Dumped Weapons & Underwater Arms Race: Analysis of India’s Survival Strength with the Existing Legal Framework

Anu B.¹, Sanskriti Mishra²
¹Research Scholar, School of Law, Sharda University, Uttar Pradesh. India
²Assistant Professor, School of Law, Sharda University, Uttar Pradesh, India

Abstract
India’s role in maritime trade dates back to 1500s as it is bordered with Indian Ocean which is open sea. But it gradually declined when the state was invaded by colonial powers and made forced participation in the World Wars. During the wars Indian Ocean catered as major maritime trade route and hence a lot of warships sank, seized weapons were dumped in the ocean. The dumped weapons include non-deactivated biological and chemical weapons that pose perpetual threat to India and other coastal states. Since Cold War, there was a rise in militarization in the seabed which eventually led to arms race. With digitalization, the facility of remote access has further geared up the arms race in the seabed. There are bundle of laws in the global parlance to regulate the same but the increasing arms race in the seabed creates doubt with respect to the effectiveness. In this outset, it is important to analyse whether India being a coastal state be able to survive the consequences from such arms race and dumped weapons in the seabed with its existing legal framework. For this study, this research paper makes conceptual understanding along with historic analysis of dumping of weapons ad arms race in the seabed. Further the paper conducts thorough study on the existing international legal framework and the territorial laws of India in this regard. The paper also analyses the present trends in seabed arms race in the seabed and put forth suggestions for the state’s better future and security of its people.

Keywords: arms race, dumping, weapons, seabed, maritime zone

Introduction
India is not just a piece of land in the Asian sub-continent but has written its name in golden letters in the world history irrespective of the subject. It is evident from the Vedic texts, Puranas, Upanishads which has global acceptance. Apart from this, the state has marked its position in the international trade, commerce and other fields. One of the major reasons for the same is the state is bordered its three sides with sea and the southern tip is facing open sea which envisages smooth mode of transport at the sea (Anand, 1983). The state's coastal line length measures to 7566.92km approximately (Ravi Prakash Srivasthava, 2020). By 1600s, India had slowly submerged under colonization leading to reckless exploitation of resources and led to fading of golden letters that it marked in the world history (Thakur, 2013). Thereafter India was forced to expose to several English revolutions and thereby gaining its territory a European Culture (Habib, 1975). Likewise, the colonial powers have made forced participation of India in the World Wars where the Indian Ocean catering as main maritime trade route in the World War II (Puri, 2011).

In the peak Cold War period, it was seen that there commenced a trend of using the sea for war purposes. Considering the imminent threat involved in using sea, seabed and subsoil for war purposes; several debates, discussions and round table were conducted globally. This has led to crafting and enforcement of Nuclear Non-
Proliferation Treaty 1968 and the Seabed Arms Control Treaty 1971 to prohibit use of sea and the seabed for militarization and war purposes. It turned out to be a failure as several missiles were tested and launched from the seabed and its subsoil. Also, in the post-World Wars, many confiscated chemical weapons were dumped in the sea leading to overall change of ecology and nature of the sea, seabed and its subsoil.

From then onwards, several discussions were made on the threat involved with respect to regulation of the sea in toto, weapons in the seabed and continuing underwater militarization. The result was enforcement of the magna carta regulating the sea i.e., the United Nations Convention on the Law of the Sea, 1982, in which it is mandated under art.88 that the seas shall be used for peaceful purposes only. But in the Post-Cold War, there was competitive encouragement for using the sea and seabed for war purposes including emplacement, storage, testing etc. of weapons in the seabed. This in fact can be regarded as an add-on threat to already dumped weapons in the Post-World Wars. In response, there were several treaties, declarations and other legislations enacted at the global level to prohibit underwater militarization. By 1990s, the global perils of digitalization hit with force, and pointed towards immense development of technology. Digitalization has catered for remote access that enables to access weapons emplaced or stored in the seabed from any part of the territory with a single click. The facility of remote access to weapons has actually paved way to rigorous investment and development of weapons in the seabed, which constitutes underwater arms race.

There is a question arises with respect to safety of territories especially the coastal states upon the happening of an accident or occurrence of attack with respect to weapons in the seabed. As already said, India is a coastal state and therefore incur from the said threat which needs to be addressed as the present weapons developed, tested and launched by various states are capable of destructing whole of parts of the territory. At this juncture, there is a need to research with respect to the capability of existing Indian legal framework to survive the arms race and the underwater militarization.

**Objectives of the Research**

- To study the concept of dumped weapons, arms races and underwater militarization.
- To understand the history of weapons in the seabed and existing legal framework with respect to sea, seabed and weapons in the seabed.
- To analyse the effectiveness of the existing legal framework in facilitating survival of India in the underwater arms race.
- To identify the issues and challenges that India face with respect to dumped weapons and underwater arms race.
- To attempt to suggest for better survival of India with respect to dumped weapons and underwater arms race.

**Hypothesis**

The existing legal framework is capable of facilitating survival of India with respect to dumped weapons and underwater arms race.

**Research Methodology**

This research is purely doctrinal and depends upon the statutes such as the United Nations Conventions on the Law of the Sea 1982, the Nuclear Non-Proliferation Treaty 1968, the Seabed Arms Control Treaty, 1972 and such other international legislations and national legislations such as the Constitution of India, the Maritime Zones Act 1976.
and other government reports and secondary data. As the information involves confidential data of several states, it is cumbersome to conduct empirical research in this regard. The research further lays thrust on cases, institutional periodical reports, news reports etc.

**Research Questions**

- What are the various concepts of sea, seabed, weapons and militarization?
- What is the history of dumped weapons and underwater arms race?
- What is the existing legal framework of the dumped weapon and underwater militarization?
- Whether the existing legal framework facilitates the survival of coastal state India in the said scenario?
- What are the issues and challenges involved with respect to dumped weapons and underwater arms race?

**Literature Review**

**Concepts**

Dumped weapons and arms race in the seabed are mainly in the range of Exclusive Economic Zone, Continental Shelf and High Seas which involves international law and involves various concepts. As this research deals with Indian scenario, concepts in relation to the same has to be also dealt. The main concepts are international law, states, maritime zones, weapons and underwater militarization.

International law is an order of conduct of independent states as influenced by external and internal factors (Foulke, 1919). According to Wheaton, international laws among civilized nations are those rules of conduct that is in consonance with the justice, from the nature of such independent states and all amendments are made with general mutual consent and understanding. Whereas, Hall states that the international law constitutes a branch of true law because it cast in a legal mould and treated in practice as being legal in character, although lacking the sanction of determinate political authority, and lying as he admits, on the extreme frontier of law (Hall, 1880). International law can be regarded as a set of legal norms and principles churned out from repeated amendments and consensus of understanding between the states conducting trade and other allied transactions. It can be seen that the efforts for defining international law is being on the track in the eighteenth century through juristic works. A clear definition of international law is given by the Oppenheim, which states that the Law of Nations or the International Law is the name of the body of the customary or the conventional rules which are considered legally binding by the civilized states in their intercourse with each other (Janis, 1996). But the definition of modern international law was enumerated by J G Starke in adaptation with Professor Hyde's definition and says, “International law may be defined as that body of law which is composed for its greater part of the principles and rules of conduct which States feel themselves bound to observe, and therefore, do commonly observe in their relations with each other, and which includes also:-

- the rules of law relating to the functioning of international institutions or organisations, their relations with each other, and their relations with States and individuals; and

- certain rules of law relating to individuals and non-State entities so far as the rights or duties of such individuals and non-State entities are the concern of the international community.”

This definition is set as authority in the present days and thus this research adheres to this definition. It
can be said that the international law is actualization through law of common interest of the international society and is based on three systematic levels i.e.; the international constitutional law, the international public law and the law of the nations (Allot, 1999). Whenever the meaning or definition of international law comes into picture there arises a question as to what are the subjects of the international law. The subjects of international law are states, intergovernmental organizations created by the states and non-governmental organizations created by the individuals or in other words, a subject of international law is a body or entity recognized or accepted as being capable, or as in fact being capable of possessing and exercising international law rights and duties (Dixon, 2013).

State as a subject of international law has paramount importance in the research as the topic is the activities done by states recognized under the international law and the effect is on the coastal state i.e.; India which is also recognized under the same law. Here the concept of state and coastal state in the context of subject of international law is discussed in brief. A clear definition to the term state is given under art. 1 of the Montevideo Convention 1933 wherein it states that the state as a person of international law shall possess a permanent population, a well-defined territory, a government and shall have the capacity to enter into relationship with other states. But this definition is not given literal and strict interpretation because a territory will not lose its status of states even when the government is collapsed and a military rule is imposed (Ginsburgs, 1962). This was the situation of Norway during the World War II. At the same time the territory need not be well-defined in all cases as Israel is a member state in United Nations in 1949 where it did not have definite boundaries and the negotiations were pending (Lafronte, 1949). The condition or capacity to enter into contractual relation is given strict interpretation and is utmost important among the four conditions enumerated. This is based on the Kelson's concept of synonymous nature of state and the law. The mere existence of the states will not suffice and hence the concept of state is completely rooted in the doctrine of basic rights and duties of the states which international legislations such as the Montevideo Convention 1933 and the Draft Declaration on the Rights and Duties of the States. Basic rights in the doctrine lay stress on the sovereignty, independence and equality of the states, self-defence and the self-preservation of the states whereas the basic duties lay emphasis on mutual non-intervention of affairs of the states, not resorting to war etc (V. M. Koretsky, 1958).

The essence of self-defence and self-preservation as basic rights is used as a blanket for conducting underwater militarization by the states at present. This practise points imminent threat to the coastal states and in this research, India is the coastal state. As the research demands, there is a need to understand the concept of coastal state under the international law. Under art. 2(1)(c) of the International Maritime Organization Convention on Facilitation of International Maritime Traffic, 1965 defines coastal state as a sovereign state that is not land locked and has territory connected to the ocean or whose coastal lines lie on exoreic basins which naturally externally drain into rivers or oceans (Barbados, 2021). Under Article 1(a) of the Convention on Cooperation in the Northwest Atlantic Fisheries 2006 defines coastal state as a contracting party exercising fisheries jurisdiction in waters forming the part of the Convention Area. Combining both the definitions, it can be understood that the coastal state is a sovereign, independent state having borders with the seas and has fisheries jurisdiction. Therefore, all those landlocked states which has jurisdiction in Exclusive Economic Zone cannot be regarded as a coastal state. In territorial level i.e.; in India, Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Odisha, Goa, Maharashtra, West Bengal and Gujarat are
regarded as coastal states which is bordered with the vast Arabian Sea, the Bay of Bengal and the Indian Ocean (Oliveboard, 2023). Coastal Regulation Zone Notifications issued from time to time aims to protect the ecosystem in the coastal areas, seas, bays, estuaries, creeks, lakes etc., which is more inclined to environment protection rather than other aspects such as national, social, financial and other security (Raghav Parthasarathy, 2020). Apart from this, there is no specific law that deals and regulate the coastal states.

As the coastal state is bordered by vast sea, in order to specify jurisdiction, the sea is divided into zones which is known as the maritime zones. The concept, measurement and rights of coastal states in each maritime zone is clearly states in several provisions of the United Nations Convention on the Law of the Sea. Maritime Zones Act 2005 defines maritime zones as the archipelagic waters, contiguous zones, continental shelf, EEZ, historic waters, internal waters, maritime cultural zone and territorial sea (United Nations Secretariat, 2017).

Art.1(4) of the Agreement between the Government of French Republic and the Government of the Republic of Guatemala on the Encouragement and Reciprocal Protection of Investments, 1998 define maritime zone as those maritime zones over which the contracting parties have, in accordance with the international law, sovereignty, sovereign rights or jurisdiction for the purpose of exploring, exploiting and preserving natural resources. Even though the UNCLOS III did not define the term maritime zones, it elaborates the zones as Territorial Waters, Contiguous Zone, Exclusive Economic Zone, Continental Shelf and the High Seas. The zones are marked from baselines.

**Baseline & Internal Waters**

Baselines are the zero mark for measuring the breadth of the territorial sea and other maritime zones and are the starting point delimitation between the states claiming their overlapping maritime areas (Lathrop, 2015). It can be seen that full and exclusive sovereignty is exercised in the baseline and since it's a zero mark point it is located within the territorial boundaries. Whereas in the internal waters, the state shall exercise absolute sovereignty and includes the water on the landward side of the baseline belong to the state's internal waters (Kohen, 2015). The sovereignty of the state in the internal waters is equal to that of mainland but there lies a difference with respect to exercise of innocent passage with respect to internal waters. That is, there is no right to innocent passage in the internal waters unless there is the presence of a separate agreement.

**Territorial Waters**

The term territorial waters or territorial sea is not defined under the UNCLOS III but includes water measuring up to 12 nautical miles from the baseline as said under Article 3. Compared to the state's right over the territorial, the right in the territorial waters is restricted to fishing, national security, exploitation of resources etc (Z. Adangor, 2018). The coastal state may exercise civil or criminal jurisdiction in the territorial waters as like it has in the internal waters.

**Contiguous Zone**

The maritime zone succeeding the Territorial Waters that measures not exceeding 24 nautical miles from the baseline is the Contiguous Zone as per Article 33 of the UNCLOS III. Like the Territorial Waters, Contiguous Zone is not defined under the legislation. It can be said that the Contiguous Zone is an area of sea contiguous to an extending seaward of the territorial sea (Oda, 2008). Here the jurisdiction of the coastal state is restricted to customs and fiscal affairs and environmental affairs.
**Exclusive Economic Zone**

This zone is located in an area up to 200 nautical miles from the baseline and is the maritime zone that subject to regulation of rights and obligation of coastal states from other states including its freedoms. Article 57 of the UNCLOS III deals the same. As per the legislation, the coastal state shall respect the freedom of other states envisage under various provisions of the UNCLOS III. The coastal state shall have the jurisdiction to fisheries, marine environment protection, lay submarine cables, conduct controlled marine scientific research etc (A, 2013). It can be seen that the jurisdiction of the coastal states is diminishing in nature. This zone can be regarded as a politico-legal compromise and various units of this zone constitute a complete harmony and functional balance will be destroyed if it were to be assimilated into any pre-existing concept (Nandan, 2010).

**Continental Shelf**

Unlike other maritime zones, the Continental Shelf considerably vary its width from place to place and is dependent on the geological conditions. Continental Shelf is a submerged bed of the sea contiguous to the continental landmass and formed in such a pattern that as a real extension of landmass situated at a greater minimum depth of 200 metres (Starke, 1972). This has various stages which is called the continental slope, continental rise and abyssal plain which is collectively represented as continental margin (Shalowitz, 1964). Article 76 of the UNCLOS III defines continental shelf comprises of the submarine areas that extend beyond its territorial sea through natural prolongation of its land territory to the outer edge of the continental margin or to a distance of 200 nautical miles and consists of continental rise, slope and abyssal plain which is collectively known as continental margin. It also narrates how the measurement shall be made from the coastal state's baseline. In this area, the coastal state shall exercise jurisdiction with respect to exploration and exploitation of resources and to establish conditions in laying pipelines, cables, artificial installations and marine scientific research; is elaborately discussed under Article 77 and 79.

**High Seas**

The waters beyond 200 nautical miles from the baseline are regarded as international waters and constitute High Seas. In this area, the coastal state cannot exercise its jurisdiction in the international waters. This is confirmed under Article 89 of the UNCLOS III. The Annual Report of United States Secretary of the Interior 1945, described its High Seas is as large as area 827,000 square miles and almost twice as large as original 13 colonies which was 400,000 square miles. There is no clear definition given in the UNCLOS III, but it describes under Article 87 that the states have freedom of navigation, fishing, lay submarine cables and pipelines, construct artificial islands and conduct marine scientific research. Under Article 88, the High Seas are reserved for peaceful purposes. It is thus understood that the state's jurisdiction diminishes with advancement of maritime zones and thus there is full and absolute sovereignty in the Territorial Waters to limited equatorial sovereignty in the EEZ and Continental Shelf and no sovereignty at the High Seas. The same shall be dealt in section 2.3. of this research paper.

Maritime zones have underlying perpetually running seabed which is measures more that the total continental area in the earth i.e.; 354 million km² (Mark John Costello, 2010). The deep seabed comprises of the ocean space beyond the continental shelf, and the Area, by the UNCLOS as any seabed surface below 200m (Almeida, 2020). In the Deep-Sea Mining Act 2014, Deep seabed means the area of the seabed situated beyond the limits of national jurisdiction of the United Kingdom or any other state. Britannica defines seabed as the ground that is at the bottom of the sea.
International Seabed means the seabed and ocean floor beyond the limits of national jurisdiction (US Legal, 2020). Article 137 of the UNCLOS III gives legal status to the seabed and narrates that no state shall claim or exercise sovereignty or such rights over any part of the area or its resources and no such claim by the state shall be recognized.

**Weapons**

Weapon in the literal interpretation is something used or designed in causing death, injury or damage on a person or property (The Criminal Law Notebook, 2019). Weapon is any instrument capable of threatening or injuring a person that range from knife to nuclear explosive devices (Law Insider, 2022). According to the Black's Law Dictionary, weapon is an instrument for the purpose of fighting or offensive in nature with a defensive combat. As per Britannica, the weapons can be artillery, biological weapons, chemical weapons, combat weapons, explosives, missiles and rockets (Britannica, 2020). The weapons dealt in this research paper ranges all the above types which are dumped in the Post-World Wars or emplaced or tested or other activities by states at any time till dates and thrust is given to each type and call it as weapon altogether. In order to understand how much is dumped, tested, emplaced etc. there is a need to discuss the international and Indian history with respect to weapons in the seabed and the underwater arms race.

**History**

**World History**

Since 1200, the sea was widely used for fishing especially for livelihood and daily consumption and further by 1500s, the usage drifted to traversing and exploration of new territories across the globe (Anand, Origin and Development of the Law of the Sea, 1982). By the end of sixteenth century, the British and other powerful states have commenced invasion of territories by wars due to which several peace conferences were held at Geneva and Hague. As General William Tecumseh Sherman said “war is hell” but international law softens its asperities (Ohio Memory, 2017). In a way it can be said that use of sea for war commenced in the early colonial era. The “mare liberum” of Grotius borrowed from Roman writers which forbade the right to private property in the sea or air and meant for common use of mankind (Foster, 1909). This was advanced by introduction of concept of “mare clausum” by Selden. During the period under common law, crafting a law by the coastal state to regulate and penalize activities High Sea was considered appropriate (Cooley v. Board of Wardens, 1851). This was in a way overruled in a seaman could not claim for injuries occurred at High Seas (Chelentis v. Luckenbach Steamship Company, 1918). This indicated to total freezing of states jurisdiction at the High Seas. The notable developments in the early nineteenth century was establishing admiralty jurisdiction and diminishing conflict of admiralty jurisdiction with common law courts (Palfrey, 1923).

The initial spark of war at sea was from the blockade by British fleet in Germany and seizing of weapons including ammunitions and fire arms (Crenshaw, 1957). Introduction of munitions into seas and oceans commenced in the middle of nineteenth century which were installed in shores and warships and submarines (Jacek Bełdowski, 2020). Seizing of arms and ammunitions by different states happened rigorously in the course of the wars. The states Russia, China, France, Germany, the United States and the British were the major participants in the World Wars. As per records, the United States alone dumped one lakh tons of chemical agents such as chlorine gas, phosgene and mustard gas in various seas (Everts, 2015). Even though legislation is crafted for demilitarization of chemical weapons, almost twenty-five percent of the recorded 71,000 tons by the United States is destroyed; demilitarization is
tedious as it is a political and environment issue as much as an economic issue (Wagner, 2007). Almost 40,000 tons of weapons and materials are dumped in the Baltic Sea area in the Post World War period (Helcom, 2012). Practice of dumping did not stop with World Wars; it continued in the post-Cold War period too. The surplus of weapons i.e.; arsenals in the cold war was dumped in various seas (Susanne Kopte, 1996). During the Cold War, the weapon stockpiles aimed to protect the Americans and free world as a part of retaliation policy (Price, 1995). Also, a practice of manufacture and storing of nuclear and chemical weapons was introduced to prevent usage of the same; which was later used as a pillar of deterrence and as an escalated retaliation policy (Muller, 2016). Further this period was noted for the extensive arms race between the states especially the nuclear states Russia and the United States (Council on Foreign Relations, 2021). Even though the Cuban Missile Crisis ended peacefully by fall of the Soviet Union, the arms race is still continuing and is evident from the United States' withdrawal from Intermediate- Range Nuclear Forces Treaty in 2019 for the reason that Russia was not in compliance with the same (History Editors, 2009).

This practice along with growth in technology and digitalization paved for remote access of weapons; that has boosted the states to emplace, test, implant etc. of weapons in the seabed. The interest in militarization in the seafloor accelerates with the varying gears of arms race which pose threat to the adjacent waters and the freedom of the territory (Evensen, 1970). Debates on seabed disarmament often wind up by jerking on to two aspects; one is the exploitation of marine resources and the other is the protection of freedom of the sovereignty of the states (Rauf, 1980). With respect to frequent nuclear tests, it is often iterated that how will the power of a weapon developed with new technology can said to be intelligently used unless it is actually used (Hamlett, 1990). In the late 1990s, the concept of nuclear weapon free zones was gaining greater reach when France conducted nuclear testing in the South Pacific (Rosen, 1996). As already said, the remote access as boosting factor in the arms race in the digital age, it poses great threat to pose unauthorized access due to which an attack may occur at any time. This has paved extreme hindrance in implementing arms control (Lamberth, 2022). In 2023, the Analysis and Research Team of the European Union stated that the arms race is the result of vicious circle in which the growing ambitions of different powers are perceived as a threat by other powers (Analysis and Research Team, 2023). In short, oceans can be regarded as depot of weapons due to escalating arms race, that pose high risk to the international waters, territories especially the coastal states, marine environment etc (Urbina, 2023).

Indian History

As said in the introductory part, India i.e., Bharat is a land that gave birth to several gods and goddesses and widely accepts the divine character of the resources it imbibes i.e.; water, trees, animals etc. With respect to history in any subject matter India has embossed its name in the golden letters immaterial of the subject. But with regard to war, dumping or weapons and arms race, there is a doubt as to whether India has any active role. Therefore, there is a need to analyse India's participation in the World Wars when the land was submerged in colonialism. Also, there is a need to its role in the post-independence period.

It is righteous to start the Indian History analysis with the great words of Sir John Robert Seeley, “The Indian Empire is comparable to Roman Empire at its peak and with respect to area and population, much greater than the European states except Russia and can be regarded as the heart of the British Empire economically, politically and strategically” (Seeley, 1883). In the World War India had supplied a million soldiers and also
provided endless quantity of food and other survival essentials which outweigh the quantum supplied by rest of the colonies (Das, 1942). Indian soldiers were sent to Egypt, Africa, Belgium, China, Russia and other states in meeting the alliance with the British (Indian Embassy in Dublin, 2018). In a way, India acted as the pillar for the maintaining the British Empire in Asia. Extensive backing for the Great War by India is not a mere thing because it has exhausted the man power, the resources and essentials which were already squeezed out during the peak of colonial era. At the same time as Dr. Shasi Tharoor said “Losing life and limb in a foreign war does not honour, instead portrayed as occupational hazard” (Tharoor, 2015).

Coming to the World War II, the colonialism was indirectly facing a downsized time and hence the colonies including India i.e.; the Congress Party had the opinion to participate in the Second World War to achieve Indian Independence. As Mr. M.K. Gandhi was the centre of attraction in the Indian Independence I wish to address his opinion in this subject. He opined that the India must not participate in the World War even if its motive is its own independence from the British and other colonial powers (Bhattacharjee, 1989). It is to be kept in mind that the Indian Ocean acted as the major maritime trade route during this period and therefore the war at sea on traverse has affected the purity and sanctity of the Indian Ocean including the Indian waters. The Indian Navy today was then called the Royal Indian Marine which escorted the Royal Navy for local defence, patrolling in Burmese waters, fought against the Italian Navy and also traversed in its waters with newly armed fleets to protect Indian ports (Indian Navy, 2010). Cold War on the other hand may be described as Soviet Union-India v. the United States-Pakistan-China geopolitical alignment and Soviet arm sales to India in the immediate independence period of India to strengthen its defence power (Rajan Menon, 2022). But the Soviet fall and India's decision for diversifying weapon for defence in a way paved to melting relations with the states. It can be seen that there is nowhere in the history that talks about India's participation in dumping the weapons in the seabed. In the Post Cold War season, there were several researches popped out as to India is engaged and committed in arms race especially since Pokhran test (Toby Dalton, 2012). The objective behind the such as action is the enmity with its neighboring countries Pakistan and China. India's 2015 Maritime Security Strategy document highlights the minimum deterrence with assurance of massive nuclear retaliation (Jalil, 2018). In short it can be said that there is no prolonged history of India as to arms race in the seabed.

Existing Legal Framework

Historical analysis with respect to evolution of international law, World Wars and use of the sea, dumping of weapons in the Post World Wars and pitching of arms race since cold war period; points to importance of legal framework with respect to dumping of weapons, weapons in the seabed, nuclear non-proliferation, unauthorised access etc. Therefore, the legal framework on these aspects with be analysed and dealt here.

International Legal Framework

The aim of international law is to regulate the conduct of states and its people on a particular subject and here it is with respect to weapons in the seabed. Right now, a huge bundle of laws can be identified that caters for decelerating arms race or and dumping of weapons in the seabed. The presence of weapons in the seabed may be through dumping in the post-World Wars, emplacing, implanting, testing, storing etc. of weapons since the Cold War period and the militarization activities conducted by the states in the seabed. As already said, use of sea for war was found or in a way it is coined in the World Wars when the British did blockade of Germany.
The Post World War Period was mostly engaged on discussion with respect to how to decelerate the use of nuclear weapons in the on-going Cold War, rather than how to revive the sea from the dumped weapons of the World War. Considering the threat imbied in the use and other activities of the nuclear weapons in future, the Nuclear Non-Proliferation Treaty 1968 was enforced, wherein the states were dissected into nuclear weapon states and non-nuclear weapons states. That is a state that has manufactured or tested or exploded a nuclear weapon prior to 1st January 1967 is a nuclear weapon state which is Russia, China, France, the United States and the United Kingdom (UN Office for Disarmament Affairs, 2018). Article I prohibits transfer, assist, encourage or do other activities with respect to nuclear weapons to the non-nuclear states and Article II says not to receive, manufacture etc. of the nuclear weapons. The treaty further calls for international cooperation for nuclear weapon non-proliferation. Article X gives liberty to states to withdraw from the treaty considering in exercise of national sovereignty in extraordinary circumstances; by circulation of three months' notice to the parties and the United Nations Security Council. Other Treaties in line to this legislation are Anti-Ballistic Missile Treaty 1972, New Strategic Arms Reduction Treaty 2019 (between Russia and the United States), Convention on Cluster Munitions 2019, International Code of Conduct against Missile Proliferation 2019 and Treaty on Prohibition of Nuclear-Weapons 2023.

As the Cold War period faced widespread use of sea and its ocean floor for stocking, using, emplacing and implanting of arms and weapons especially by the nuclear weapon states, which lead to widespread discussion of taking up measures to regulate and prohibit such activities. In this note, the Seabed Arms Control Treaty 1971 was signed between the states which imposes total prohibition of emplacement, implantation, manufacturing, testing, storing etc. of weapons in the seabed or its ocean floor in the outer limit of 12 nautical mile referred in Part II of the Geneva Convention 1958. Like the Non-Proliferation Treaty, the Seabed Treaty also provides for the member states an option to withdraw in the interest of national sovereignty by giving three months' notice to other member states and the Security Council.

This research paper has already dealt regarding dumping of weapons during the World War Period. The weapons dumped include seized rifles, M1 Garands, mortars, nitrogen mustard, hydrogen cyanide and mustard gas. Even though peace arrived in 1945, the scientists were in hustle as to how to destroy the chemical weapons and has loaded in ships and dumped in the ocean. As per records, one million chemical weapons are dumped in the oceans (Curry, 2016). In the midst, several round tables, debates and discussions were conducted to put a complete stop on dumping of weapons and in this regard, the Biological Weapons Convention 1972 and the Chemical Weapons Convention 1993 were signed by states across the globe. The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons on their Destruction, hassle freely known as the Biological Weapons Convention 1972 imposes complete prohibition of developing and retaining of any sort of microbial or biological agents for armed purposes, through Article 1. Article 2 mandates the member states to destroy such weapons and agents with all safety precautions. Further Art. XIII provides for withdrawal from the convention by the member states. It is noted that there is no provision that bars destruction of biological weapon by dumping and does not cover the process of destruction to be followed by the member states. In furtherance, to deal with dumping of chemical weapons, the Convention on the Prohibition of the Development, Production and Stockpiling and Use of Chemical Weapons and on their Destruction 1993 was crafted. Article I impose total prohibition in developing, producing, assisting, using etc. of...
chemical weapons and gathers for international cooperation in destroying the same. Article II (1) define chemical weapons as it includes toxic chemicals, munitions and devices. Part IV (A) narrates that destruction of chemical weapons not to be done by dumping in waterbody.

During the peak Cold War, global efforts were relentlessly made for crafting a consolidated law to regulate the sea as a whole which finally churned out as the United Nations Convention on the Law of the Sea 1982. Several concepts in this legislation have been already discussed in conceptual part of this paper. What needed to be discussed keenly is the legality of dumping of weapons and arms race in the seabed. In this regard, first point needs to addressed is the rights of landlocked states in using the Exclusive Economic Zone and the Continental Shelf and the coastal state's control over its activities. Article 56 and 79 of the Convention deals with rights of the coastal states in the Exclusive Economic Zone and Continental Shelf respectively. In the Exclusive Economic Zone, the coastal states shall exercise control over other states by permitting other states in exploring, make installations and structures, marine scientific research in the zone. Whereas, the latter provision caters for duty on other states to take reasonable measures and permission from coastal states with respect to laying of submarine cables and pipelines and the coastal state has the right to control the same and may impose conditions. While advancing to the High Seas, it can be noted that no state can exercise sovereignty in the High Sea and is regarded as the common heritage of the mankind. But Article 88 puts restriction by stating that this area shall be used only for peaceful purposes. The reason by these provisions is handpicked is that the weapons in the seabed through dumping and arms races are located in these areas.

Nearing to the end of the Cold War, there was a noted acceleration in the involvement of states in nuclear weapons development, testing and launching and using it as deterrent factor against the rival states. This trend is still continuing which will be discussed in the latter part of this paper. Considering the imminent threats, the Comprehensive Test Ban Treaty 1996 was enforced. This treaty imposes obligation on member states not to carry out nuclear weapon tests and explosions and take all sort of preventives for the same. The document calls for international cooperation in implementing the provisions of the Treaty. Under Article II, Comprehensive Nuclear Test Ban Treaty Organization is established and is seated at Vienna. Article III mandates the member states to frame respective territorial legislation and shall implement effectively. The treaty also caters for on-site inspections. Further Article IX provides for withdrawal by member states. In 2002, the Strategic Offensive Reductions Treaty was entered between Russia and the United States to reduce the deployed strategic nuclear forces. The Treaty on the Prohibition of Nuclear Weapons 2017 was crafted to prohibit the use, threat of use, development, production etc. with any prohibited activities. Article II mandates declaration of owned, possessed etc. by member states within thirty days of signing the treaty. Article IV clearly states that the Treaty focuses on total elimination of nuclear weapons. The Treaty further deals with national implementation and caters for victim assistance and environmental remediation and calls for international cooperation for achieving its objects.

With respect to international legal framework, there is a bundle of laws regulating dumping of weapons and arms race especially the nuclear weapons. It is therefore ideal time to discuss the Indian legal framework regarding the same.

**Indian Legal Framework**

India is a land of antiqueness and history. Its practice in maritime field dates back to Vedic period which has been already discussed in the historical analysis part of this paper. The idea here is to check
whether India has a law that regulates dumping of weapons and arms race in the seabed. As the Constitution of India is the heart and soul of the function and liveliness of the state, let us analyse the same first. The Article 297 of the Constitution of India deals with the ownership and possession of resources in exclusive economic zone and other valuable things in the territorial waters and the continental shelf. There is no other provision that deals with the sea, seabed, arms race or weapons. In adherence to the United Nations Convention on the Law of the Sea II, the Territorial Waters, Contiguous Zone, Exclusive Economic Zone and other Maritime Zones Act 1976 was an enacted containing provisions identical to that in the Convention. One of the interesting parts of this legislation is, section 2 which defines the term limit as limit of Territorial Waters, Contiguous Zones, Exclusive Economic Zone and the Continental Shelf with respect to the mainland of India as well as the individual or composite group or group of islands constituting part of the territory of India. Section 3 narrates the sovereignty over the territorial waters which extend over twelve nautical miles including its seabed and subsoil. Section 6 defines and deals subjects of the Continental Shelf. It is the area comprising the seabed and subsoil that extend beyond the limit of territorial waters through natural prolongation of its land territory and shall exercise sovereign rights with respect to exploitation, exploration and management of resources. The provision is rather silent about the regulation of landlocked states and other states utilizing the resources in its jurisdiction. Also, it is noted that there is no provision to safeguard the national security of the state and the state is not vested with jurisdiction in this regard. Sections 11 and 12 of the Act speaks of punishment for contravening any provisions of the Act by individuals or companies and imposes imprisonment for period extending to three years or fine or both in case of individuals. In case of a company, the punishment will be determined with respect to the gravity of the offence. Therefore, this legislation does not directly regulates dumping of weapons or arms race in the seabed and allied activities.

India is a state party to the Biological Weapon Convention and the Chemical Weapons Convention and has crafted the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act 2005. The Act imposes total prohibition on manufacture, produce, develop, transfer, import etc. of the weapons of mass destruction throughout the territory. This Act has amended in 2022 and inserted section 12A prohibiting financial assistance for any activities relating to weapons of mass destruction, biological weapons or the nuclear weapons. Upon analysis, it is seen that the Act propels for different layers of punishment; i.e.; it punishes for aiding non-state actor or terrorist, unauthorized export and violation of other provisions of the Act. S.14 imposes punishment for the prohibitions under sections 8 and 10 for a minimum period of five years which may extend to imprisonment for life and shall be liable for fine.

In addition to the above legislations, the Civil Liability for Nuclear Damage Act, 2010 which is enforceable in and over the maritime areas of the territorial waters, in and over the other zones and shelf of India and on any installation or artificial structure or island under the jurisdiction or controlled by India. Section 6 of the Act elaborately discusses on limitation of liability of the individuals or companies. In case of nuclear reactors, it is one thousand five hundred crores and for research reactors it is one hundred crores. Chapter VI deals with offences and penalties whereby the scope of offenders not restricted to individuals and companies but widens government departments. These are the available legislations in India that deals with sea, seabed and weapons in relation to the topic in hand.

In this part, what is the available legal framework in
the international and the Indian parlance is discussed and restricted from conducting deep root analysis of the effectiveness of these laws. This is intentionally done as there is a need to discuss the recent trends and practices with respect to dumping weapons and arms race in the seabed, so that the effectiveness of the laws can be analysed in the best possible way.

**Present Trends & Practice**

Dumping of weapons and arms race in the seabed are two divergent modes of threat that leads to similar hot-iron effects to the states especially the coastal states. Weapons so dumped in the seabed are majorly non-deactivated and causes perpetual threat until the states destroy it effectively in adherence to the laws they have signed. Best example for such perpetual threat from dumped weapons in the seabed is the 2022 Nord Stream explosions in the Baltic, where thousands of tons of chemical weapons including corrosive mustard gas in the post-World War period (Ganeshan, 2022). The practice of dumping weapons by the states have downsized to a major extend but the non-completion of destruction of such weapons is turned out as an opportunity by the non-state actors in dumping their weapons in the seabed (Director-General OPCW, 2023). Since the Cold War, there has commenced a trend of militarization in the seabed or arms race at the seabed which is being accelerated through the intense development in the digital technology that provides ultra-excellent remote access (Marc Champion, 2023). Considering the immense developments in AI and digital technology, let us analyse the threads of arms race in the past eight years. In 2015, a newspaper report was published “You can find more mortars even 1000 times more in the sea and beach area which are dumped or deposited in the seabed of Dandrum Sea Area, that have the likelihood to explode” (Down Recorder, 2015).

The 2016 Report Card on Nuclear Disarmament and Non-Proliferation Efforts shows the increasing trend of nuclear power states in investing and engaging in nuclear weapon manufacturing, testing and usage (Arms Control Organization, 2016). As per news reports from Arms Control Association, the United States, China and Russia is reportedly keen on developing and deploying hypersonic weapons (Arms Control Organization, 2021). Reuters has recently reported that Russia has deployed hypersonic nuclear weapons in the Baltic Region and thereby threatens Sweden and Finland not to join NATO (Reuters, 2022). In May 5, 2022, it is reported that Russia is conducting weapon testing in the Baltic Sea (TDPEL, 2022). China has recently revealed its military dominance in the underwater through UAVs (Goldstein, 2022). On October 10, 2022, North Korea has reported that it has launched Ballistic missile from the submarine submerged in New Lake (JOSEPH TREVIITHICK, 2022). On October 6, 2022, Indian based media reported that India lacks technology and weapons to meet seabed warfare (Siddiqui, 2022).

On 9th January 2023, a European Media reported that the United States has done three AUV trials with French Military at the seabed (Defense News, 2023). On 02nd February 2023 VOA London channel reported that the Russia and other military states are engaged in developing weapons to target underwater pipelines and cables (Ridgwell, 2023). Further in 2022, the three nuclear bomb issue from the United States gained importance as the other states got solid clues regarding their shrouded object (Gorvett, 2022). Later, the United States has withdrawn from the Seabed Arms Control Treaty (Lesley Wroughton, 2019). The gravity that Asia would be exposed to, is being once said by Ankit Panda, the nuclear policy expert, that Asia will be witnessing the biggest arms race ever as on one corner it's the United States along with Japan and South Korea, the other China in partnership with Russia and on third North Korea (Lendon, 2023). Even the Arctic is not free from arms race. There is rigorous drill conducted in the Arctic waters by Russia and the NATO troops
Bochove, 2023). Therefore, it is now understood that how spontaneously the arms race is happening between the states across the globe. To add, no area of the sea is left free even which its marked neutralized in official papers.

**Analysis of Effectiveness of Legal Framework - Discussion**

The answer as to whether existing laws in India is capable of surviving the threats and risks from the dumped weapons in the sea and the arms race in the seabed will be churned out in this part. Let us first analyse the effectiveness of international framework. The United Nations Convention of the Law of the Sea 1982 is recognized as the magna carta of the law of the sea that deals with each and every aspect of the activities at sea. Dumping and arms race are not actually concentrated in the territorial waters where the coastal states have absolute sovereignty, but in the Exclusive Economic Zone and the Continental Shelf where the coastal state has only subjective jurisdiction. Subjects in which the state can exercise jurisdiction is exploration, exploitation and management of resources, installations, artificial islands and pipelines and cables and does not include national security subjects. Further the law does not provide for an option for coastal state to craft its own laws to add subjects where it can exercise sovereignty. Due to the same India is in tied hands position to exercise sovereignty with respect to concerns arising from an arms race or weapons in the seabed. Also, Article 88 reserves high seas to be used only for peaceful purposes. All the activities of militarization and arms race are non-peaceful activities which is being actively conducted till date. The recent trends show continuous and intentional violation of this provision by the states including those having veto power.

The set of legislations i.e.; the Nuclear Non-Proliferation Treaty, the Seabed Treaty, Comprehensive Test Ban Treaty, and the Biological Weapons Convention that handles very sensitive subject gives the member states the option to withdraw from the Treaty in the interest of national sovereignty by circulating notice to the Security Council and the member states. In many cases, it is doubtful that there is proper inquiry as to what is the extraordinary circumstance in the interest of national sovereignty and to check whether the state genuinely need withdrawal. Because withdrawal signifies intention and a license for the state to commit such activities that may lead to widespread fatalities. Also in the Biological Weapons Convention, there is no provision restricting destruction of biological weapons by dumping at sea.

In India there is no law that directly deals with dumped weapons and arms race in the seabed. The Weapons of Mass Destruction and Delivery Systems Act 2005 and the Civil Liability for Nuclear Damage Act 2010 is found fruitful for better future of India that regulates non-state actors who are now a days plays pivotal role in conducting unlawful activities including explosions. As the Act is crafted in adherence with the Biological Weapons Convention and the Chemical Weapons Convention, the territorial legislation is subjected to the bars with respect to interest of sovereignty of other nations rather than protecting the nation and its people.

Further on a general note, the international law is regarded as a weak law as it gives paramount interest to the national sovereignty and refrain itself from coercing the globe to do or abstain from doing an act. As the arms race is spiking at the global parlance with the aid of minute-wise growing technology, the nature of the international law and the institutions established under it can play only minor role to achieve the aims for which such law is being created. On the other side, India being a coastal state is always subject to the threat and risks emanating from the dumped weapon and arms race in the seabed and stood frustrated and handcuffed.
itself to mitigate the haphazard germinated from the dumped weapons and the arms race at the seabed. Let us now discuss what are the issues and challenges that India is facing to gain its survival strength in the era of increasing arms races and the dumped weapons in the seabed.

Issues & Challenges

Firstly, India is a coastal state and has higher risk of being exposed to an attack or accident from dumped weapons or arms race from the seabed. But India has no legislation that directly deals with and capable of regulating effects from dumped weapons and arms race in the seabed.

Secondly, such attack or accident if happened in the high seas and affected in the areas of Indian jurisdiction; as per the existing international law, India cannot exercise jurisdiction for something happened in the high seas as per Art.89 of the United Nations Convention of the Law of the Sea 1982.

Thirdly, the nuclear weapon states are in fact the veto power states, who violates the Nuclear Non-Proliferation Treaty and allied legislations without any hesitation. Their interest in nuclear deterrence in violation to the laws lead the law impotent. This creates discrimination in the protection of freedoms and rights of coastal states including India and its people.

Fourthly, lack of jurisdiction of India in the Exclusive Economic Zone and the Continental Shelf with respect to national security pose a huge threat to the existence of the territory itself, especially in the age where Russia's Tsunami Bomb is ready to be tested, deter and hit.

And fifthly, as these activities are conducted confidentially and secretly, the general public residing in the coastal states of India may fail to recognize suspicious incidents in this regard.

Suggestions

In the light of above drawn issues and challenges that India faced due to its existing weak and non-availability of laws in dumped weapons and arms race in the seabed, the following suggestions are put forth for the better security and future of this nation.

Firstly, there is a need to create awareness among the people residing in the coastal state and fisherman so as to identify and recognize suspicious event at the sea or the area near the shore.

Secondly, India shall need a specific legislation to enact its jurisdiction upon the effects of arms race or dumped weapons.

Thirdly, the appropriate government shall intake volunteers from fishermen community to assist the coast guard in monitoring the safety of the waters of this nation.

And finally, Indian Defence Forces shall adopt stringent defence measures taken in monitoring, preventing, acting and responding the dumped weapons and the arms race in the Indian Ocean.

Conclusion

The use of sea for non-peaceful purpose i.e.; for war, commenced in the Second World War. The effects of world war at sea were majorly sinking of warships, dumping of confiscated weapons etc. in different parts of the sea that too in very high volumes. Even though the participants of the war claimed their contribution towards dumping there were several tons of unclaimed non-deactivated weapons that are still posing threat to several states especially the coastal states. The peak Cold War period led to emplacement, implantation, storing etc. of weapons in the seabed that has spiked the risks in multiple folds. There after the digitalization era paved perfect platform for remote access of weapons and UAVs through artificial intelligence.
and technology which geared the nuclear weapon states who are also the veto power states increased their investment in development and testing of weapons. Presently, India being facing to Indian Ocean which is an open sea capable of traversing risk to the territory. As the International law gives thrust on the national sovereignty, the laws are not coercive in nature which in fact leads to least regulation of the situation in hand. As the technology is developing day by day, the risks would also increase. Even though India has a strong defence mechanism unlike its laws in this regard, we being the responsible citizens of this nation shall take interest in the same and assist and report to the concerned authorities upon any suspicion. This attitude of people of India shall act as a strong defence mechanism against the attack or accidents arising from dumped weapons and arms race in the seabed.

References:


Chelents v. Luckenbach Steamship Company, 244 (U.S. June 9, 1918).

Cooley v. Board of Wardens, 12 (U.S. 1851).


Dumped Weapons & Underwater Arms Race: Analysis of India’s Survival Strength with the Existing Legal Framework

http://www.thedownrecorder.co.uk/pages/?title=Undersea_arms_dump_is_giving_up_its_secrets


