#### APPROVED GOA STATE COASTAL ZONE MANAGEMENT PLAN

# No.J-17011/12/92-IA-III GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT AND FORESTS IA DIVISION

Paryavaran Bahvan, C.G.O. Complex, Lodhi Road, New Delhi 110 003. September 27, 1996.

To, Chief Secretary, Govt. of Goa., Panaji.

Subject: Coastal Zone Management Plan (CZMP) of Goa.

The coastal zone Management Plan of Goa submitted vide letter No. 31/7/TCP/96/221 dated 26-6-96 has been examined.

 I am directed to convey its approval in accordance with the powers vested in Central Government under Section 3 (3) (i) of CRZ Notification, 1991 subject to incorporating the following conditions and modifications.

### A. General Conditions

- (i) All the relevant positions of the Coastal Regulation Zone (CRZ) Notification, 1991 as amended in 1994, (after incorporating the directions given by the Hon'ble Supreme Court vide its judgement dated 18.04.1996) shall be strictly incorporated in the CZMP.
- (ii) No activity that has been declared as prohibited under section 2 of CRZ Notification, 1991 shall be carried out within the Coastal Regulation Zone.
- (iii) The permissible activities shall be regulated in accordance with section 3 and follow the norms for regulation as indicated in Section 6(2) of CRZ Notification, 1991 as amended in 1994.
- (iv) The Classification of Coastal Regulation Zone shall be in accordance with Annexure –I, Section 6 (1). For Development of Beach Resorts/Hotels in the designated areas of CRZ –III, the guidelines indicted under Annexure-II shall be followed.
- (v) In addition to the information already available with the State Government of Goa, all ecologically important and sensitive areas

shall be demarcated on the basis of the following sources of information:-

- (a) National Parks, Sanctuaries and Marine Parks Information published/available with Ministry of Environment and Forests (MOEF), Govt. of India (GOI).
- (b) All reserve forests and protected Forests As marked in the Forests Atlas updated through Biennel Forest Report Status published by Forest Survey of India(scale 1: 50,000).
- (c) Mangroves, Mudflats, Coral reefs/Corals Maps prepared on the basis of Satellite Imagery in the scale of 1: 25,000 by Space Application Centre, Ahmedabad and the information as published by MOEF, Gol.
- (d) Breeding grounds for turtles, horse shoe crabs Wildlife Institute, Dehradun.
- (e) Historical and Heritage sites As listed with Archaeological Survey of India, State Departments of Archaeology, Culture and Tourism in addition to the sites, if any, mentioned under specific conditions of this letter.
- (f) Areas rich in genetic diversity Information published/available with the MOEF, Gol.
- (g) Areas of outstanding natural beauty Government of Goa to decide keeping in view the generally recognized perception regarding such areas.
- (h) Sea level rise due to global warming National Institute of Oceanography.

In case the requisite information is not available from the sources mentioned above, information obtained from other sources may be used after approval of MOEF.

(vi) On the basis of further studies or in the event of any additional such information.brought to the notice of the State Government/Central Government all areas that are ecologically sensitive and important (as per CRZ Notification) shall be classified as CRZ –I by the UT Administration with the prior approval of MOEF.

- (vii) The State Governments which have prepared maps on 1:25,000 scale through Satellite Imagery for the purpose of delineating the HTL, should submit these maps to the Chief Hydrographer, Govt. of India for the purpose of demarcation. Those State Governments which were not in a position to prepare the maps in this manner, should submit them to the Chief Hydrographer, Govt. of Inda for the purpose of vetting. It is advisable that whenever there is any doubt, any development activity should only be permitted after ground measurements from the HTL taking into consideration marks left by water, presence of mangroves, mudflats and beach.
- (viii) State Government of Goa shall delineate on the maps LTL, HTL, 200 meters, 500 meters lines and other relevant lines in respect of creeks, backwaters and rivers affected by tidal action so that the distances can be measured, whenever required.
- (ix) All uninhabited islands are being classified as CRZ-I(Subject to continuation of existing traditional rights, social rights and customary uses) except those islands which have been approved by MOEF, GoI as CRZ-III or CRZ-IV. In case of uninhabited islands classified as CRZ-I, in exceptional cases should a carrying Capacity Study establish that the proposed development will not have adverse ecological impacts, those particular islands could be reclassified as CRZ-IV, subject to prior approval of MOEF, GoI.
- (x) Government of Goa shall ensure that all development and activities in CRZ areas take place within the framework of the approved Coastal Zone Management Plan. Violation shall be subject to the provisions of Environment (Protection) Act, 1986 and other relevant laws.
- (xi) Government of Goa or any other Authority so designated shall be responsible for monitoring and enforcement of the provisions of CRZ Notifications and CZMP.
- (xii) Approval of this CZMP would not imply approval of any proposed project such as roads, airports, jetties, ports and harbours, buildings etc., indicated in the plan/map.
- (xiii) All mangroves with an area of 1,000 square meters or more would be classified as CRZ-I with a buffer zone of at least 50 meters.

- (xiv) Dredged material will not be disposed within the CRZ area.
- (xv) Sand dunes will be classified as CRZ-I.
- (xvi) Parks, Play grounds, regional parks, green zones and other non-buildable areas falling within CRZ-III areas are categorized as CRZ-III.
- (xvii) Government of Goa will not make any changes in the approved categorization of CRZ areas without prior approval of Ministry of Environment and Forests, Government of India.
- (xviii) Government of Goa will give wide publicity to CZMP and indicate the list of places where it is available/can be inspected.

### B. Special Conditions/Modifications/Classification

# A) CRZ along sea coast

#### Pernem Taluka

- i. Tiracol Fort area is classified as CRZ-I and settlement area is classified as CRZ-III.
- ii. The whole stretch of Querim is classified as CRZ-I because of outstanding natural beauty and sand dune area except settlement area which is classified as CRZ-III.
- iii. The whole stretch falling in Paliem village is classified as CRZ-III.
- iv. Sand dune and mangrove areas falling in Arambol village are classified as CRZ-I except settlement area which is classified as CRZ-III.
- v. Settlement area falling in Mandrem village is classified as CRZ-III. Sand dunes, mangroves and turtle nesting sites are classified as CRZ-I
- vi. Sand dunes, mangroves and turtle nesting sites falling in Morjim village are classified as CRZ-I and settlement area is classified as CRZ-III.

#### Bardez Taluka

- i. In Anjuna village, chapora Fort is classified as CRZ-I and rest of the area is classified as CRZ-III.
- ii. Calangute area is classified as CRZ-III except sand dunes which is classified as CRZ-I.
- iii. Candolim is classified as CRZ-III except sand dunes and forts which are classified as CRZ-I.

#### Tiswadi Taluka

i. Dona Paua is classified as CRZ-I being a fort area.

## Mormugoa Taluka

- i. Substantially built up area of Vasco having approach roads, drainage and other infrastructural facilities is classified as CRZ-II, rest is classified as CRZ-III.
- ii. Dabolim, Chicalim, Chicolna, Issorcim and Sancoale areas are classified as CRZ-III.
- iii. Pale and Velsao areas are classified as CRZ-III. Cansaulim and Arossim are classified as CRZ-III except sand dunes which are classified as CRZ-I.

#### Salcete Taluka

i. The entire village falling in Salcete Taluka namely, Utorda, Majorda, Gonsua, Betalbatim, Colva, Sernabatim, Benaulim, Varca and Cavelossim are classified as CRZ-III except sand dunes which are classified as CRZ-I.

## Quepem Taluka

i. The village of Quitol and Naquerim are classified as CRZ-III.

### Canacona Taluka

- i. The whole of Cola stretch is classified as CRZ-I except settlement area which is classfied as CRZ-III.
- ii. In Agonda, the entire Agonda village is classified as CRZ-I except built up areas which are classified as CRZ-III.
- iii. Nagarcem area is classified as CRZ-I except settlement and built up areas which are classified as CRZ-III.
- iv. Areas falling in Painguinium village are classified as CRZ-III.
- v. In Loliem, the entire stretch is classified as CRZ-I except settlement and built up areas which are classified as CRZ-III

## B) CRZ Along banks of rivers , backwaters and creeks:

- i. Along the rivers namely Tiracol, Chapora, Mandovi, Zuari, Sal, Talpona, creeks and backwaters in Goa influenced by tidal action, the extent of CRZ will be either 100 m or width of the river or creek or backwater whichever is less.
- ii. Along Tiracol river, tidal influence is felt up to Patradevi. All the areas upto Patradevi within the CRZ having mangroves including mouth of Kerim bay,near Paliem, Densua Konad, Naibag and Torxem are as CRZ-I and rest as CRZ-III.

- iii. According to NIO, in Chapora river, tidal influence is felt up to Ibrampur in Tillari river whereas in Osalna river it is felt up to Belapur.
- iv. All along Chapora river areas with mangroves including areas of river mouth, Siolim, Chopdem, Oxel, Tuembank, Colvale, Revora, Pirna are classified as CRZ-I and other areas classified as CRZ-III.
- v. According to NIO, in the various tributaries of Mandovi river i.e. in the Madei river tidal influence is up to Gaulem; in Khandepar river upto Odi Karvada; in Sinquerim up to Verem and the three feeders of other tributary, the Mapusa river, tidal influence is upto Mapusa, Tivim and Mulgao.
- vi. The areas at mouth of the river having reserved/protected forests, sand dunes of Caranzalem-Mirarmar and Nerul and all areas along the bank of river Mandovi having mangrove areas including Nerul, Verem, Ourem, Ribandar, Betim to Britona, outskirts of Mapusa, San Pedro, Banastarim, Volvoi and Savoi-Verem are classified as CRZ-I and rest of the areas, without mangroves and ecologically sensitive areas, are classified as CRZ-III.
- vii. According to NIO, among the tributaries of Zuari river namely Sanguem, Kushawanti and Siridao tidal influence is felt up to Sanguem, Avadem and Santana respectively.
- viii. Dona Paulo promontory is classified as CRZ-I. Sao Jacinto island and all mangroves including those at Chicalim, Sancoale, Agassim, Mouth of Cumbarjua canal, Mercurim, upstream of Cortalim shipyard, entire length of Zuari river from Cortalim to Macazana are classifed as CRZ-I and rest of the area classified as CRZ-III.
- ix. In the feeders of river of Sal tidal influence is felt up to Bengulim, Chinchinim and Cuncolim.
- x. Ecologically sensitive areas along the rivers Sal and tributaries including dunes at Mobor and Mangroves at Assolna, Cavelossim, Orlim, Benaulim, Navelim, are classified as CRZ-I and the rest of the area is classified as CRZ-III.
- xi. The tidal influence in river Talpona is felt up to Bhatpal. Along the banks of Talpona, sand dune areas at the mouth of the river and all the mangroves along the bank are classified as CRZ-I and the rest of the area as CRZ-III.
- xii. In river Galgibaga, tidal influence is felt up to Velvada. The Galgibaga sand dunes and mangroves areas including Mashem, K.R. Bridge, Galgibaga, Paingunim are classified as CRZ-I and the rest of the area is classified as CRZ-III.

- xiii. With respect to Panaji and its environs, the following categorization is approved:
  - (a) Area along Ourem creek till confluence with Mandovi river is classified as CRZ-II.
  - (b) Area along Mandovi river bank (from confluence with ourem creek) westwards till the beginning of Children's Park of Campal is classified as CRZ-II.
  - (c) Area on landward side of existing road till Rotunda of Gasper Dias is classified as CRZ-II.
  - (d) Area west of Sports Authority of India complex up to Rotunda of Gaspar Dias is classified CRZ-II.
  - (e) Area from Rotunda of Gasper Dias Gasper Dias beach to Caranzalem beach up to Cabo Raj Niwas is classified as CRZ-III.
  - (f) Area from Cabo Raj Niwas to Dona Paula jetty is classified as CRZ-III.
  - (g) Area of Dona Paula cove/bay is classified as CRZ-III upto line of existing authorized developments.
  - (h) Area from Dona Paula cove/bay to Wainginim beach is classified as CRZ-III.
  - (i) The plateau top to the extent is classified as CRZ-II (falling within municipal limits).
  - (i) All areas outside municipal limits are classified as CRZ-III.
  - (k) Wainginim beach is classified as CRZ-III.
  - (I) From Wainginim beach to Sorodao Beach and area upto Agassaim bridge is classified as CRZ-III.

The plan submitted by the Goa Government vide their letter NO. 31/7/TCP/96/221 dated 26/06/96 is not in conformity with the conditions/ classification indicated above. These modifications may be made and the modified plan and maps sent to the Ministry within a period of two months for record.

Yours faithfully, (S.K.Mathur) Deputy Secretary to the Govt. of India