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Legal concepts and principles governing coastal and marine commons

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This module is part of a series of learning modules centred around commons, created and published for internal circulation among the researchers of Dakshin Foundation. Information contained in these modules is collated from publications of various scholars. While these are not exactly ‘commons for dummies’, we have tried our best to simplify the concepts :)

Of all spaces considered as ‘commons’, coastal and marine areas are important conceptually and materially. The coast is an interface between land and sea. We refer to coasts as those areas that come under the exclusive sovereignty of a coastal state. Marine areas refer to areas that are outside the sovereignty of a state which includes the high seas, ocean floor or seabed. Marine and coastal areas are generally considered commons. As commons, these areas are not exclusive to any persons. Most marine areas are regarded as global commons available to the entire international community while certain marine areas are only meant to be accessed by nationals of a state¹.

The commons we refer to while talking about marine and coastal areas can be conceptually separated as common spaces, common resources and common knowledge. Common spaces include the sea and its components. Resources include both living and non-living such as fish, oil, natural gas and so on. Marine and coastal commons also include knowledge about common areas and resources that are developed over a period of time.

Marine and coastal commons were historically used for various purposes including navigation, trade, fishing, defence and so on (Swing 1976). Although these spaces were used initially for the above-mentioned purposes, currently there are competing multiple uses. Various kinds of research, exploration, exploitation of biological and mineral resources take place in marine and coastal areas. The ease

and ability to carry out intensive fishing through modern technologies like trawling have resulted in unsustainable extraction of common resources causing their exhaustion. Similarly, the seashore is being used for varied purposes such as power plants, industries, ports whose activities reportedly lead to degradation of common lands, its encroachment and pollution. Marine areas are also witnessing increased commercial activity due to transportation and mining leading to marine pollution, depletion of stock of fish and other resources. In addition, challenges like climate change, species extinction, sea erosion and sea level rise threaten the very existence of coastal and marine commons.

Now, the question before us is how will we ensure the effective management of these spaces which sometimes have overlapping or competing interests? Who will decide the best use of these spaces and resources? Will an industry which promises economic development and generation of employment be considered beneficial? Or will more importance be given to safeguarding rights of traditional fishing communities who have been using the area for generations for their subsistence and livelihood? Or should the commons be given protection with the long-term objective of conservation in order to combat climate change and disasters? This module will attempt to understand and unpack these issues. First part of the module deals with coastal commons and associated governing principles. The second part of the module discusses marine commons and governing principles associated with it.

¹State refers to a country

COASTAL COMMONS

Understanding the coast

The coast, for the purpose of this module, is referred to as the territorial sea (sea upto 12 nautical miles from shore, discussed in part two of this module) and shoreline of a nation. The territorial sea can be considered as a layered resource. The seabed and subsoil occur at the bottom, above it is the water column. In both the seabed and the water column there are many living and non-living species. The Indian coast is endowed with diverse geomorphological features. It consist of a variety of ecosystems such as sandy beaches, rocky foreshores, estuaries, river mouths, bays, lagoons, mangroves, mudflats, salt marshes, sea grass beds, coral reefs and so on².

The mainland Indian coast, with a coastline of about 5422.6 km, is classified into various zones and is regulated by the Coastal Zone Regulation Notification issued by the central Ministry of Environment, Forest and Climate Change. The coastal areas around the Andaman and Nicobar and Lakshadweep archipelagos are governed by the Island Protection Zone Notification of 2019 and the island coastline extends to about 2094 km. Under both the notifications, the following come under the scope of 'coasts':

- territorial sea and bed area
- water and bed area of tidally influenced water bodies
- land along the seafront (measured from the high tide line till 500 meters on the landward side)
- land along the tidally influenced water bodies that are connected to the sea(measured from the high tide line till 50 meters or length of the creek)
- inter-tidal zone

These coastal areas and their uses are regulated by the CRZ Regulations.

Uses, users and conflicts in coastal areas

The sea and its shores have varied ecological, economic and social importance. There are different uses of coastal areas such as industrial, agricultural, fisheries, ecological, strategic and defence. Fishery is one of the prominent uses of coastal ecosystem. The high productivity of coastal ecosystems has prompted many communities to settle along the shores³. Settlers have been predominantly artisanal communities depending on sea and shore to meet their livelihood. They carried out different kinds of

occupations, but primarily fishing. Fishing communities' have traditionally used coastal areas for fishing, storing their boats, fish drying, salt making, recreation and religious uses (Dakshin Foundation 2018). Mangrove forest, estuaries, territorial seas, coral reefs are important fishing areas in the coast. River mouths and bays become important fish landing centres or natural harbours. There are also designated fishing zones and fish breeding areas in the territorial and inland coastal waters. But there are several changes taking place within the fisheries sector. Mechanised fishing is marginalising artisanal fisheries⁴. Other new uses of the coast include projects relating to power generation, tourism, port development, special economic zones. The newer uses are marginalising traditional uses and depleting and degrading coastal spaces. Pollution from industries and offshore mining is threatening the ecosystems. Various developmental projects are occupying these lands or impacting them negatively.

Multiple uses of the same space is one of the distinct features of coast. For instance⁵, a natural estuary may be important for the fishing community as it is regarded as one of the most productive ecosystems in the world but at the same time, industries will also value it as a natural and safe harbour for building ports for transporting various goods. If there are calcium carbonate deposits in the estuary, then there is an addition of different set of interest groups. In addition to this matrix, there is also an aspect of conservation of the resources through laws. Areas which have rich biodiversity are declared as protected areas and resources that are sensitive are listed under schedules of the Wild Life Protection Act, 1972. Some protected areas are declared as national parks such as the Gulf of Kutchh and the Gulf of Mannar (Laxmilatha et al 2015). Some are declared as sanctuaries such as the Pulicat Lake and Chaoro Island of Goa (ibid). The divergent uses of the same resource lead to conflicts. The box inset illustrates an instance of such conflict (Panipilla & Marirajan 2014).

Fishing Communities of Gulf of Mannar

In a study on traditional knowledge of fishing communities, the authors (Robert Panipilla and Marirajan) report the history and use of several fishing islands of the Gulf of Mannar by fisher communities. Until the area was declared as National Park, several villagers in Ramanathapuram district used to occupy the villages and engage in various activities including fishing, seaweed collection, shell fishing in Gulf of Mannar and its 21 islands. Fishing for subsistence was old but was not documented since there wasn't much economic value. The authors carefully assemble a range of evidence sources that point to a tradition of fishing and use in many islands of the present day national park. The participatory study shows that villagers developed intricate

²For a detailed account of these please read, Ahana Lakshmi et al (2012): "The Challenged Coast of India",

A report prepared by PodyCAN in collaboration with BNHS and TISS, https://www.indiawaterportal.org/sites/indiawaterportal.org/files/the_challenged_coasts_of_india__october2012.pdf (last accessed on 6th February 2020)

³Infra at 5

⁴Government of India, (2017) Marine Fisheries Policy

⁵Situation based on Aghanashini estuary in the state of Karnataka. More information and resources available at <https://ecojpblog.wordpress.com/> (last accessed on 6th February 2020)



“Women of Aghanashini estuary picking up bivalves at the rivermouth”. Image credits- Ecological Justice Student Group Project, Azim Premji University

knowledge of the habitat and the resources of this region. Their knowledge related to oceanographic, meteorological, biological, ecological and navigational aspects. They have also developed many sustainable practices and taboos against unsustainable practices such as dynamite fishing. The 560 sq.km of islands were declared as a national park in 1986 and 10,002 sq. km was declared as the Gulf of Mannar Biosphere Reserve. A major conflict arose when fishing communities were prevented from entering the fishing grounds in the national park. There were also communities which collected sea cucumber and other marine species who were adversely affected after these species were listed on the protected schedules of the Wildlife Protection Act, 1972, prohibiting their catch. No settlement of fishing rights was carried out for this region as per the authors’ study. This study throws light into the issue of insecurity of livelihood and rights to those who had traditional rights over these commons.

Legal principles governing coastal commons

The varied uses, multiple users and accompanying issues and threats highlight the need to have a management system for the governance of coasts. In India, the coast is under the trust of the Indian State managed for the benefit of people of India. Historical evolution of principle of commons can be traced back to Roman law, when air, running water, the sea and coasts were considered property that was common to humankind. In the modern era, land areas and some

water areas adjacent to the coastline are allotted to different users under private ownership or management in order to carry on various activities. These uses are sanctioned in accordance with different rules and regulations. Some coastal areas are open to all while some are available only to certain users. For instance, the harbour of a port may not be accessible by the general public and will be under the control of relevant authorities of the port. Fish landing centres are earmarked for fishing communities to carry on their fishing related operations. In many cases, these areas are open to all but priority is accorded to fishing related activities, and certain authorities like the fisheries department may have oversight over the area and operations.

Since coastal areas, in particular, the territorial sea and seashore are common areas, various legislative and judicial sources have laid down that the governance of these areas are to be undertaken following certain principles as mentioned below:-

(a) Inalienability of common property

In a landmark case - *Jagpal Singh v. State of Punjab*⁶, the Supreme Court of India ruled that public lands cannot be alienated to private parties. In this case, the petitioners filed a complaint against Jagpal and others who had filled a village pond and encroached it by constructing buildings on it. The public pond was originally used by the villagers for common purposes as bathing and providing water for their cattle.

⁶Judgment of Supreme Court of India dated 28th January 2011 <https://indiankanoon.org/doc/1692607/>

The Supreme Court in this case passed directions to all State Governments to make schemes so that all illegal occupants in panchayat lands should be evicted and all public lands which are encroached should be restored to the panchayat for common use of its villagers.

Public lands are now managed by decentralised governmental institutions, namely the Panchayat Raj institutions. Depending on the population of the area, the panchayat, municipality or municipal corporation is in charge of maintaining the common characteristic of the public lands. These institutions have the duty not to alienate common properties in their jurisdiction as laid down by Jagpal Singh case.

(b) Public trust doctrine

An important principle that guides the management of common property resources is the public trust doctrine, according to which the State acts as a trustee of public property and holds and manages it for the welfare of the general public. The concept originated in Roman law which held that certain natural resources such as the air, running water, sea and seashores were commons. The commons idea ensured that the sovereign has trusteeship rights and a duty to ensure public access for the benefit of the people (Ghosh 2019). The public trust doctrine was later used by Professor Joseph L. Sax in his seminal article titled 'The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention' which expanded the scope of the doctrine to natural resources for its ecological and environmental values. The American Courts used this concept extensively to apply it to most ecosystems. The doctrine was adopted in Indian jurisprudence through the famous case of *M. C. Mehta v. Kamal Nath*⁷. In this case the Supreme Court of India held that all natural resources which are by nature meant for public use and enjoyment must be held in trust by the state and public at large are beneficiaries of these natural resources.

We will look at how the Indian courts have applied the public trust doctrine to a few cases relating to coasts. One such case was regarding the obstruction of public access to a popular tourist beach in Goa by construction of a resort. The case was *Fomento Resorts and Hotels v. Minguel Martins*⁸ and the Court held in this case that certain natural resources such as the river, sea shore are common properties and people are

entitled to uninterrupted use of it and state cannot transfer it to private parties if such a transfer interferes with the right of the public.

(c) Safeguarding customary rights of traditional communities

An accompanying concept is safeguarding customary rights as several coastal communities have traditionally used public lands and sea for generations. These rights can be protected through various ways. It can be claimed as the fundamental right to life under the Indian Constitution. It can be ascertained as the priority right to traditional fishing in territorial waters as guaranteed by the Marine Fisheries Regulation Act of each maritime state⁹. The CRZ Regulation is also a tool that assists traditional fishing communities as traditional fishing is recognised as a permissible activity in coastal regulation zones. Another useful concept is that of customary easement. Easement is the right of an individual (or individuals) to enter or use another's property. Customary easements are defined in Section 18 of the Indian Easements Act, 1882 as easements which 'may be acquired in virtue of a local custom'. Many fishing communities have easement rights to carry out fishing and allied activities in coastal waters and land. The case of *Ramdas Janardan Koli v. Secretary, MoEF*¹⁰ decided by the National Green Tribunal throws light into the protection of customary rights enjoyed by fishing communities of Bombay. These fishing communities have been engaged in traditional fishing and using the seawater for entering (ingress) and exiting (egress) the sea for catching fish from the sea. In the case, they allege that the proposed expansion of the port area of the Jawaharlal Nehru Port Trust will adversely affect their livelihood as the construction activities will destroy the mangroves that support the fish life and narrowing of the Nhava Sheva creek mouth will affect the smooth navigation of their boats to the sea. The Court recognised the right to fish in and around the port area and also the right to navigate as customary easement and as fundamental rights of the fishing community. A compensation of about 90 crores was awarded to the fishing families in that case.

(d) Principle of Sustainable Development

The principle of sustainable development is a prominent principle underlying environmental governance. It states that resources need to be sustainably used so as to meet the needs of current generation without compromising the

⁷M. C. Mehta v. Kamal Nath decided by Supreme Court on 13th December 1996 <https://indiankanoon.org/doc/1514672/>

⁸Fomento Resorts and Hotels v. Minguel Martins decided by Supreme Court on 20th January 2009 <https://indiankanoon.org/doc/1238478/>

⁹Refer Section 4(2) (a) of Kerala Marine Fishing Regulation Act, 1980; Section 5 (2) of Tamil Nadu Marine Fishing Regulation Act, 1983

¹⁰Ramdas Kohli v. State of Maharashtra, Judgment of National Green Tribunal dated 27th May 2014 <https://indiankanoon.org/doc/68770347/>

needs of future generation¹¹. Various environmental laws are enacted in furtherance of sustainable development such as the Environmental Protection Act, 1986 and the Biological Diversity Act, 2002. They play an important role in the implementation of this principle. The law that exclusively governs coastal area - the Coastal Regulation Zone Notification is notified under the Environmental Protection Act, 1986.

(e) *Public Participation*

The principle of public participation and consultation is another aspect that is pertinent in the governance of commons. This is also another principle of governance in general and environmental governance in particular as enunciated in Principle 10 of the Rio Declaration on Environment and Development, 1992.

And two more important principles are provided in Table 1

Table 1

Principles	What it says
Precautionary principle	“In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.” (Principle 15 of the Rio Declaration on Environment and Development)
Polluter Pays principle	“National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.” (Principle 16 of the Rio Declaration on Environment and Development)

MARINE COMMONS

Marine areas were originally outside the sovereign limits of a state, but nations have staked territorial claims to marine spaces over the past few centuries. These areas were conventionally used for navigation purposes especially navigation of merchant and military fleets (Treves 2018). With the emergence of newly independent states and modern technologies, marine areas also witness high level of extraction of living and non-living resources (ibid). These

include fishing in international waters, extraction of oil, gas, polymetallic nodules, cobalt rich crusts from seabed and ocean floor (Jadav 2016). Destructive fishing practices such as bottom trawling, overfishing of slowly growing deep sea species and polluting mining activities are considered as the biggest threat to these commons. Currently the international legal regime governing marine and coastal areas is the United Nations Convention on Law of Seas, 1982 and it categorises these areas into territorial waters, contiguous zone, exclusive economic zone, continental shelf, high sea and the Area as detailed in Image 1.

¹¹Principle 3 of Rio Declaration on Environment and Development, available at <https://www.cbd.int/doc/ref/rio-declaration.shtml>

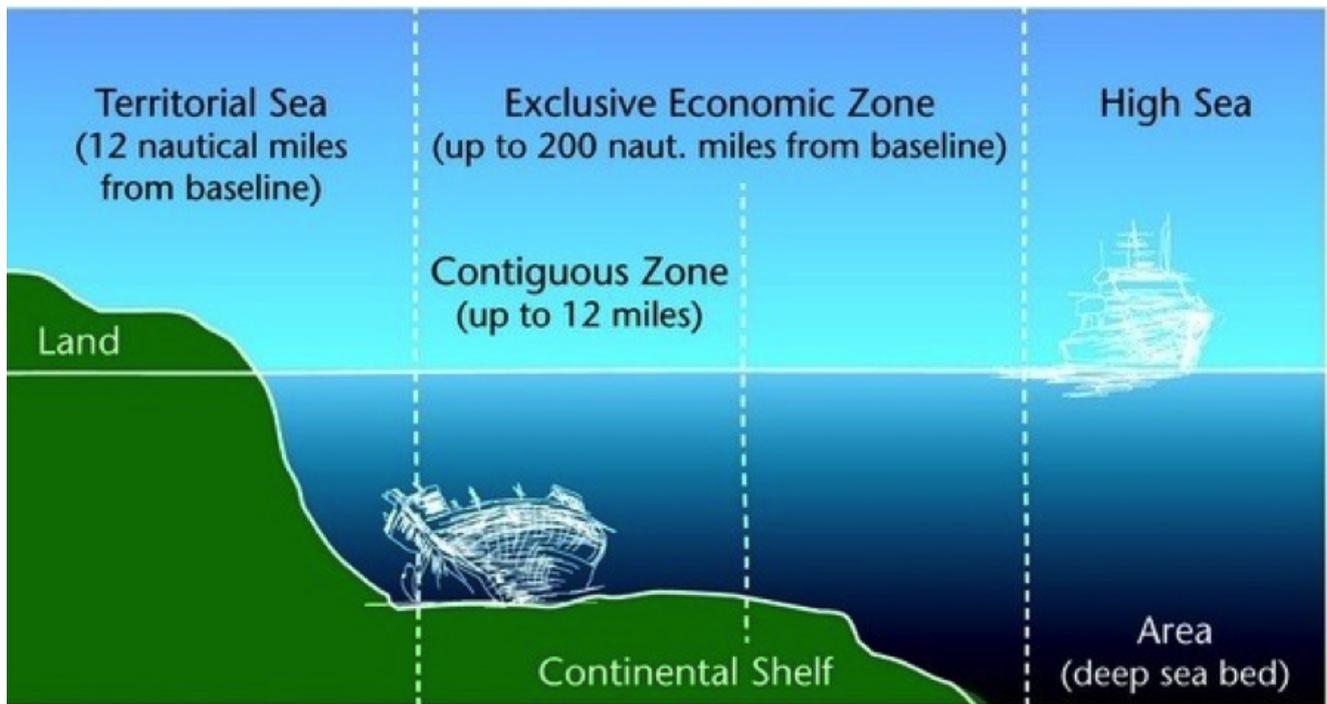


Image credits: Legalbites

Categories of Marine areas	Brief description
Territorial Sea	Sea upto 12 nautical miles from the baseline
Contiguous Zone	12- to 24 nautical miles
Continental Shelf	Continental shelf comprises the seabed and the subsoil in the submarine areas from the baseline to 200 nautical miles.
Exclusive Economic Zone	Exclusive Economic Zone comprises 12-200nm (22-370 km) areas. In these areas nations can exercise certain rights but they also have certain duties towards other nation states.
High Sea	The High seas refer to the sea beyond the EEZ. It is generally regarded as global commons governed by the principle of the freedom of the sea
The Area	Seabed, ocean floor and resources thereupon of the areas beyond the national jurisdiction commonly referred to as the "Area"

Principles for governing marine commons

Different principles determine the nature of the various categories of marine areas. The 'territorial sea' is considered as a part of the coastal areas since they are part of a nation's territory and under its exclusive jurisdiction and sovereignty. Hence, nations have sovereignty over these spaces and resources. The 'continental shelf' and 'Exclusive Economic Zone' also come under the jurisdiction of a nation state. But the high seas, and the 'Biodiversity Beyond National Jurisdiction (BBNJ)' areas are considered as global commons. These global commons are governed by two different principles. The high seas are governed by freedom of high seas (under the United Nations Convention on the Law of the Seas) whereas the principle applicable to the BBNJ Area is the common heritage of humankind. This part will confine the scope to understanding of various categories of marine areas and the above principles that govern them. It is important to note that various environmental law principles like precautionary principles and polluter pays principle are relevant to these areas.

(a) Rights over the Continental Shelf and the EEZ

Indian state has jurisdiction over the continental shelf and the Exclusive Economic Zone. The national sovereignty over these areas has been affirmed in the Constitution of India in Article 297 which states that "things of value within territorial waters or continental shelf and resources of the exclusive economic zone to vest in the Union"¹² The Supreme Court of India, in *Reliance Natural Resources Limited v. Reliance Industries Ltd*¹³ has held that it is the people of India who are the real owners of the natural resources and they have vested their ownership rights to the Union to be held in trust and good faith¹⁴. The power of the Union to use these resources is, thus, restricted by the doctrine of public trust. The Court laid down following conditions with respect to the natural resources extracted and exploited from the geographic zones specified in Article 297:

- i. No alienation of the resources without just and proper compensation;
- ii. No deprivation of access to resources to various users of different sector;
- iii. No extraction of resources without a clear policy statement of conservation,
- iv. Periodic evaluation of distribution and assessment of how greater equity can be achieved, as between sectors and also between regions;

v. Explicit permission of Union of India needs to be sought for allowing contractor or other agency to extract and distribute resources.

vi. no end user may be given any guarantee for continued access and of use beyond a period to be specified by the Government¹⁵.

This has been re-affirmed in the legislation titled 'Territorial Waters, Continental Shelf and Exclusive Economic Zone and other Maritime Zone Act, 1976.

Within EEZs, a coastal State has:

1. Sovereign rights for the purpose of exploring, exploiting, conserving and managing natural resources, whether living or nonliving, of the seabed and subsoil and the superjacent waters and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
2. Jurisdiction with regard to the establishment and use of artificial islands, installations, and structures, marine scientific research, and the protection and preservation of the marine environment, and other rights and duties provided for under international law.
3. Jurisdiction with regard to the preservation of the marine environment, including pollution control.

Even though the EEZ is considered as a zone where coastal states have certain rights and limited jurisdiction, this zone is not under the territory of a nation and other states have certain rights over this zone. Under Article 69 of UNCLOS, specific rights have been guaranteed for land-locked States in the EEZ to participate on an equitable basis in the exploitation of an appropriate part of the surplus of the living resources. Article 70 gives these rights to geographically disadvantaged States. But, the provisions of Articles 69 and 70 are not applicable in case of a Coastal State whose economy is overwhelmingly dependent on the exploitation of the living resources of its EEZ. For these purposes, even though the EEZ is considered as a zone where states can extend its sovereignty, it is still considered as commons. It promotes sharing in an equitable manner the resources in the EEZ but it is set in general, as a principle that has to be established by agreement between States¹⁶. A coastal state has discretionary powers for determining allowable catch, its harvesting capacity, the allocation of surpluses to other states and the terms and conditions established in its conservation and management laws and regulations. (Jurisdic-

¹²Article 297 of the Constitution of India

"297. Things of value within territorial waters or continental shelf and resources of the exclusive economic zone to vest in the Union

(1) All lands, minerals and other things of value underlying the ocean within the territorial waters, or the continental shelf, or the exclusive economic zone, of India shall vest in the Union and be held for the purposes of the Union

(2) All other resources of the exclusive economic zone of India shall also vest in the Union and be held for the purposes of the Union

(3) The limits of the territorial waters, the continental shelf, the exclusive economic zone, and other maritime zones, of India shall be such as may be specified, from time to time, by or under any law made by Parliament"

¹³<https://indiankanoon.org/doc/1070490/>

¹⁴Ibid Para 88

¹⁵Ibid para 99



Fishermen with their catch, Image credits: Robert Panipilla

tional Water Limitation)

(b)The High Seas and the principle of the freedom of the seas

The principle of the freedom of seas is a principle put forth in the 17th century according to which the sea (except a narrow strip around the nations) is free to all and belongs to none. This concept is founded in the concept of *res nullius* meaning that the sea belongs to no one in particular and is open to all. Under the United Nations Convention on the Law of the Sea, high seas are open to all nations states, coastal and landlocked. They have the following rights in the high seas¹⁷ :-

- i. freedom of navigation;
- ii. freedom of overflight;
- iii. freedom to lay submarine cables and pipelines,;
- iv. freedom to construct artificial islands and other installations permitted under international law;
- v. freedom of fishing, subject to the conditions laid down in section 2;
- vi. freedom of scientific research.

In short, it is a principle that facilitates access to all, to the resources of the sea. It can be seen as working in conflict with conservation norms that seek to limit such untrammelled freedoms over the seas.

(c) The 'area' of UNCLOS and the concept of Common Heritage of Humankind

Covering 65% of Earth's surface, deep sea is the area of the ocean below 200 m¹⁸. The seabed, ocean floor and subsoil resources are 'the areas' beyond the national jurisdiction governed by the UNCLOS¹⁹ and are considered as the 'common heritage of humankind' by Article 136 of UNCLOS. The concept of common heritage of humankind evolved from the pleas of Arvid Apdro, Malta's Ambassador to the United Nations, who urged nations of the world to recognise the importance of the oceans to all human's wellbeing, calling for safeguards of areas beyond national jurisdiction. According to this concept, all rights over resources in such areas are vested in humankind as a whole. There is common management of the activities undertaken in this area. The protection and regulation of the seabed of such areas beyond national jurisdiction is agreed by the international community to be implemented through a body - the International Seabed Authority (ISA), which is constituted by UNCLOS. The sea bed of the high seas hosts varied minerals and other resources. Despite an insufficient understand-

¹⁷Article 87 of UNCLOS

¹⁸IUCN, Deep Sea Mining: Issues Brief, 2018

¹⁹United Nations Resolution 1970

ing of such areas, exploratory mining for three of kinds of minerals are presently being undertaken. These minerals are polymetallic nodules, cobalt rich crusts and polymetallic massive sulphides. Currently an area of size of Mongolia (1.5 million sq.km) is given permission for exploration activities by the International Sea Authority. There are opinions that ISA has conflicting responsibilities – on the one hand promoting exploration and exploitation activities, and on the other protecting the marine environment²⁰. The IUCN has sought that these conflicting responsibilities be divested and separate bodies be creating to undertake such kind of activities²¹.

Most proposals for exploration of these areas are made by technologically advanced developed countries. In order to ensure equity between developed and developing countries, there are certain areas called “reserved areas”.

In addition to the principle of equity, the precautionary principle is of specific relevance to governing areas beyond national jurisdiction.

(d) Biodiversity in areas beyond national jurisdiction

The status of marine genetic resource beyond national jurisdiction is currently being negotiated by the nation states. There is debate on whether these genetic resources should be declared as common heritage of humankind or whether the principle of freedom of high seas should be made applicable to them.

Conclusion

This module discussed the governing principles and concepts of marine and coastal commons. Concepts and principles like national sovereignty, common heritage of humankind, freedom of high seas, public trust doctrine, customary easements, are paramount in governing these areas. In addition, the precautionary principle, polluter pays principle, rights of traditional communities to practice customary uses are also relevant. We have also discussed that there are multiple threats to these areas. There are also competing and overlapping interests over these spaces. In this context, there is a need to shift focus to protecting common spaces, resources, knowledge of coastal communities to alleviate poverty, ensure livelihood security and to conserve marine and coastal spaces and resources. The commons ought to ensure equitable access and its own sustainable use. The knowledge that communities have developed from the commons through generations needs to be recognised. Endogenous systems of governance of such spaces, resources and knowledge developed by various communities need to be respected and recognized as predominant governing system.

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²⁰IUCN, Deep Sea Mining: Issues Brief, 2018

²¹Ibid

