

## **Coastal Zone regulations**

India has about 7500 kms of coastal areas including islands, many segments of which are fragile and sensitive from the environmental angle. Apart from the high population density, the coastal areas are also vulnerable and sensitive to the impacts of possible sea level rising, rise in the high tide levels, cyclones and storms etc. which are influenced by climate change. Development activities in the coastal areas are regulated by means of the Coastal Regulation Zone (CRZ) Notifications and Integrated Coastal Zone Management (ICZM) Plans made under them. The National Environment Policy (NEP) recognizes that there is need to ensure that the regulations are firmly founded on scientific principles, in order to ensure effective protection to valuable coastal environmental resources without impeding livelihoods or legitimate coastal economic activity or settlements, or infrastructure development. The NEP accordingly envisaged an action plan to strengthen the ICZM and review the same at pre-determined intervals. The Plan also provided for decentralization of the responsibility for the clearances of specified projects to State Environmental Authorities, exempting activities which do not cause significant environmental impacts and are consistent with approved ICZM plans.

Coastal environmental resources include mangroves, coral reef, estuaries, coastal forests, genetic diversity, sand dunes, geomorphologies, sand beaches, and land for agriculture and human settlements, coastal infrastructure, and heritage sites. The NEP notes that in the recent years there has been significant degradation of coastal resources mainly on account of poorly planned human settlements, improper location of industries and infrastructure, pollution from industries and settlements, and overexploitation of living natural resources<sup>77</sup>. Impact of climate change by way of sea level and high tide rising will have direct and indirect adverse impact on coastal reaches in the future. The NEP accepts that the main cause of these 'proximate factors' is the inadequate institutional capacities for, and participation of local communities in, the formulation and implementation of coastal management plans, the open access nature of many coastal resources, and lack of consensus on means of provision of sanitation and waste treatment. The specific measures proposed include construction of coastal protection infrastructure and cyclone shelters (Adaptation) as well as plantation of coastal forests and mangroves (Mitigation). The National Action Plan (NAP) aims to focus mainly on two elements, namely, coastal area protection (Mitigation) and early warning systems (Adaptation). The NAP includes several programmes for coastal area development and protection. In the audit of coastal management, all the above factors should receive adequate attention.

The notification issued by MOEF on Coastal Zones 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 m from the High Tide Line (HTL) and the land between the Low Tide Line(LTL) and HTL as Coastal Regulation Zone (CRZ). HTL is the line on the land up to which the highest water line reaches during the spring tide. The distance from the HTL will apply to both sides in the case of rivers, creeks, and backwaters etc. to be notified on a case-by-case basis. The Notification envisages that the HTL would be demarcated by authorized agencies uniformly. However, this is yet to be done.

### **Restrictions on Establishing Industries and Processes on Coastal Zones**

Several restrictions have been imposed on setting up of and expansion of industries, operations and processes etc. in the CRZ. These include restrictions on setting up of new industries except those

directly related to waterfront or directly needing foreshore facilities and the projects of the Department of Atomic Energy. Further, the handling and storage of hazardous materials, setting up or expanding fish processing units etc. also fall within the restricted list. As per the classification, CRZ I which falls between HTL and LTL is the most ecologically sensitive area and no new constructions are permitted over them. On the other hand, as regards to CRZ II, which is the next in classification, State authorities are to prepare plans for their protection, but buildings will be permitted only on the landward sides of existing roads, structures etc. Moreover, the design and construction of any buildings permitted under the rules have to be environment-friendly. Areas up to 200m from HTL are to be marked as 'No Development Zones'. However, subject to certain guidelines, designated areas within the CRZ III may be earmarked for development of tourism resorts and hotels.

### **ICZM project**

Recently, Central Government has approved an ICZM (Integrated Coastal Zone Management) project at a cost of Rs.1156 crore to develop capacity and institutions to effectively implement the CRZ Notification, 1991 aimed to control pollution of coastal waters and to expand livelihood options for coastal communities. The project includes the proposal for hazard mapping along the 7500 km coastline, which was long overdue and will be carried out by the Survey of India. All fragile coastal areas will also be identified and demarcated as part of the project and the 'Critically Vulnerable Coastal areas' will be assigned special attention for initiating protectionary measures. The Society of Integrated Coastal Management (SICOM), is the nodal agency for the major Integrated Coastal Zone Management Project (ICZM) being implemented by the Government of India.

### **Coastal Zone regulations 2011**

The Coastal Regulation Zone Notification issued on 6th January 2011 under Section 3 (1) & Section (2) (v) of the Environment (Protection) Act 1986 and Rule 5 (3) (d) of the Environment (Protection) Rules 1986, supersedes the CRZ Notification issued on 19th February 1991. The Coastal Regulation Zone Notification, 2011(herein after referred as CRZ Notification2011) has come into force with a view to ensure:

- Livelihood security to the fisher communities and other local communities, living in the coastal areas, to conserve and protect coastal stretches.
- To promote development through sustainable manner based on scientific principles taking into account the dangers of natural hazards in the coastal areas, sea level rise due to global warming.
- To declare the coastal stretches of the country and the water area upto its territorial water limit.
- Restricts the setting up and expansion of any industry, operations or processes and manufacture or handling or storage or disposal of hazardous substances as specified in the Hazardous Substances.