

Introduction

- The coastal areas of seas, bays, creeks, rivers, and backwaters which get influenced by tides up to 500 m from the high tide line (HTL) and the land between the low tide line (LTL) and the high tide line have been declared as **coastal regulation zone (CRZ)** in 1991.
- The coastal regulation zones have been declared by the Ministry of Environment, Forest and Climate change under the **Environment Protection Act 1986**.
- While the CRZ Rules are made by the Union environment ministry, implementation is to be ensured by state governments through their **Coastal Zone Management Authorities**.

HTL and LTL

- **High Tide Line:** HTL means the line on the land up to which the highest water line reaches during the spring tide.
- **Low Tide Line:** Similarly, it means the line on the land up to which the lowest water line reaches during the spring tide.
- **Spring tides:** The position of both the sun and the moon in relation to the earth has direct bearing on tide height. When the sun, the moon and the earth are in a straight line, the height of the tide will be higher. These are called spring tides and they occur twice a month, one on full moon period and another during new moon period.

Importance of Regulation of Coastal Zones

- Protection of ecologically Sensitive Areas like mangroves, coral reefs which act as a shield against tsunami and cyclone
- Improving the lives of coastal communities like fishing communities
- Resilient measures for mitigating impacts of Climate Change and high-intensity Cyclones
- To balance development with conservation of the coastal environment

Timeline of CRZ regulations

- In India, the Coastal Regulation Zone (CRZ) Rules govern human and industrial activity close to the coastline, in order to protect the fragile ecosystems near the sea.
- They restrict certain kinds of activities — like large constructions, setting up of new industries, storage or disposal of hazardous material, mining, reclamation and bunding — within a certain distance from the coastline.

- Coastal Regulation Zone (CRZ) notification was first issued in 1991 by Ministry of Environment, Forest and Climate Change (MoEFCC) under **Environment (Protection) Act, 1986** with the mandate to take measures to protect and conserve our coastal environment.

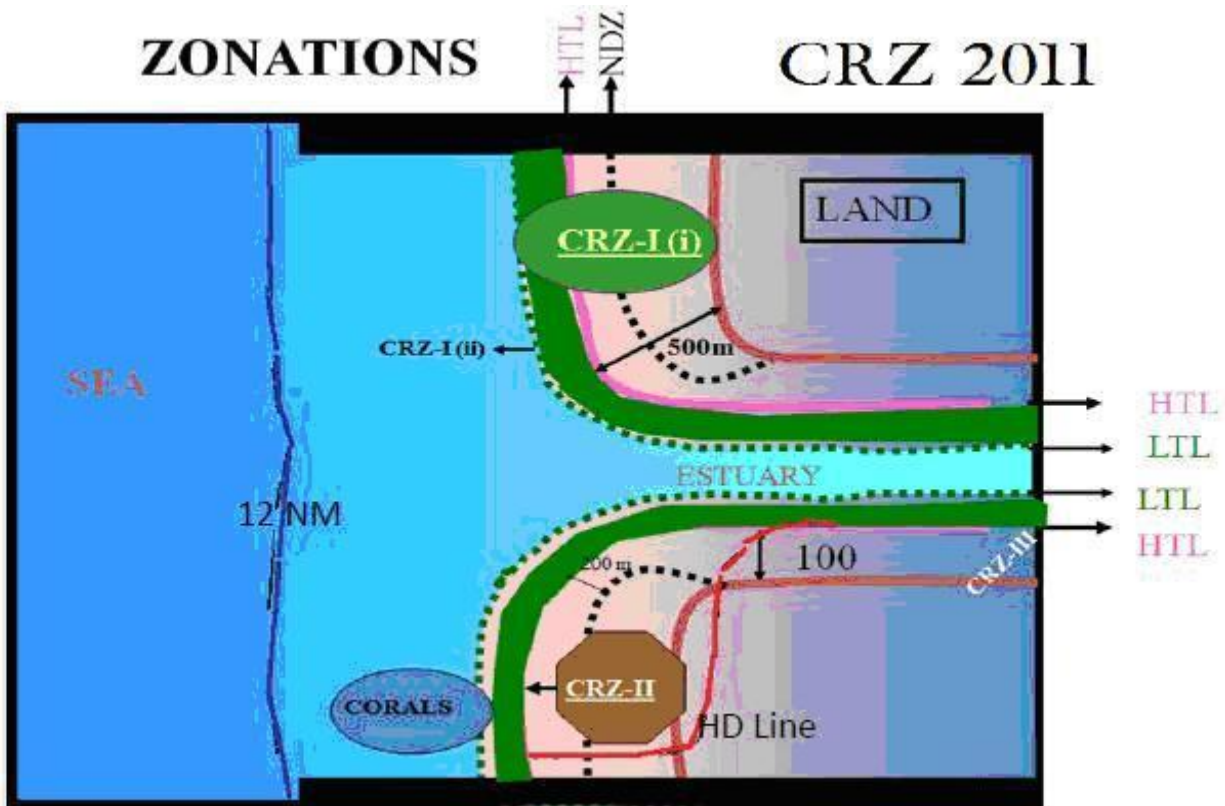
- **Shortcomings of CRZ 1991:**

- Uniform regulations for the entire Indian coastline without taking into account the diversity in terms of biodiversity, demographic patterns, natural resources, etc.
 - Laid no clear procedure for obtaining CRZ clearance.
 - Post clearance monitoring and enforcement mechanism was not laid out.
 - Measures/rules to check pollution emanating from land-based activities were not included.
 - Caused hardships to traditional communities living in ecologically sensitive coastal stretches (fishermen, slum dwellers, etc.).
- Several amendments were made in the CRZ 1991 notification which was consolidated and issued in the **CRZ 2011 notification**. The CRZ 2011 notification took into account the issues of CRZ 1991.

- **Objectives of CRZ 2011:**

- To conserve and protect coastal stretches;
 - To ensure livelihood security to the fishing & local communities living in the coastal areas;
 - To promote development in a sustainable manner based on scientific principles, taking into account natural hazards and sea-level rise.
- In December 2018, Union cabinet approved the **Coastal Regulation Zone (CRZ) Notification, 2018**.
- CRZ 2018 notification is based on recommendation of **Shailesh Nayak committee** constituted by the MoEFCC in June 2014 for comprehensive evaluation of provisions under CRZ 2011 notification as demanded by various coastal States/UTs along with other stakeholders.

Classifications of Coastal Zones under CRZ Notification 2011



- **CRZ-I (ecologically sensitive areas like mangroves, coral reefs, biosphere reserves etc.).**
 - No new construction shall be permitted in CRZ-I except
 - Projects relating to the Department of Atomic Energy;
 - Construction of trans-harbour sea link and roads without affecting the tidal flow of water, between LTL and HTL. Etc.
 - Between Low Tide Line and High Tide Line in areas which are not ecologically sensitive, the following may be permitted;
 - Exploration and extraction of natural gas;
 - Construction of basic amenities like schools, roads, etc. for traditional inhabitants living within the biosphere reserves;
 - Salt harvesting by solar evaporation of seawater;

- Desalination plants;
- Storage of non-hazardous cargo such as edible oil, fertilizers within notified ports;
- **CRZ-II** (Areas which are developed up to the shoreline and falling within the municipal limits; includes built-up area – **villages and towns** are that are already well established),
 - Buildings are permissible on the landward side of the hazardous line.
 - Other activities such as desalination plants are also permissible.
 - Some construction is permitted only as per guidelines specified by the notification.
- **CRZ-III:** Areas that are relatively undisturbed and do not fall under either in Category I or II and also include rural and urban areas that are not substantially developed.
 - Between 0-200 metres from HTL is a No Development Zone where no construction shall be permitted.
 - Only certain activities relating to agriculture, forestry, projects of Department of Atomic Energy, mining of rare minerals, salt manufacture, regasification of petroleum products, non-conventional energy sources and certain public facilities may be permitted in this zone.
 - Between 200-500 metres of HTL, those permitted in 0-200 metres zone, construction of houses for local communities and tourism projects are permissible.
- **CRZ-IV:** The aquatic area from low tide line up to territorial limits is classified as CRZ-IV including the area of the tidal influenced water body.
 - There is no restriction on the traditional fishing undertaken by local communities.
 - No untreated sewage or solid waste shall be let off or dumped in these areas.
- A separate draft **Island Protection Zone** Notification has been issued for protection of the islands of Andaman & Nicobar and Lakshadweep under Environment (Protection) Act, 1986.

Ecologically sensitive areas (ESA) given Special Dispensations under CRZ 2011

- Sunderbans, Gulf of Khambat and Gulf of Kutch, Malvan, Achra-Ratnagiri in Maharashtra, Karwar and Coondapur in Karnataka, Vembanad in Kerala, Bhaitarkanika in Orissa, Coringa in East Godavari and Krishna in Andhra Pradesh would be declared as **Critical Vulnerable Coastal Areas (CVCA)** and the integrated management plan would be prepared for each of these areas in consultation with the local communities.
- Beaches such as Mandrem, Morjim, Galgiba and Agonda in Goa have been designated as turtle nesting sites and protected under the Wildlife Protection Act, 1972.
- No developmental activities shall be permitted in these areas.

Shailesh Nayak Committee Report on Coastal Regulation Zone

- Shailesh Nayak committee was constituted in June 2014, and it submitted its report in January 2015.
- The committee recommended relaxation on the terms set up by the CRZ 2011 notification. The major objective behind the recommendations was to boost tourism, port construction and real estate.
- The committee suggested diluting the regulatory powers of the Central Government in the coastal areas. Except for those activities which require environmental clearances all other activity should fall under the ambit of state and local planning bodies.
- Based on the recommendations of Shailesh Nayak committee, the suggestions were given by the coastal states and union territories, and the CRZ 2018 notifications were issued.

Diluted by design

Hotels, resorts and temporary tourism facilities can now be built closer to the shore; mangroves to make way for ports, harbours

Coastal Regulation Zone Notification, 2011

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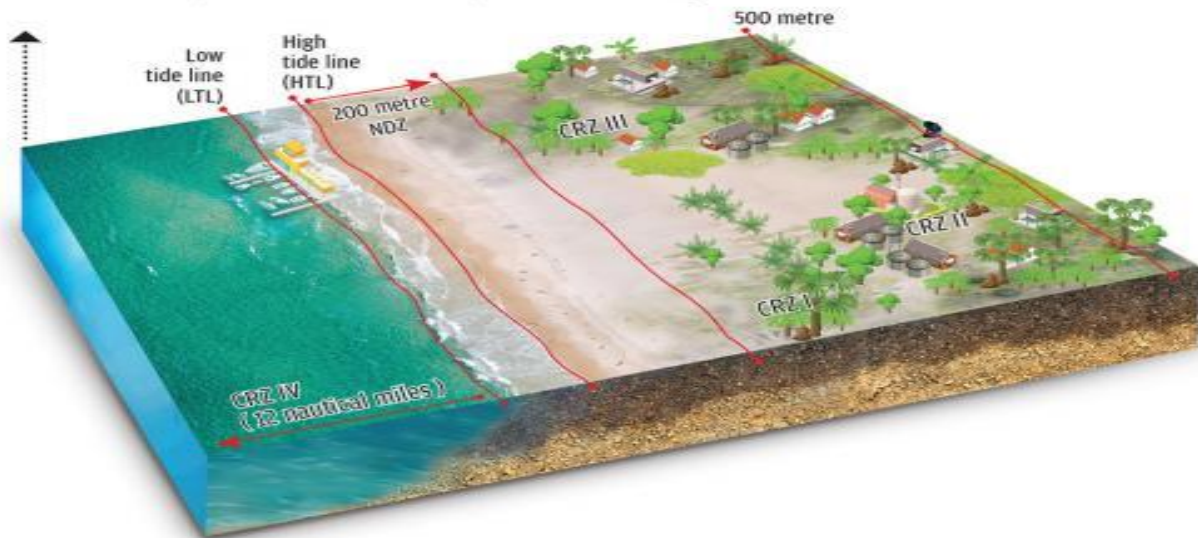
CRZ I: Eco-sensitive and intertidal areas

CRZ II: Areas which have been developed up to or close to the shore

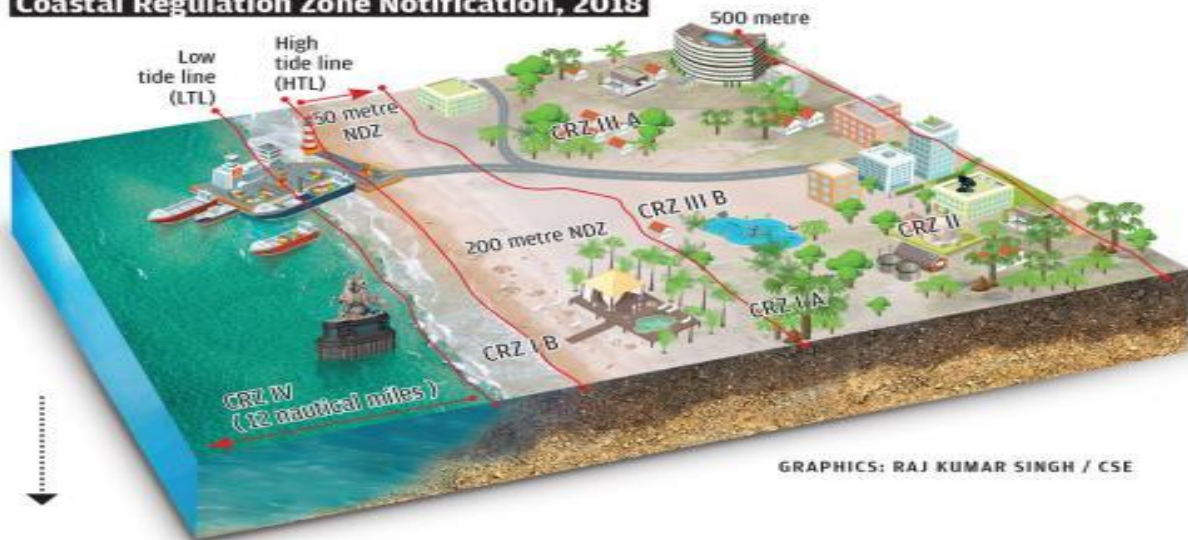
CRZ III: Areas that are relatively undisturbed and do not fall under CRZ-I or CRZ-II

CRZ IV: Area between Low Tide Line and 12 nautical miles into the sea/ tidal influenced waterbodies

NDZ: No development zone that extends up to 200 m from High Tide Line towards land in CRZ-III area



Coastal Regulation Zone Notification, 2018



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CRZ I A: Eco-sensitive areas

CRZ I B: Inter-tidal areas

CRZ II: Areas which have been developed up to or close to the shore

CRZ III A: CRZ-III areas, where the population density is more than 2,161 sq km as per 2011 Census

CRZ III B: Areas with population density of less than 2,161 per sq km, as per 2011 Census

CRZ IV A: 12 nautical miles from the Low Tide Line towards the sea

CRZ IV B: Tidal influenced waterbodies

NDZ: 50 metres from High Tide Line in CRZ III A areas, 200 m from HTL in CRZ-III B areas