parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal water of a state, or in the archipelagic waters of an archipelagic state\textsuperscript{17}. High Sea is a global common and hence the coastal state cannot exercise its exclusive jurisdiction

\textsuperscript{11} Ibid
\textsuperscript{12} Ibid
\textsuperscript{13} Ibid
\textsuperscript{14} Ibid
\textsuperscript{15} Malcolm N. Shaw, International law, fourth edition, GrotIOUS publication Cambridge University Press, the Law of the sea, page 418.
\textsuperscript{16} Article 86 to121 of the UNCLOS 1982 deals with the various provisions relating to high seas including the definition of the High Seas
\textsuperscript{17} UNCLOS 1982 has defined the archipelagic states as “a state constituted wholly by one or more Archipelagos and may include other islands. Archipelago means a group of islands, including part of the island, interconnecting waters and other natural features which are so closely interrelated that such islands, waters and other natural features from an intrinsic geographical, economic and political entity, or which historically have been regarded as such.
over high sea. Normally jurisdiction is exercised only by the flag state of a vessel, floating on the High Sea. Article 24 of the Convention on the High Seas called on states to draw up regulations to prevent the pollution of the seas by the discharge of oil or the dumping of the radio active waste. While Article 1 of the convention on the fishing and conservation of the living resources of the high seas, declared that all states have the duty to adopt or cooperate with other states in adopting such measures as may be necessary for the conservation of the living resources of the high seas. However these provisions have been reinforced by later agreements addressing the marine pollution including the United Nations Convention on the Law of the Sea 1982.

4. DEEP SEA BED

The Sea Bed area has been defined as the sea bed, ocean floor and sub soil there of beyond the national jurisdiction\(^\text{18}\) this would start at the outer edge of the continental margin or at least at a distance of 200 nautical miles from the base lines. Part XI of UNCLOS 1982 recognized this area as a common heritage of mankind\(^\text{19}\). Part XI and Part XII of the United Nations Convention on the Law of the Sea deals with the various aspects of the Protection and preservation of the Deep Sea Bed.

5. CONTIGUOUS ZONE

Contiguous zone is that part of the sea which is beyond and adjacent to the territorial sea of the coastal state. UNCLOS 1982 empowered the coastal state to exercise its jurisdiction over continuous zone which is necessary to

\(^{18}\) Part XI of the UNCLOS 1982 has been devoted to elaborate the various provisions relating to the regulation and management of the sea bed area, including the definition of the sea bed area.

\(^{19}\) Common Heritage of mankind has been well recognized in the Article 136 of the UNCLOS 1982. It is the governing principle of the sea bed area. This principle takes root in the concern that the natural resources of certain areas beyond national jurisdiction should not be exploited solely by those whose commercial enterprises are able to do so, but rather constitute the common heritage of mankind, to be utilized for the benefit of all states.
a. Prevent infringement of its customs, fiscal, immigration or sanitary regulation with in its territory or territorial sea.

b. Punish infringement of the above regulations committed with in this territory or territorial sea²⁰.

c. However, the contiguous zone may not exceed 24 miles from which the breadth of territorial sea is measured. That means the contiguous zone can also measured as 12 miles beyond the territorial sea.

6. CONTINENTAL SHELF

Continental shelf is the Sea Bed and sub-soil of the sub marine areas adjacent to the coast but outside the area of territorial sea till the depth of 200 meters or beyond that limit to where the depth of superjacent water admits all exploitation of natural resources of the said areas, to the sea bed and sub soil of similar sub-marine areas adjacent to the coast of island²¹. This definition has been severely criticized because it does not fix any outer limit of the continental shelf. For the first time concept of Natural Prolongation has been introduced by UNCLOS III 1982. According to this convention continental shelf means “The sea bed and sub soil of the submarine areas that extend beyond its territorial sea through out the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles. From the base lines form which the breadth of territorial sea is measured where the outer edge of the continental margin does not extend up to that distance”²².

²⁰ Article 33 of the UNCLOS 1982 deals with the provisions relating to the Contiguous Zone
²¹ Part VI, section 76 to 85 deals with the various provisions relating to the continental shelf
OUTER LIMITS OF CONTINENTAL SHELF

Though the problem of the definition of the continental shelf was satisfactorily solved, the problem of the outer limits of continental shelf still in question. UNCLOS 1982, in it’s article 76 paragraph 5 provided that “The fixed points comprising the lien of the outer limits of the continental shelf on the sea-bed drawn in accordance with paragraph 4(a) (i) and (ii) either shall not agreed 350 nautical miles form the base lines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 meters isobaths which is a lien connecting the depth of 2,500 meters.

However, there is no rigorous classification of the marine for the purpose of its protection and preservation, rather the right to exploration and exploitation of natural resources itself correlated with the duties and obligations for the conservation of Marine environment. Again the provisions that deals with the protection and preservation of the marine environment runs like a golden thread in all most all conventions that deals with the exploration and exploitation of the marine living and non living resources. For example: the use of terms like Sustainable and equitable use of the available resources, international co-operation with each other for the protection and preservation of the marine environment etc.

III. HISTORICAL EVOLUTIONOF THE MARINE POLLUTION WITH SPECIAL REFERENCE TO SOLID WASTE.

Marine pollution is relatively a long standing concern; the initial efforts to regulate it were unsuccessful. However in 1926, an international conference was
convened by the United States, where a convention was elaborated to limit the discharges of oil and gas in to the sea, but this treaty was not signed.

Second draft was prepared under the auspices of the League of Nations in 1935 it contains many of the same provisions but was also failed to gain the acceptance. In 1954, for the first time, the International Convention for the Prevention of the Pollution of the Sea by oil was adopted. This convention prohibits the deliberate discharge of oil in to the specified zones. This convention was amended for many times, first in 1962 to extend the protected zones, then in 1969 to substitute a general prohibition on oil pollution for the system zones and finally in 1971. But this convention has given its full attention towards the protection of the marine environment against oil pollution.

In 1958 two United Nation Convention on Law of seas\textsuperscript{23} were came in to force, which contained the prohibition relating to pollution of the sea by oil or by pipelines and also by radioactive waste and waste regulating form oil drilling form the continental shelf; waste resulting form the exploitation and exploration of the sea bed and its sub soil. Further the same convention obligates the states to take necessary measures in accordance with the regulations drawn under treaty obligation to prevent pollution of the seas from the dumping of radioactive waste, and to co-operate with the competent International Organization for the prevention and protection of seas against the pollution that resulting form any activities with radio active materials of other harmful agents. Hence these are the first treaties that were addressed the oceanic disposal of solid waste.

In 1967, the Torrey canyon tanker accident\textsuperscript{24} gave rise to the general environmental

\textsuperscript{23} Supra Note no 6

\textsuperscript{24} It is one among the great maritime disasters, which spilled over 1,00,000 tons of crude oil in to the English Channel which caused serious damage to both the French and English coast lines.
awareness. Soon after this disaster the UN General Assembly was adopted a resolution\textsuperscript{25} which obligates the international member states and organizations to promote and to adopt the effective international agreements for the prevention and control of marine pollution\textsuperscript{26}. Another resolution was adopted on the prevention of pollution of the marine environment by sea bed development.

Two years later, in a recommendation\textsuperscript{27} the General Assembly has requested the Secretary General to review the harmful substances affecting the ocean and activities of member nations and international agencies dealing with the prevention and control of marine pollution and also to sought views of member nations on the desirability and feasibility of an international treaty on this subject.

Aftermath of Torrey Canyon Oil Spill, the global efforts were centered on finding a solution to the problems posed by accidents that causing serious pollution and also to the difficulty of resolving the numerous compensation claims and liability issue under then existing law. As a result the Maritime Consultative Organization (now IMO) has drafted two conventions\textsuperscript{28} among these two conventions one concerning civil responsibility for oil pollution damage and other relating to intervention on the high seas in cases of oil pollution causalities\textsuperscript{29}. These measures were supplemented in 1971 convention, which was drafted mainly to create International Fund for Compensation for

\textsuperscript{25} Resolution No 2414
\textsuperscript{26} December-21-1968
\textsuperscript{27} A/Res/2566(XXIV) of December-13\textsuperscript{th} -1969, concerning effective measures for the prevention and control of marine pollution
\textsuperscript{28} In 1969
\textsuperscript{29} Brussels, November 29\textsuperscript{th} 1969
oil Pollution Damage. Again the International Maritime Organization gave much importance to the Oil Pollution and related problems.

In 1972, the Stock Holm Conference gave new start to the development of International Environmental Regime. Principle 6 of this declaration contains general principle regarding pollution and provides that the discharge of toxic substance or of other substances and release of heat in quantities or concentrations should not exceed the assimilative capacity of the environment. Principle 7 of this declaration specifically addressed the marine pollution by declaring that states shall take all necessary steps to prevent the pollution of the seas by substances that are liable to create hazards to human health and harm to living resources and aquatic life damages to amenities or interfere with other legitimate uses of the sea. In addition 86 to 94th Recommendations of Stock Holm Action Plan addressed the marine pollution. 86th Recommendation provides that states to adhere to and implement the existing instruments to combat marine pollution and to develop further norms both in the national and international level, to effectively prevent the further marine pollution.

In 1972, a new international instrument was signed, at a conference in London viz Convention on Prevention of Marine Pollution by Dumping of Wastes and Other matter. Further on November 2nd 1973 a conference was held by International Maritime Consultative Organization (Now IMO) in London, in that conference the International Convention for the Prevention of Pollution by Ships (MARPOL) was adopted. This convention addresses all kinds of marine pollution caused by ships. In the same year (i.e.

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30 Supra Note no 6
31 29 December 1972
in 1973) the drafting work of the third UNCLOS 1982\textsuperscript{32} was started, which was adopted in December 10\textsuperscript{th} 1982. Part XII of the UNCLOS 1982 contains elaborate provisions for the protection and preservation of marine environment\textsuperscript{33} from probable kinds of marine pollutants. Part XII of UNCLOS 1982 specifically aims to prevent the pollution of marine environment. This convention empowered the coastal states to frame their own environmental legislations based on their socio-economic conditions\textsuperscript{34} the convention has also addressed the pollution relating to the Exclusive Economic Zone which is newly developed area of jurisdiction in International law\textsuperscript{35} and this convention does not address the pollution of high seas. It is the most eminent global convention that has addressed many kinds of marine pollution in general with lot many loop holes\textsuperscript{36}.

**IV. HISTORICAL EVOLUTION OF REGIONAL INSTRUMENTS**

We can recognize the equally rapid evolution of treaty regime at the regional level. In response to the Torrey Canyon accident, the eight European states parties were accepted the principle of co-operation to combat the marine pollution of the North Sea. Consequently in June 9\textsuperscript{th} 1969 the first regional convention was signed which was dedicated to the problem of marine pollution viz, Agreement of co-operation in dealing with pollution of North Sea by oil\textsuperscript{37}. In September 16-1971 another regional agreement concerning co-operation in taking measures against pollution of the sea by oil was signed

\textsuperscript{33} Article 192 to 222 of the UNCLOS 1982
\textsuperscript{34} Article 207 of the UNCLOS 1982
\textsuperscript{35} Supra Note no 33
\textsuperscript{36} Discussed in the chapter V of this thesis
\textsuperscript{37} Bonn Convention June 9\textsuperscript{th} 1969
in Copenhagen, by Denmark, Finland, Norway and Sweden\textsuperscript{38}. These two conventions are concerned with the oil pollution and not directly applicable to the marine pollution due to the solid waste.

In 1972 twelve European states signed the OSLO Convention which addressed the previously ignored problem of marine pollution caused by dumping of wastes form ships and air craft. But this agreement concerns only a part of the Atlantic and the Arctic oceans and excludes the Baltic and Mediterranean seas. However to the context of solid waste this is the first regional convention but restrained with the limited and regional application.

The same maritime zone is covered by one more convention that was signed by the same European Countries in Paris\textsuperscript{39} entitled Convention for the prevention of the Land Based Sources (Paris June 4\textsuperscript{th} 1974). This convention aimed at the prevention of marine pollution from Land Based Source.

In March 22\textsuperscript{nd} 1974, another legal instrument was created for the protection of marine environment of the Baltic Sea area entitled Helsinki Convention.

For the First time, seven littoral states\textsuperscript{40} have agreed to comprehensively address all forms of marine pollution. The fundamental principle of the convention is that the parties shall take all appropriate measures whether individually or jointly to protect and enhance the marine environment. They also agree to counter act to the introduction of all forms of hazardous substances in to sea by air, water and otherwise\textsuperscript{41}.

\textsuperscript{38} Agreement concerning co-operation in taking measures against pollution of the sea by oil (Copenhagen September 16\textsuperscript{th} 1971)
\textsuperscript{39} Supra Note no 6
\textsuperscript{40} Denmark, Finland, Germany, Poland, Sweden and USSR
The United Nations Environmental Program has adopted the approach of the Baltic Sea Convention and launched a Program for Eight Regional seas. For each sea, the resulting series of agreements generally that consists of a plan and a general convention for the protection of the marine environment, accompanied by special protocols devoted to the problems, such as the dumping of waste and co-operation in case of accident or Land Based Pollution\textsuperscript{42}.

In Feb 11\textsuperscript{th} 1976, convention for the protection of Mediterranean Sea against pollution was signed which accompanied by the two protocols, and was signed in the same day. One addresses the dumping from ships and air crafts and another concerning co-operation in combating pollution by oil and other harmful substances in cases of emergency. Subsequently, two additional protocols were substantially concluded. The first aims to protect the Mediterranean Sea against land based pollution\textsuperscript{43}. The second related to Mediterranean Sea specifically protected and indirectly concerns pollution\textsuperscript{44}

Article 7(b) of the second additional protocol prohibits the discharge of dumping of waste or other matter which could detrimentally affect a protected area.

Other regional seas are similarly regulated by UNEP- sponsored groups of instruments, e.g. For the Persian, Gulf; Kuwait regional convention for co-operation on the protection of marine environment form pollution; protocol concerning Regional co-operation in combating pollution by oil and other harmful substances in cases of emergency\textsuperscript{45} and protocol concerning marine pollution resulting from exploration and

\textsuperscript{42} Ibid
\textsuperscript{43} Athens protocol, May 17\textsuperscript{th} 1980
\textsuperscript{44} Ibid
\textsuperscript{45} Geneva, April 3\textsuperscript{rd} 1982
exploitation of the continental shelf. Similarly in the *west and central Africa*, Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the west and central African Region, For *Abidjan*; a protocol concerning co-operation in combating pollution in cases of emergency both signed in March 23rd 1981.

Lima Convention\(^{46}\) has been designed for the Protection of Marine Environment and coastal area of the South East Pacific. Agreement on regional co-operation in combating pollution of the South East Pacific by hydrocarbons or other harmful substances in case of emergency, both signed in November 12th 1981. Again Quito protocol has been formulated for the protection and preservation of the marine environment of the South East Pacific against pollution from land–based sources\(^{47}\). In addition supplementary protocol to the agreement on regional co-operation in combating pollution of the South-Pacific by hydrocarbons or other harmful substances has been established\(^{48}\).

Apart from the Barcelona system, whose four protocols make it the most complete regulatory system, the regional convention for the South East Pacific provides the most precise rates concerning land based pollution, and others regulating land based pollution only in the emergency situations. Further for the protection of the Gulf of Aden and the Red-sea, two documents were signed\(^{49}\), namely Jeddah regional convention for the conservation of the Red Sea of the Gulf of Aden environment; secondly, protocol

\(^{46}\) April 24th 1978  
\(^{47}\) December 11 1988  
\(^{48}\) July 22nd 1983  
\(^{49}\) In Feb 14th 1982
relating to regional co-operation to combat pollution by oil and other harmful substances in case of emergency.

Two instruments were signed for the protection of Caribbean Region\(^{50}\) they are, Convention for the Protection and Preservation of the Marine Environment of wider Caribbean Region, Cartagena de Indies and protocol concerning co-operation in combating oil spills in the wider Caribbean region.

For the protection of South Pacific Region Convention on the protection of the natural resources and environment of the South Pacific Region has been established\(^{51}\) called as Noumea Convention and its protocol has addressed the problems relating to the land based solid waste of South Pacific Region. One of the most recent treaty concerning the marine environment that has been adopted on September 13\(^{\text{th}}\) 1983, in the regional context is the Bonn agreement for the co-operation in dealing with pollution of the North Sea by oil and other harmful substance, The 1969 Bonn agreement, which regulated the pollution by oil was replaced by the 1983s Bonn Agreement.

In January 26\(^{\text{th}}\) 1982, to combat the vessel based pollution western European states have initiated a creative approach for the enforcement of International norms concerning maritime commerce. Under this approach the port states were signed a memorandum of understanding on the Surveillance of ships. The primary objective the fourteen signatory states are to dissuade dangerous ships which could pollute the environment of European ports and adjacent waters, frequently. The contracting states have agreed to enforce, with in their ports, a body of International Conventions regarding

\(^{50}\) In 24 March 1983
\(^{51}\) November 24\(^{\text{th}}\) 1986
the security of ships and the prevention of pollution. In case, if the flag is not contracting party, then also such ships have to follow the rules and regulations of the agreements, while they are passing through the water of European States. In addition, the contracting maritime authorities have agreed to exchange information and evidence regarding breaches of maritime rules and pollution.

At the outset results form application of the memorandum of understanding was very encouraging. During the initial four years, 38,000 ships or 21.5% of those entering in to European ports were subject to inquiry. Among these, 1500 were in port because of infractions. Nearly one-quarter i.e. 23.6% were held for violation of norms concerning pollution, and 13% for irregular documents more then half of which related to the international certificate on oil pollution. In addition Basel Convention on the Transboundary Movement of hazardous Waste, Bamako Convention, Basel Ban, Basel liability Convention and Lome Convention that are addressed the Transboundary movement of hazardous waste and trade in hazardous waste. Similarly The International Convention On the Liability and Compensation for Damage caused due to the Carriage of Hazardous and Noxious Substances by Sea 1996 was established which covered the problems relating to the payment of compensation in case of damages caused to the marine environment due to the Hazardous and Noxious Substances including solid waste.

The close examination of the literature reveals that prior to the United Nation Convention on the Law of Sea 1982 (UNCLOS) the problems relating to marine pollution did not occupy a prominent position in the hierarchy of international concerns.

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52 20.U.Miami Inter-AM.L.Rev.579
53 For provisions please refer chapter 5 -Section B of this thesis
54 For detail provisions of this convention please refer chapter 6 of this thesis
and were consequently given scant consideration, but it does not mean that there is a paucity of instruments on marine pollution problems\(^{55}\).

However only few legal instruments are there to tackle the marine pollution that caused due to the solid waste. They are MARPOL 73/78, London Dumping Convention, OSLO convention, Barcelona convention, Lima convention, Athens protocol, Quito Protocol and UNEP regional seas programme. The first regional convention appeared in 1974 which is relatively late in International perspective. The London Dumping convention specifically addressed the Land Based Sources of marine pollution. This convention regulates dumping of wastes by establishing 3 lists i.e., the black, grey and white. The black list contains the wastes that are considered as most dangerous\(^{56}\). The dumping of these wastes are prohibited, but with certain exceptions. This convention has specifically banned the high level radioactive wastes with certain exceptions. With this end, the IAEA\(^{57}\) has specifically defined the High Level Radio-Active waste. However, the exceptions provided under this convention would pose future threat to the marine environment.

The Helsinki (1974) convention specifically addressed the Baltic Sea area. This convention was agreed between seven Baltic Sea States to take all appropriate legislative, administrative and other relevant measures to prevent the pollution of Baltic Sea area specifically from the Land based sources.

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\(^{55}\) Ibid

\(^{56}\) Supra note no 41

\(^{57}\) For detailed provision regarding the IAEA please refer the chapter 7 entitled the “Role of international organizations for the protection and preservation of the marine environment” of this thesis
Barcelona convention also governs the marine pollution of Mediterranean area, caused due to the discharges from rivers, coastal establishments or outfalls or emanating from other sources within their territories and those parties should co-operate in the formulation and adoption of measures, including procedures and standards for the prevention and control of marine pollution of that area.

In spite of these legal instruments the marine pollution is still in increasing rate and in some areas the marine pollution is exceeding even the assimilative capacity of the ocean. E.g.: Baltic Sea and Mediterranean Sea.

Further, UNCLOS 1982 is the only global instrument addressing the land based sources of marine pollution which is not specific and in sufficient. It has conferred wide discretion on the states to formulate their own rules and regulations to regulate the different kinds of marine pollution by considering their socio-economic conditions. Such wide discretion without fixing any standards, guidelines can give rise to the weak laws as well as non-uniform laws. Again the same article has insisted that such rules and regulations should be in conformity with the international standards. This part of the article is too ambiguous it presupposes the existence of some international standards but in fact there are no any such standards. Hence the primordial regulation to govern the marine pollution due to the solid waste is not sufficient to govern the global challenge like marine pollution.

V. HISTORICAL EVOLUTION OF LEGAL REGIME OF MARINE POLLUTION IN INDIA

India can trace its history even before Indus Valley Civilization. During its Vedic period it was known as the most developed dominion, hence was always being raided by invaders specifically the Macedonians invasion of Alexander, Ghazni etc. It was ruled by
various powerful rulers and small kingdoms, that of the Guptas, the Mayuryans and sultanate of Delhi. Ultimately it came under the rule of the Mughals under Babur from 1526, the dynasty ended with the last Mughals emperor Aurangzeb in 1707. With the weakening of the Mughals the country came under small principalities, the most powerful among them being the East India Company.

After century of territorial expansion by the British, the Indian felt threaded by the company’s attitude and revolted in 1857-58. The immediate result was the India Act 1858 which transferred the company’s authority to the British crown under a viceroy, the area under British rule co-existed with the independent states ruled by the Indian Princes. The revolt gathered momentum for independence continued with Sh.M.K.Gandhi at its Helm from 1930. On 15th August, 1947 India became independent with in the common wealth as a federal union of former British. Pakistan was carved out of it. In 1950 it became republic with in the commonwealth. Pt. J.L. Nehru becomes its first prime minister. In 1956 the State Reorganization Act created a new structure of states and territories with boundaries. At present the Nation have its exclusive sovereign right over the territorial waters, Contiguous Zone, Exclusive Economic Zone, Continental Shelf, hence the county has the exclave right over the marine resources and this right is correlated with the responsibility for the protection and preservation of the marine environment and also cooperate with other nations for the protection and preservation of the marine environment.

India has a long history of administration of marine environment but the first official administrative policy was laid under the Indian Forest Act 1927. It was clubbed with Natural Resource Conservation. Secondly, the Forest Conservation Act 1980 and then the National Forest Policy 1988. It was also discussed in the wild life (protection)
Act of 1972, Environmental Protection Act 1986, Water Act 1974, Coastal Zone Regulation Act 1992. Coastal Zone Management Plans of the state government. Maritime and port policies and Port Act of the state, Coast Guard Act 1976, Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act 1976, are other marine environmental administrative tools. These legislations have not effectively addressed the problems relating to the marine pollution in general and solid waste in particular. Many of these legislations have forwarded more general provisions and tackled the marine pollution and relate problems incidentally. Such negligence can be attributing to the exaggeration of the assimilative capacity of the ocean. Hence India has to give immediate attention to frame effective regulations to govern the marine pollution and related problems. Again equal importance should be given to ensure the effective implementation of the existing legislations.

VII. BASIC PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW THAT GOVERNING THE LAWS RELATING TO THE MARINE POLLUTION.

International Environmental Law is relatively a new branch of international law. It took a swift growth in 1970s as a result of mounting concern of the states towards the protection and preservation of the global environment. At the beginning International Environmental Law was governed by the principles like freedom of seas, exclusive sovereignty over the natural resources etc. Now governing more then twelve principles like polluters pay principle, sustainable development, Best Available Technology, Best Environmental Practice, etc. However it does not mean that all the principles were well established, some are established while others are still in infant stage, but all these
principles have imposed positive obligations upon sovereign states towards the protection and preservation of the marine environment\textsuperscript{58}.

- Permanent sovereignty over natural resources
- Due care for the environment and precautionary action.
- Inter and Intra generational Equity
- Good neighborliness
- Equitable utilization and apportionment
- Prior information, Consultation and early Warning
- Preservation of the common heritage of man kind
- Duty to co operate in solving Transboundary environmental problems
- Common but differentiated obligations

These principles are superior to ordinary rules because the rules should be based on these principles\textsuperscript{59}.

\textbf{A. Permanent sovereignty over natural resources.}

It is one of the oldest principles of General International Law. At the beginning the meaning of this principle was narrow and limited to the exclusive jurisdiction over the natural resources on the Territory, Ocean, and space of the sovereign state irrespective of respect towards the integrity of other sovereign state. But the growing concept of

\textsuperscript{58} The sources of principles of International Environmental Law can be classified in to three categories they are

1. General principles of law (e.g. principle of good Faith)
2. Principles of General International Law (state sovereignty, duty to co operate)
3. Principles which only concern with international environmental issues (Duty to prevent environmental degradation, Polluters pay principles)

\textsuperscript{59} Nico Shrijver, sovereignty over natural resources, Balancing Rights and duties Institute of social studies, the Hague press. Cambridge. Page no 244.
international environmental law has changed the concept of sovereignty over natural resources. Now it means state have the exclusive right over its territory, ocean and space correlated with the responsibility of protection and preservation of global environment and sustainable use of the natural resources\textsuperscript{60}.

**B. Due care for the environment and precautionary action.**

The principles of ‘due diligence’ or ‘due care’ with respect to the environment has its direct impact on the anti pollution and environmental laws. One can trace the root of this principle in ancient and natural law as well as in religion. This principle requires that states have to conduct environmental impact assessment there by an increasing emphasis on the duty of states to take preventive measures to protect the environment. The emergence of this precautionary principle is reflected in many multilateral treaty law including UNCLOS 1982, 1985 Ozone layer convention and its 1987 Montreal protocol etc. The precautionary principle was also inserted in Rio Declaration\textsuperscript{61}. However this principle deeply depends on the discretion of states with regard to policy. So it can be termed as premature and emerging principle.

**C. Inter and Intra generational equity.**

According to this principle states must take in to account the interest of the both present and future generations. States are under an international obligation to manage their natural environment in such a way as to conserve its capacity for sustainable use by future generations as well as to conserve their flora and fauna, including endangered wild life species and wet lands of international importance. An intergenerational equity stipulates equitable use of natural resources by taking in to account the needs of other

\textsuperscript{60} Ibid .and also see S, Shanth kumar, Introduction to environmental law second edition 2005, wadhwa and company Nagpur, Page number 380 Para 3 and 4.  
\textsuperscript{61} Principle 15 and 19
users and necessitating assistance by the industrialized states to developing states. Principle 1 of the 1972 Stockholm Declaration notes a solemn responsibility to protect and preserve the environment for present and future generation. According to this principle every generation has a responsibility to the next.

D. Good neighborliness.

It is well established principle which obligates the state not to use their territory and resources in such a way as to cause significant harm to the environment of other states, and more recently to the areas beyond national jurisdiction. However it is not so easy to determine the exact scope of this obligation and its implication because all instances of Transboundary damage resulting from activities within a state territory can not be prevented or can not be considered as illegal. Hence the important criteria that has laid down by decided cases are

- Likely hood of significant harmful effects on the environment and on potential or current activities in other state.
- The ratio between prevention costs and any damage
- The impact on other states capacity to use their natural wealth and resources in a similar way and
- The health of population of other state62.

E. Equitable Utilization and Apportionment.

This principle is closely related to the previous one and implies that state should utilize resources and the environment in such a way that other states can utilize them as

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62 See principle 3 of UNEP, drafted on the conduct on shared natural resources and article 10-12 of the general principles concerning natural resources and environmental interferences as adopted by the Brundland commission’s expert group on environmental.
well or at least obtain a reasonable and equitable share. Secondly, that state must co-ordinate and co-operate for the ‘optimum use’ of resources and prevent damage caused through Transboundary pollution. This principle is relevant to all forms of shared resources including fresh water resources, land fishery resources and oil and gas deposits.

F. Prior information, consultation and early warning

When ever the Transboundary resources are at stake or activities with in the territory of one state may seriously affect the environment in other states, or persons or property their in, States are under an obligation to inform and consult these countries well in advance. In the event of a Transboundary environmental disaster (such as tanker accident, nuclear explosion or toxic discharge) or even less acute environmental problems, states are under an obligation to warn other states and to co-operate to contain and solve these problems.

G. Preservation of common heritage of mankind

Common Heritage of mankind means the area beyond the national jurisdiction e.g. High seas, ocean floor, outer space, and perhaps Antarctica. The rational behind this principle is that the natural resources of certain areas beyond national jurisdiction should not be exploited solely by few states whose commercial enterprises are able to do so; rather it should be utilized for the benefit of all states. Various conventions provide that these areas may not be used as waste dumping places and that their resources should be used in the interest of human kind as a whole.

H. Duty to co-operates to solve environmental problems.

It is well established principle and exemplified by chapter IX of the United Nations charter and the 1970 declaration on principles of international law. At the
bilateral and regional level international co operation to solve Transboundary environmental problems requires prior information consultation and negotiation from a North South perspective there is a duty of industrialized countries to assist developing countries in protecting global environment. There is also the duty of industrialized countries to contribute to developing countries efforts to pursue sustainable development. In both cases such assistance may entail financial aid, transfer of financially sound technology and co operation through international organizations

I. Common but differentiated obligation.

Differentiated obligation means the imposition of different standards, delayed compliance or less stringent commitments or economic support to some countries, best example is convention on climate change. This principle implies the differentiated obligation on developed and developing states. The rational behind this differentiated approach is that the contribution of industrialized states is more to the pollution of the global environment and hence they have to make good the loss on the ration of their contribution to the pollution. Secondly once a developed state has to insert any changes to the existing environmental regulations or has to frame new regulations to relating to the environment, such act needs huge money, advanced technology, and time. Hence this principle intends to put high level of responsibility on the developed states and low on the developing and under developed states. However it is most complicated principle.

In addition, many conventions have introduced the principles of BEP and BAT which means when there is a threat to the marine environment the states have to opt for the Best Environmental Practice and Best Available Technology to combat such marine pollution. These principles are well developed principles of International Environmental
Law and well recognized by many conventions that governs the marine pollution e.g. Helsinki Convention, Barcelona Convention and many other conventions established by the UNEP.

**VIII. RIGHTS TO LIVE IN A HEALTHY ENVIRONMENT - AS BASIC HUMAN RIGHTS**

Right to life is the most important of all human rights that implies the right to live with out the harmful invasion of pollution, environmental degradation and ecological imbalances. In all most all the countries the concept of right to healthy environment and to sustainable development are fundamental human rights that implicit in the right to life. The universal Declaration of Human Rights 1948 has declared that every one has the right to life and that every one has the right to standard of living which is adequate for the health and well being of himself and his family. The International Covenant on Economic, Social and Cultural Rights 1966 declares that the state parties to the covenant recognized the right of every one to an adequate standard of living for himself and to his family and to the continues improvement of living conditions. The covenant further declares that the state parties recognize the right of every one to the enjoyment of the highest attainable standard of physical and mental health. The covenant provides that the steps to be taken by the state parties to achieve the full realization of this right shall include the steps that are necessary for the improvement of all aspects of environmental and industrial hygiene. The International Covenant on Civil and Political Rights 1966 proclaims that every human being has the inherent right to life. This right shall be

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63 Article 3 of UDHR 1948
64 Article 25 of UDHR 1948
65 Article 11 of ICESCR 1966
66 Article 12 (1) Ibid
67 Article 12 (2)(b), Ibid.
protected by the law. The European Convention for the protection of the Human Rights and fundamental freedom 1950 provides that every one’s right to life shall be protected by the law.

Principle 1 of the Declaration on the United Nations Conference on the Human Environment, 1972 held that Stock Holm proclaims that “man has the fundamental right to freedom, equality and adequate conditions of life in an environment of a quality that permits a life of dignity and well being”. After the Stock Holm Declaration in 1972, references to a right to a decent, healthy and viable environment was incorporated in several Global and Regional Human Rights treaties and in the various declarations and resolutions of International Organizations. At the UN Conference on Environment and Development (UNCED) held at Rio in 1992, the initial emphasis on the human rights perspective was not maintained. Avoiding rights terminology, the Rio declaration 1992, merely asserted that human beings are at the center of our concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

The UN General Assembly has declared the right to sustainable development as inalienable human rights. The 1997 Earth Summit reflected that the principle in order to achieve “sustainable development, environmental protection shall constitute an integral part of development process and can not be considered in isolation of it”.

The UN Sub Commission on prevention of discrimination and protection of minorities undertook a study on Human Rights and Environment “and submitted its report in 1994. The most fundamental conclusion of report is that there has been a shift from environmental law to the right to a healthy and a decent environment” and it is

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68 Article 6, ICCPR, 1966
69 Article 2, ECPHR, 1950
70 Principle 23 of the World Charter for Nature 1982
capable of immediate implementation by human Rights bodies. The sub commission has also proposed a draft declaration of principles on Human Rights and environment, which would give environmental rights an autonomous character. The draft principles affirm that sustainable development links the right to development with the right to secure healthy and ecologically sound environment.\footnote{Ian Brownlie, CBE, QC Guy’s Good win- Gill, Basic Documents on Human Rights, Oxford University Press, Fourth edition}

**IX. CONCLUSION:**

Environment has no boundaries and it is not possible to stop the Transboundary marine pollution, since the ocean currents are active and in continues circulation. Such problems relating to Transboundary pollution of global environment gave a good start to the International Environmental law. In addition the various principles established in many cases that contain international environmental issues have contributed significantly to the evolution of International Environmental Law.\footnote{E.g. Trail smelter case and Corfu channel case} However these principles do not address the marine pollution specifically but we have to draw an inference from the decisions of the cases containing the environmental issues. Approximately, more than 80% of the solid waste generates on land and rest of the waste accumulates from the other sources like vessel sources dumping of hazardous waste etc. Marine is severely being polluted form the land based solid waste, particularly in thickly populated areas like Mediterranean Sea and Baltic Sea, also in the coastal area as well as the coastal regions known for tourism.
According to a survey conducted by Pan American Health Organization, more than 70% of the marine pollution is caused due to the Land Based Sources. But it is unfortunate that there is no comprehensive global scheme to govern the land based sources of marine pollution. UNEP guidelines presuppose the existence of international standards. In addition, directives of European Economic Council are regional and apply only to its member. Therefore for the effective regulation of marine pollution, there is a need for comprehensive, global legislation which should be applicable to all the states irrespective of their socio-economic conditions.

However as a matter of fact, sea is the ultimate sink for planetary wastes, thus complete eradication of pollution of this major area of earth surface is impossible. But by strict compliance to the existing legal regime and by taking adequate measures to overcome form the existing loopholes, we can effectively reduce the pollution and balance it with the assimilative capacity of the ocean.