

A coastal scene featuring waves crashing against a sandy beach and rocky shore. The sky is filled with dramatic, dark clouds, suggesting a storm or late afternoon light. The water is a deep blue, and the sand is a light tan color. The overall mood is serene yet powerful.

COASTAL REGULATION ZONE

College of Fisher

Introduction

- Coastal zone - Transition zone between marine & terrestrial
- Coastal beaches, mud flats, wet lands, mangroves, wet land, sea grass ecosystem
- Estimated 4800 billion tonnes of domestic waste, 65 million tonnes of solid waste to the extend of 50 million cum.m generated every year are reaching the sea.
- Continuous onslaught on the coastal areas is resulting not only in diminishing the extent of mangroves , coral reefs and affecting fish breeding but also impacting the lives of over 200 million people who inhabit the long coastline.
- Therefore a plan of action based on sustained utilization is necessary.

CRZ



- According to **Clause(d) of sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986**, the Central Government hereby declares “ *the coastal stretches of seas, bays, estuaries , creeks, rivers and backwaters which are influenced by tidal action (in the landward side) up to 500 meters from the High Tide Line (HTL) and the land between the Low Tide Line (LTL) and the HTL are referred as Coastal Regulation Zone ”* , the setting up and expansion of industries , operations or processes etc are restricted in Coastal Regulation Zone(CRZ).

GOI)

MoEF,

Genesis

- **1981 November:** The then PM Smt. Indira Gandhi took initial measures to protect the ecological balance in the coastal area of our country by writing a letter to all the CM of the coastal states.
- **1982:** the ministry of Environment setup working groups to prepare environmental guidelines for the development of beaches and coastal areas.
- **1983 July:** Environmental guidelines were promulgated.
- **1985-06:** Launched an integrated project called ***Monitoring of coastal waters*** for assessing the status of coastal pollution up to 5Km- DOD & MoEF

- **1989**: Draft of CRZ notification was published
- **15th December, 1990** : MoEF issued notification against the declaration of the coastal stretches as regulation zones- imposed restrictions on industries, operation and processes in the zone.
- **9th February, 1991** : based on the EP Act 1986, MoEF issued CRZ notification.
- **2011 (January)** : Revised CRZ notification under EP Act 1986

CRZ Notification, 1991

Coastal regulation zone is the boundary from the high tide line up to **500m** in the land -ward side.

- Area between the low and high tide line.
- In the case of rivers, creeks and backwaters, the distance from the high tide level shall apply to both sides and this distance shall not be less than 100 meters or the width of the creek, river or backwater whichever is less.

Categories of CRZ

Coastal stretches within 500 m of High Tide Line of the landward side are classified into four categories:

- Category I (CRZ I)
- Category II (CRZ II)
- Category III (CRZ III)
- Category IV (CRZ IV)

CRZ I

Areas that are *ecologically sensitive and important, such as, national parks/ marine parks, sanctuaries, reserved forests, wildlife habitats, mangroves, corals/ coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/ historical/ heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas*

- Area between the Low Tide Line and the High Tide Line

CRZ II

- The areas that have already been developed up to or close to the shoreline. For this purpose, “**developed area**” is referred to as that *area within the municipal limits or in other legally designated urban areas which is already substantially built up and which has been provided with drainage and approach roads and other infrastructural facilities, such as, water supply and sewerage mains.*

CRZ III

- Areas that *are relatively undisturbed and those which do not belong to either Category-I or II*. These will include coastal zone in the rural areas (developed and undeveloped) and also areas within municipal limits or in other legally designated urban areas which are not substantially built up.

CRZ IV

- *Coastal stretches in the Andaman and Nicobar, Lakshadweep and small islands except those designated as CRZ-I, CRZ-II or CRZ-III.*

Permissible Activities in CRZ 1

- Project relating to Dept. of Atomic Energy
- Pipelines, conveying systems including transmission lines facilities **that are essential for activities permissible under CRZ-I [(d)**
- **Operational construction of jetties, wharves or construction, development or modernization of jetties and wharves in the Union territory of Lakshadweep**
- Installation of weather radar for monitoring of cyclone movement and prediction
- Construction of trans-harbour sea-links **between the LTL and HTL**

CONTD..

Area in between LTL and HTL are not ecologically sensitive and important

- Exploration and extraction of Natural Gas,
- **Construction of dispensaries, schools, public rain shelters, community toilets bridges, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants**
- salt harvesting by solar evaporation of sea water **desalination plants**
- **storage of non-hazardous cargo such as edible oil, fertilizers and food grain within notified ports**
- **construction of trans-harbour sea links**

In CRZ II

- Buildings shall be permitted only on the landward side of the existing road (or roads proposed in the approved Coastal Zone Management Plan of the area)
- Facilities for receipt and storage of petroleum products and liquefied natural gas
- Facilities for generating power by non conventional energy sources.
- Construction of airstrips and associated facilities in the Islands of Lakshadweep and Andaman and Nicobar

In CRZ III

- The area up to 200 metre from the High Tide Line is to be earmarked as ‘No Development Zone’
- Permissible activities
- agriculture, horticulture, gardens, pastures, parks, playfields, forestry [projects relating to the Department of Atomic Energy],⁴² [**mining of rare minerals**]⁴³ and **salt manufacture from seawater [facilities for receipt and storage of petroleum products and liquefied natural gas** may be permissible
- facilities for generating power by non conventional energy sources, desalination plants, weather radars and construction of airstrips
- Reconstruction alterations of an existing authorised building permitted
- In notified SEZ, construction of non-polluting industries in the field of information technology and other service industries,

CRZ IV

For islands

- No new construction of buildings shall be permitted within 200 metres of the HTL [except facilities for generating power by non conventional energy sources, desalination plants and construction of airstrips and associated facilities]
- The buildings between 50 and 500 metres from the High Tide Line shall not have more than 2 floors (ground floor and 1st floor), the total covered area on all floors shall not be more than 50 per cent of the plot size and the total height of construction shall not exceeds 9 metres;

Need of CRZ Notification, 2011

- Uniform regulation for entire coastline, which is highly diversified in terms of biodiversity, hydrodynamic conditions, demographic patterns, natural resources & geological features
- No clear procedure for obtaining CRZ clearance, no time stipulated
- No concrete steps were indicated in the 1991 Notification with regard to the pollution emanating from land based activities.
- 1991 Notification sought to regulate all developmental activities in the inter-tidal area and within 500 metres on the landward side
- The restrictive nature of the 1991 Notification caused hardships to the persons/communities living in certain ecologically sensitive coastal stretches

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- The 1991 Notification has been amended almost 25 times in consideration of requests made by various State Governments, Central Ministries, NGOs etc. In addition, there are also several office orders issued by Ministry of Environment and Forests clarifying certain provisions. The frequent changes to the 1991 Notification have been consolidated in the 2011 Notification.
- The 2011 Notification takes into account and address all the above issues in a comprehensive manner, relying on the recommendations made in the “Final Frontier” Report by the Committee chaired by Dr. M.S. Swaminathan on Coastal Regulation

CRZ 2011

On the 7th of January 2011, Minister of State for Environment and Forests (MOEF), Jairam Ramesh, released the Coastal Regulation Zone (CRZ) Notification, 2011 (Government of India 2011).

● OBJECTIVES

- To ensure livelihood security to the fishing communities and other local communities living in the coastal areas;
- To conserve and protect coastal stretches and;
- To promote development in a sustainable manner based on scientific principles, taking into account the dangers of natural hazards in the coastal areas and sea level rise due to global warming.

Classification of CRZ Areas

- CRZ area was classified as **CRZ-I (ecological sensitive)**, CRZ-II (built-up area), **CRZ-III (Rural area)** and **CRZ-IV (water area)**.
- In the 2011 Notification the above classification is retained. The only change is the inclusion of CRZ-IV, which includes the water areas up to the territorial waters and the tidal influenced water bodies.
- 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

Areas in CRZ I



- Ecologically sensitive areas and the geomorphological features that play a primary role in maintaining the integrity of the coast.
- The area between Low Tide Line and High Tide Line.

- **Mangroves**, (in case mangrove area is more than 1000 square metres, a buffer area of 50 metres shall be provided); **Corals and coral reefs** and associated biodiversity; **Sand Dunes**; **Mudflats** which are biologically active; **National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected** areas under the provisions of Wild Life (Protection) Act, 1972 (53 of 1972), the Forest (Conservation) Act, 1980 (69 of 1980) or Environment (Protection) Act, 1986 (29 of 1986); including **Biosphere Reserves** encompassing (**Salt Marshes**; **Turtle nesting grounds**; **Horse shoe crabs habitats**; **Sea grass beds**; **Nesting grounds of birds**; **Areas or structures of archaeological importance and heritage sites**);

Permissible activities

- No new construction shall be permitted in CRZ-I except;
- **Projects relating to the Department of Atomic Energy;**
- **Pipelines, conveying systems including transmission lines;**
- **Facilities that are essential for activities permissible under CRZ-I;**
- **Installation of weather radar for monitoring of cyclones movement and prediction by the Indian Meteorological Department;**
- **Construction of trans-harbour sea link and roads on stilts or pillars without affecting the tidal flow of water, between LTL and HTL.**
- **Development of green field airport already permitted at only Navi Mumbai**

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- 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 dispensaries, schools, public rain shelter, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required to meet the needs of traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA.
- Salt harvesting by solar evaporation of seawater;
- Desalination plants;
- Storage of non-hazardous cargo such as edible oil, fertilizers and foodgrains within notified ports

Areas in CRZ II



- The Notification defines CRZ-II as the areas which **are developed up to or close to the shoreline and falling within municipal limits.**
- **Permissible Activities**
- Buildings are permissible on the landward side of the existing road, authorized structure or hazardous line where there are no authorised structures.
- Other activities such as desalination plants and storage of non-hazardous cargo are also permissible.
- The Floor Space Index and Floor Area Ratio for construction projects shall be as on 19.2.1991 except for those specified in the CRZ Notification, 2011 which is mainly for slum redevelopment and redevelopment of dilapidated structures.

Areas in CRZ III



- CRZ-III areas are those 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.
- Permissible Activities
- Between 0-200 metres from HTL is a **No Development Zone** where no construction shall be permitted. Only certain activities relating to agriculture, horticulture, gardens, pasture, parks, play field, forestry, projects of Department of Atomic Energy, mining of rare minerals, salt manufacture from seawater, facilities for receipt, storage, re gasification of petroleum products and liquefied natural gas, facilities for generating power by non-conventional energy sources and certain public facilities may be permitted in this zone.

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- Between 200-500 metres of HTL, construction and repair of houses of local communities, tourism projects including green field airport at Navi Mumbai, facilities for receipt, storage, degasification of petroleum products and liquefied natural gas, storage of non-hazardous cargo, desalination plants, facilities for generating power by non-conventional energy sources are permissible.

Areas in 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.
- Permissible Activities :
 - There is no restriction on the traditional fishing and allied activities undertaken by local communities. However, no untreated sewage, effluents or solid waste shall be let off or dumped in these areas.
 - A comprehensive plan for treatment of sewage generating from the city must be formulated within a period of one year from the date of issue of this Notification and be implemented within two years thereafter

Salient Features

- The fishing communities traditionally live in the coastal areas, they have been given primary importance when drafting the CRZ Notification 2011.
- The 2011 Notification lists out certain measures that have to be taken to prevent pollution in the coastal areas/coastal waters. The disposal of wastes and effluents into coastal waters is a prohibited activity.
- In the 2011 Notification special provisions have been inserted, keeping in view the diverse problems faced by local communities like those individuals living in slums, those inhabiting old and unsafe buildings in Mumbai, people living in islands in the backwaters in Kerala, local communities living in the coast of Goa and the communities living in ecologically sensitive areas of the Sunderban etc.

Provision to Prevent Pollution

- The disposal of wastes and effluents into coastal waters is a prohibited activity.
- All coastal states are required to ensure that:
 - the existing practice of discharging untreated waste and effluents is phased out within a period not exceeding two years.
 - Dumping of solid waste is phased out within one year from the commencement of the Notification.
 - An Action Plan is to prepared for dealing with pollution in coastal areas and waters and in a time bound manner.
 - The Action Plan is submitted to MoEF who would provide technical and financial assistance

New Provision in 2011 notification

- The entire water area which includes 12 nautical miles in the sea and the entire water area of a tidal water body such as creek, river, estuary will be regulated by the Notification
- In order to safeguard livelihood and property of local communities including the infrastructure along the coastal areas the hazard line has been introduced which will be demarcated by the offices of the Survey of India.
- Special dispensation has been provided to Greater Mumbai, Kerala, Goa and Critically Coastal Vulnerable Areas such as the Sunderban

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- In view of the erosion experienced along the coastal areas due to man-made interventions the shoreline will be mapped using up-to-date satellite images and the shorelines will then be subsequently classified as ‘high eroding’, ‘medium eroding’ and ‘low or stable stretches’. No foreshore development would be permissible in high eroding areas.
- To meet the increasing demands of housing for fishing communities and other traditional coastal communities, the No Development Zone which is of 200 metres from the High Tide Line is being reduced to 100m.

Provisions retained in CRZ notification 2011 from the

previous

- The jurisdiction of 500 metres from the High Tide Line along the seafront and 100 metres from the High Tide Line along the tidal influenced water bodies has been retained.
- The categorisations of the Coastal Regulation Zone area as Coastal Regulation Zone-I (ecologically sensitive areas), Coastal Regulation Zone-II (urban areas), Coastal Regulation Zone-III (rural areas) have been retained.
- The methodology to be utilised for the preparation of Coastal Zone Management Plans demarcating Coastal Regulation Zone-I, II and III has been retained.

Dropped provisions in CRZ Notification, 2011

- No more SEZ projects in Coastal Regulation Zone area will be allowed.
- The provisions pertaining to the regulation of Andaman & Nicobar and Lakshadweep have been dropped and in view of the specific geographical issues, environmental sensitivity and to meet the needs of the islanders, a separate Notification has been issued called IPZ Notification.
- The provisions restricting the expansion of housing for the rural communities in Coastal Regulation Zone-III area have been dropped.



THANKS