# WEST BENGAL STATE COASTAL ZONE MANAGEMENT AUTHORITY

Prani Sampad Bhawan, 5th floor, Block - LB2, Sector - III, Salt Lake, Kolkata - 700 106

Tel.: 033 - 23355246

Fax: 033 - 23350271

Email: <a href="mailto:environmentwb@gmail.com">environmentwb@gmail.com</a> Website: <a href="mailto:www.environmentwb.gov.in">www.environmentwb.gov.in</a>

No. 1698 / EN/T-II-4/011/2018

Date: 15 /12/2020

To:

- 1. Sri A. K. Nautiyal, Jt. Secretary, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi 110003
- 2. Director, National Centre for Sustainable Coastal Management, Anna University Campus, Chennai

Sir,

Kindly find herewith a copy of the minutes of the  $8^{th}$  meeting of West Bengal Coastal Zone Management Authority held on 15.10.2020 for kind information and necessary action.

(Niraj Singhal, IFS)
Chief Environment Officer
Dept. of Environment, Govt. of West Bengal &
Member Secretary, WBSCZMA

Encl.: a/a.

Minutes of the 8<sup>th</sup> Meeting of West Bengal Coastal Zone Management Authority, held virtually on 15.10.2020 at the Conference Room of Environment Department

#### Participants:

- Shri Vivek Kumar, IAS, Principal Secretary, Environment Department & Chairman, WBSCZMA
- 2. Shri Niraj Singhal, IFS, Addl PCCF, Chief Environment Officer, GoWB& Member Secretary, WBSCZMA.
- 3. Prof, Amalesh Chaudhury, Expert Member, WBSCZMA
- 4. Dr.Parthasarathi Chakraborti, Expert Member, WBSCZMA
- 5. Shri Sandip Chatterjee, Expert Member, WBSCZMA
- Shri Arindam Mani, WBCS (Exe), Addl. Director of Surveys, Directorate of Land Records and Survey, Govt of West Bengal.

#### Special Invitees:

- 1. Dr.Sugata Hazra, Ex-Head, Department of Oceanographic Studies, Jadavpur University
- 2. Ms. Barnali Biswas, IAS, Director, IESWM.
- 3. Shri Siddhartha Roy, IFS(Retd), Consultant, IESWM
- 4. Shri Rajeev Sharma, IFS, CCF & Senior Environment Officer, Environment Department
- 5. Shri Debajyoti Bhowmick, Consultant, IESWM.

The meeting was convened to discuss the 'Updation/ revision of Coastal Zone Management Plan for West Bengal as per CRZ Notification 2019' and was chaired by the Principal Secretary, Environment Department and Chairman, West Bengal State Coastal Zone Management Authority.

The main issues discussed are as follows:

# 1. Fixation of extent of Coastal Regulation Zone (CRZ)

The earlier CRZ Notification, 2011 in Para 1, sub-para (ii) stipulates *inter alia* that "CRZ shall apply to the land area between HTL to 100 mts or width of the creek whichever is less on the landward side along the tidal influenced water bodies that are connected to the sea ...."

The CRZ Notification 2019 stipulates that "CRZ shall apply to the land area between HTL to 50 meters or width of the creek, whichever is less ... Provided that the CRZ limit of 50 meters or width of the creek whichever is less, shall be subject to revision and final approval of the respective CZMPs as per this notification, framed with due consultative process, public hearing etc. and environmental safeguards enlisted therein".

This change in the 2019 Notification seeks to strike a balance between the socioeconomic aspirations and livelihood of coastal communities and strong environmental safe guards. The Authority had, in its meeting held on 15.10.2020, agreed in-principle to explore the feasibility of implementing the stipulations of CRZ, 2019 by giving due emphasis to the aspirations of the coastal communities for rapid socio-economic development. At the same time, the environmental and geomorphological set up, off-shore bathymetric configuration, semi-diurnal macro- and meso-tidal effects along the West Bengal coastal belt, high incidence of cyclones emerging from Bay of Bengal and increasing sea level rise due to global warming detrimentally affecting the fragile eco-system of Sunderbans will also have to be taken into consideration. Latest satellite imagery and other data reveals that the tide influenced water-bodies including some areas on open sea faces have already breached the embankments resulting in ingress of tidal waterand shifting of High Tide Line (HTL) by 90-300 mts at about 70 places.

Y.L

In the threadbare discussion that ensued, the expert opinion of the Dr. Kalyan Rudra, Chairman, West Bengal Pollution Control Board, and of the Expert Members of West Bengal State Coastal Zone Management Authority (WBSCZMA) were taken into account. It emerged that the alluvial Gangetic delta is of very recent origin on the geological time scale. It is substantially different from the peninsular India which comprises old crystalline, igneous and metamorphic rocks formed due to the breaking and drifting of the oldest landmass of Gondwanaland. Hence, the coastal stretches of West Bengal are unique, fragile and dynamic in nature and not comparable to any other coastal area in the country.

The house agreed that the coast line of West Bengal comprises of two broad regions. The area comprising Purba Medinipur District, towards the western side of the river Hooghly, is mesotidal in nature and extends to the eastern part of Odisha upto Mahanadi delta. The portion towards the eastern side of River Hooghly is predominantly macro-tidal with an eastward geotectonic tilt towards Bangladesh.

It was also felt that for the purpose of CRZ, the coast along Sunderbans area should be further divided into "Mainland Sunderban" area (i.e. areas adjacent to the mainland comprising of Hasnabad, Minakha, Kakdwip, Mathurapur-I&II, Joynagar-I, Joynagar-II, Sandeshkhali-I, Haroa and Canning I Blocks) whereas the other blocks nearer to the Bay of Bengal may be marked as "Island Sunderbans". The administrative Blocks in the mainland Sunderbans, except along the wide rivers, face lower effects of tidal influx. Hence, it was decided that the CRZ extent for the unique coastal area of West Bengal should be considered with due respect to environmental safeguards, so as to mitigate the risk posed to the life, livelihood and property of the local communities with due consideration for environmentally sustainable socio-economic aspirations of the local people.

Accordingly, it was broadly agreed that in "Mainland Sunderbans", barring the wide river areas there-in, the CRZ extent from HTL for tide influenced water bodies may be kept at 50 mts or width of the creek whichever is less. The rest should remain 100 mts or width of the creek whichever is less from HTL as per the previous Coastal Zone Management Plan (CZMP) of 2011. This is necessary for keeping a buffer for construction of second ring embankments wherever required, for protection of coastal populaces and their livelihoods. Based on the present situation, the CRZ extent for Purba Medinipur may be followed as per CRZ Notification 2019, but the HTL, LTL and ESA should be rectified as per the present condition using the recent/ latest satellite imagery followed by ground-truthing, wherever required.

# 2. Procurement of recent satellite image and updation, refinement and realignment of HTL, LTL and ESA.

The house was informed that some states which had by now finalized their CZMP based on CRZ Notification of 2019, had essentially resorted to the updation of the existing CZMP through a table exercise since there was not much change in their coast lines. However, the scope for such an updation based on the existing maps (2011 tidal limit) is not available to West Bengal. Considering the substantial changes that have occurred on the ground with respect to High Tide Limit (HTL), Low Tide Limit (LTL) and Ecologically Sensitive Areas (ESA) especially in mangroves and mudflats between 2010-11 and 2019-20, both along the coast and also in tide-influenced water bodies of West Bengal, as evident from the satellite imagesof Google Pro taken over these two time periods, it was felt that these features are crucial in defining the CRZ which will form a reference for granting clearance of individual CRZ projects based on the revised/ updated CZMP. Therefore, it was unanimously decided to procure recent satellite image as required and to update, refine and realign the HTL, LTL and ESA in conformity with the ground-truthing, where required, incorporate the same in the

Y.L

updated CZMP-2019 and get it approved by National Centre for Sustainable Coastal Management (NCSCM). Accordingly, action has already been initiated to procure the latest imagery, along with the ground-truthing and GPS survey of the eroded areas. For this purpose, it was also decided to consult the Department of Science and Technology, Government of West Bengal for their views on the issue.

### 3. Refinement of administrative boundary

In the approved CZMP-2011 there was no provision of CRZ-IIIA & CRZ-IIIB. In CRZ Notification 2019, CRZ-III is further categorized into CRZ-IIIA & CRZ-IIIB based on population density data of Census 2011 (mouza wise). The house decided that administrative boundaries for CRZ-II, CRZ-IIIA & CRZ-IIIB may be refined to the extent possible. It was also agreed that some accretional areas, which were previously incorporated as part of Development bodies/ Municipalities and marked as CRZ-II in CZMP-2011 as per the decision taken during preparation of CZMP 2011, may be re-classified based on administrative boundary as marked in cadastral maps issued by Land and Land Records Department.

## 4. Land use and Land Cover (LULC) maps for CZMP-2019

Regarding LULC, it was proposed that the LULC maps should be updated based on updated HTL, LTL and ESA from recent satellite images, after the approval of CRZ categorization considering a long term approach.

The house urged time-bound action in the matter considering that most of the other coastal states had already completed their CZMP based on CRZ Notification 2019. Director, IESWM was requested to accord high priority to this exercise.

The meeting ended with thanks to and from the Chair.

Principal Secretary
Department of Environment,
Government of West Bengal &
Chairman, WBSCZMA