

MINUTES OF THE 202nd MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 1st NOVEMBER, 2018 AT INDIRA PARYAVARAN BHAWAN, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW DELHI.

The 202nd Meeting of the Expert Appraisal Committee for projects related to Coastal Regulation Zone was held on 01. 11.2018 at Brahamputra Conference Hall, Vayu Wing, 1st Floor, Indira Paryavaran Bhawan, New Delhi. The members present were:

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| 1. | Dr. Manoranjan Hota | - | Member |
| 2. | Dr. N.K Verma | - | Member |
| 3. | Dr. Anil Kumar Singh | - | Member |
| 4. | Shri. N.K. Gupta | - | Member |

Dr. Deepak Arun Apte, Dr. V.K Jain, Dr. M.V. Ramana Murthy, Shri T.P. Singh, Shri. Prabhakar Singh, Shri. Narendra Surana, Dr. Mohan Singh Panwar, Dr. Anuradha Shukla, Shri Sanjay Singh and Smt. Bindu Manghat were absent. The Chairman informed the Secretariat that due to his last minute engagement he would be unable to Chair the meeting and therefore nominated Dr. M. Hota, Member (EAC) for chairing the meeting.

Also in attendance: Shri W. Bharat Singh, Director, MoEFCC and Dr. Bhawana Kapkoti Negi, Technical Officer, MoEFCC. The deliberations held and the decisions taken are as under:

2.0 CONFIRMATION OF THE MINUTES OF THE LAST MEETING.

The Committee having noted that the Minutes of the 200th meeting are in order, confirmed the same with suggestions that in case any typographical/grammatical errors are noticed the same may be corrected suitably.

3.0 RECONSIDERATION:

3.1 Proposal for construction of High Level Bridge across Pulicat Lake Connecting Chennai-Pulicat Road to Pasiyavaram Road, Cuddapah, Tamil Nadu by Highway Department, Government of Tamil Nadu [F.No.11-43/2017-IA.III]- CRZ Clearance reg.

The proposal of Highway Department, Government of Tamil Nadu for construction of High Level Bridge across Pulicat Lake connecting Chennai-Pulicat Road to Pasiyavaram Road, Cuddapah, in Tamil Nadu, was earlier considered in the 179th meeting of the Committee held on 28th November, 2017 but was deferred due to certain shortcomings in the proposal. In the aforesaid meeting, the project proponent had made a presentation and provided the following information:

- i) Pasiyavaram, is an island located in Pulicat lake near Pazhaverkadu having a population of about 50,000.
- ii) The local people of Pulicat village face high difficulties during rainy season and high tides and are required to use boats or wade through water while commuting.
- iii) The main occupation of the population is fishing and people of the village are required to go to Ponneri town and Pulicat village for their errands.

- iv) A bridge with a width of 7.5 m is proposed which shall meet the requirements of IRC Code.
- v) There is no flow of water in the project site as it is only stagnant water after high tides and rainy days.
- vi) Based on the study by NIOT, Pallikaranai, a linear water way of 407.76 m is also proposed.
- vii) The proposed project site is located in CRZ-I as per CZMP.
- viii) CRZ map indicating HTL, LTL demarcation in 1:4000 scale with proposed cabling superimposed on the map has been prepared by IRS, Anna University.
- ix) Pulicat Bird Sanctuary and Pulicat lake is adjacent to the project site.
- x) The total length of the bridge will be 432 m and total lane width will be 8.5 m (carriage way- 7.5m & crash barrier 2 x 0.5m).
- xi) The TNCZMA has recommended the project vide letter No. P1/1639/2016, dated 01.11.2016.
- xii) The total Cost of the project will be Rs 18.2 crores.

2. The Committee in the aforesaid 179th Meeting noted that the Department of Environment, Govt. of Tamil Nadu, while recommending the proposal for CRZ Clearance vide its letter dated 01.10.2016 have desired that the following be carried out viz. *(a) An exclusive report on the extent of obstruction of free flow of water in the pullicat lake due to construction of the proposed bridge; and (b) A detailed report factoring bird sanctuary be undertaken.* The Committee noted that the project proponent should have these reports in place as the site is a well-known ecological sensitive area. The Committee observed that BNHS has made an extensive study on Pulicat Sancturay and the project proponent should have no difficulty in getting the report prepared.

3. The Committee in the said meeting further noted that the EIA report submitted contains no impact assessment and the Department of Environment, Govt. of Tamil Nadu has rightly seemed to have noted the same resulting in its observation on requirement of an exclusive report on the extent of obstruction of free flow of water in the pulicat lake due to construction of the proposed bridge. *The Committee therefore decided that the project proponent shall submit a supplementary marine EIA report with special focus on birds from reputed institute and factoring also the concerns of the Department of Environment, Govt. of Tamil Nadu.* Based on the deliberations held, the Committee in the 179th meeting observed that the proposal is pre-mature for consideration and had deferred the proposal.

4. On submission of the supplementary marine EIA report, the proposal was again placed before the Committee for its reconsideration. The Committee was informed by the project proponent that the bridge location falls far south (2 km) from the Pulicat Lake water shed areas and north (20 km) from the Ennore Creek system. That the tide enters through the Ennore Creek as well as Pulicat Lake simultaneously and makes a circulatory current system along its stretch, wherein the drainage canal of the bridge location is located in between. The bridge is proposed on the western side of the island where the tidal water is less influenced and only in northeast monsoon the rain water draining is noticed during November to January. Oceanographic studies on Tides and Currents were carried out one location close to proposed bridge site to understand the flow characteristics and tidal variation. Available oceanographic data near Pulicat mouth and Pulicat estuary on currents and tides has been used to understand the flow characteristics of Pulicat lake and project site. Flow pattern, tidal variation and bathymetry of lake shows that influence of flow and tidal variation is confined

to the inlet mouth and the southern part of the lake. There is not much flow along the Buckingham Canal and the Kosasthalaiyar river branching out on the southern side.

5. It was informed that the baseline data collection for the marine EIA study has been carried out during August 2018. Baseline status for 10 km study area from project site at three locations on Seawater, Seabed sediments, Marine ecology and biodiversity were conducted by NABET accredited EIA consultant viz. M/s Indomer Coastal Hydraulic (P) Ltd. The study indicates that the sediment in the project area is mostly composed of silty clay. Heavy metal concentration showed low values, indicating that sediment in project area is free from contamination. Biological parameters considered in the study are primary production, phytoplankton biomass, diversity and population, zooplankton abundance and population, inter-tidal and sub-tidal population, bacterial population, coastal vegetation, seagrass and seaweeds, Mangroves, Corals, Turtles and fishery. Phytoplankton studies include primary productivity, species composition, numerical abundance and percentage composition. The primary productivity varied between 390 to 480 mgC/m³/day and found to be comparable with available in-house data for east coast. The Zooplankton study shows that the project area is rich in zooplankton and Shanno-Wiener (H') diversity index (varied between 4.13 to 4.33) and the zooplankton biomass at different stations varied from 29.2 to 51.3 ml/100m³. The Benthos in the intertidal benthic faunal population in the study area are moderate in number at all stations. Numerical abundance of intertidal benthic fauna varied between 195 and 255 nos/m² whereas numerical found along the alignment of bridge. It has been stated that there is wide variety of coastal vegetation recorded in Pulicat Lake. *Prosopis Juliflora* is observed along the banks adjacent to the bridge site. But there are no coastal vegetation falling in line with bridge alignment.

6. It has been further informed that the Pulicat Sanctuary Eco Sensitive zone (ESZ) starts from the interstate boundary of Tamil Nadu – Andhra Pradesh, which is about 2 km away from the proposed bridge site. Near the project site there is no diverse flora and fauna. Major migratory birds were observed north about 3 km from proposed project site where extensive bed of seaweeds is observed and also in main part of Pulicat which is in Andhra Pradesh.

7. The project proponent further informed that the conclusion of the study carried out as follows:

- Flow characteristics and average depth near the bridge site indicate that flow velocity, tidal variation and water depth are not significant enough to produce scouring.
- No modification of flow is anticipated as quantum of water flowing in and out is not significant as project site is not influenced by tidal flow.
- Following good construction practices will be the key to address the temporary impact on water quality and marine community.
- Limit the construction period so that prolonged affect to marine community can be minimized.
- The construction of proposed bridge does not hinder flow characteristics of Kossthalaiyar river, Buckingham Canal and hence no impact.
- No impact on seagrass and seaweeds as project site and surroundings are devoid of seagrass and seaweeds and hence no impact.
- No impact on mangroves as project site and surroundings are devoid of mangroves and hence no impact.

- No coastal vegetation seen in line with bridge alignment and hence there will not be any impact.

8. Based on the deliberations held and submissions made, the Committee decided that in larger public interest the proposal is recommended for CRZ clearance subject to the following condition:

- i) The conditions stipulated by the Tamil Nadu Coastal Zone Management Authority issued vide its letter No. P1/1639/2016, dated 01.11.2016 shall be implemented as may be admissible.
- ii) Temporary structures set up for construction of the bridge and materials for construction shall be removed and area around the site restored to its near original state.
- iii) Utmost care shall be taken while transferring and storage of construction material to project site so that the CRZ characteristics of the site is least disturbed.

MISCELLANEOUS

3.2 Discussion on the matter of “Shoreline Protection Management Plan for coast of Tamil Nadu”- reg.

This item was deferred as Dr. M.V. Ramana Murthy, who is a member of the Committee constituted for examination and making recommendation to the NCZMA, on the ‘Shoreline Protection Management Plan for Coast of Tamil Nadu’ submitted by the State Government, could not attend the meeting.

ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR

3.3 Amendment of CRZ Clearance issued to Navi Mumbai International Airport by City and Industrial Development Corporation of Maharashtra Limited [F. No. 10-53/2009-IA.III]-reg.

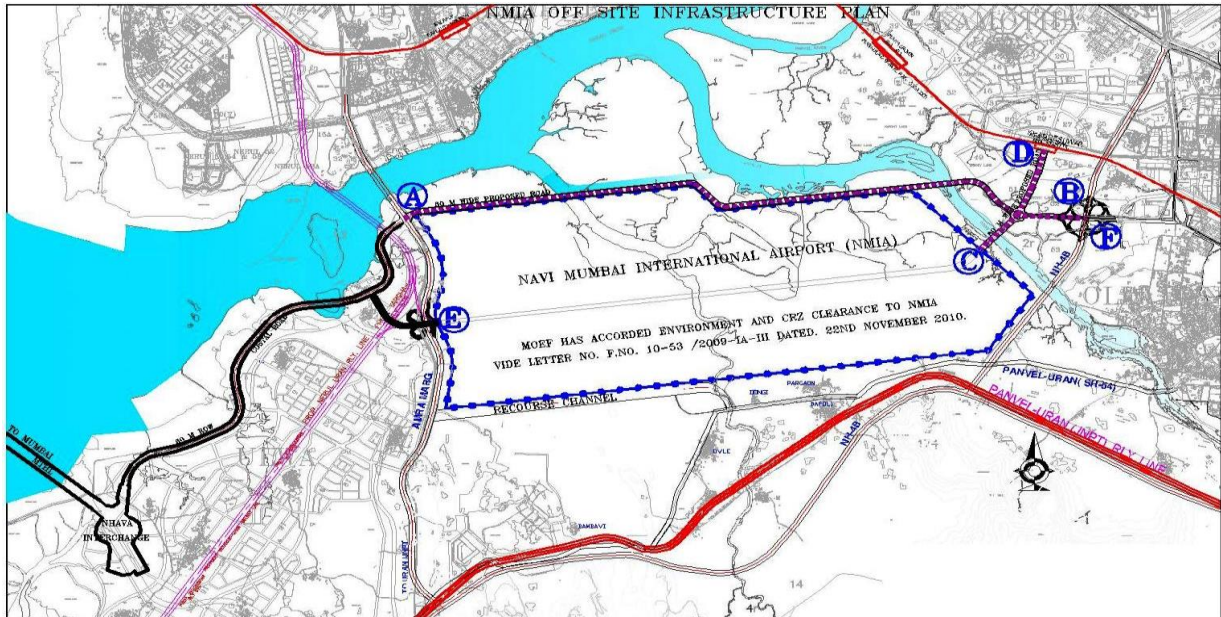
City and Industrial Development Corporation (CIDCO) of Maharashtra Limited was accorded Environmental and CRZ Clearance for construction of Navi Mumbai International Airport by the Ministry of Environment, Forest and Climate Change on 22.11.2010. Thereafter extension of validity of the EC and CRZ clearance has been granted on 20.12.2017 and the said clearance is now valid till 21.11.2020. Specific Condition at para no.7(I)(xxxii) of the aforesaid clearance stipulates as follows:

“The Environmental Clearance/CRZ is recommended below is only for the Navi Mumbai Airport project. CIDCO shall obtain the Environmental and CRZ clearance separately for off airport facilities and other off infrastructure projects after finalising the locations and details as may be required under the EIA Notification 2006 and the CRZ Notification”.

2. Accordingly, CIDCO has sought separate approvals for associated infrastructure of the airport outside of the 1160 ha core airport area viz:

- i) *CRZ clearance for Shifting of EHVT lines passing through the site:* EHVT lines are required to be shifted along the periphery of the airport. Part of the area is falling in CRZ. MCZMA cleared the proposal vide letter dated 27.09.2016 to MoEF&CC and the same was approved in the 173rd meeting of EAC held at New Delhi on 24.07.2017. The CRZ clearance was issued by MoEF&CC vide letter dated 28.08.2017.
- ii) *CRZ Clearance for Vadghar R&R Pocket:* Out of the 10 settlements/villages located within Airport area, which needs to be rehabilitated, one of the R&R sites planned on east side of airport at Vadghar falls partially in CRZ II. The proposal for CRZ clearance was granted clearance by SEIAA dated 25.03.2015
- iii) *Environmental Clearance for Pushpak Nagar R & R pocket:* This R & R pocket was taken up to rehabilitate private land to be acquired from PAPs. As the area development work for Pushpaknagar was more than 50 Ha, Environment Clearance was obtained from SEIAA vide dated 05.11.2015
- iv) *Environmental Clearance for Area Development Project in Pushpak Node:* CIDCO is planning area development, for predominantly commercial activities, to the South of NMIA site. Since this area is 143 ha, CIDCO has now submitted proposal for ToR, which was appraised at the SEAC-2 meeting held on 26.10.2018. Further work will be taken up once ToR is received.
- v) *CRZ Clearance for Offsite Infrastructure:* In 2012, CIDCO submitted a proposal for CRZ clearance for Off-site physical infrastructure of roads, bridges and interchanges comprising of the following:
 - a) 60m arterial road abutting the northern boundary of airport
 - b) Interchange on Aamra Marg to the west of airport
 - c) Interchange on NH-4B to the east of airport
 - d) Access road from Khandeshwar Railway Station on Mankhurd Panvel suburban railway line

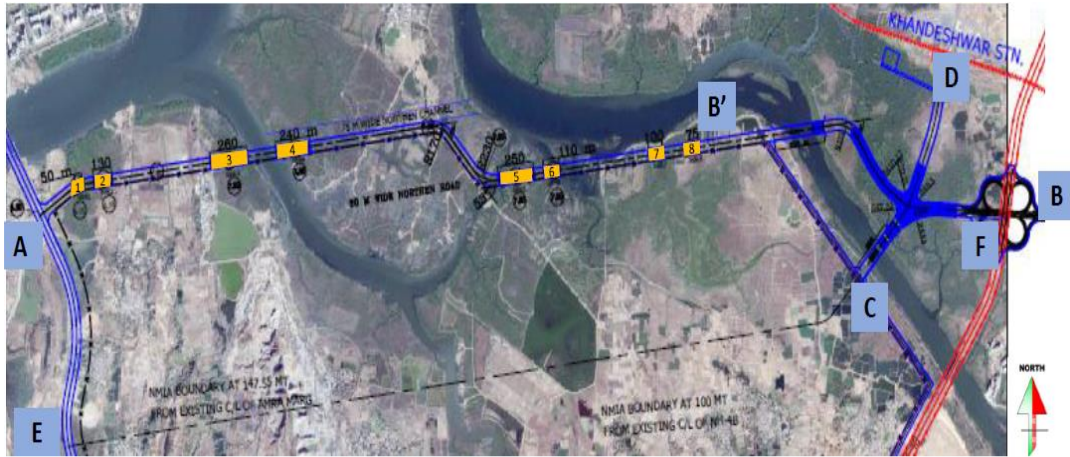
The total mangrove area falling in the above development was 10.55 ha. The plan submitted to MCZMA is given below:



The proposal was appraised at the 112th meeting of EAC MoEF on 11.05.2012 and the following recommendations were made:

- (i) *The Committee noted that the proposed roads are neither NH, SH nor Expressway therefore it will not attract EIA, Notification, 2006 and hence ToR is not required. Only clearance is required under CRZ Notification, 2011. The Navi Mumbai International Airport is made permissible under the CRZ Notification hence the proposed related facilities are permissible however, in mangrove areas the road shall be on stilt.*
- (ii) *As per the CRZ Notification, 2011, the roads can be regulated by the SCZMA. Since the Maharashtra CZMA has already examined and recommended the project. The Proponent shall abide the conditions stipulated by the MCZMA including prior permission from the High Court of Bombay for the activities in mangrove areas as applicable.*

Based on the above recommendations, MCZMA had granted the CRZ clearance vide letter dated 15.02.2016, incorporating the same conditions, i.e *in mangrove areas the road shall be on stilt.* As per the CRZ clearance granted, CIDCO planned the northern arterial road with stilt bridges on mangrove areas, in the Section A-B abutting the northern boundary of airport, as shown in the plan below. These bridges have varying spans and have a total length of 1200m. *The mangrove area under these 8 bridges works out to 3.05 ha out of the total 10.55 ha.*



3. *Approvals obtained and compliance carried out by CIDCO:* CIDCO informed the Committee that based on the EC and CRZ clearance granted by MoEF, they have carried out the following compliance activities as detailed below:

- a) Considering the presence of mangroves and forest land, CIDCO submitted combined proposal for Forest Clearance under the Forest Conservation Act 1980 for diversion of 250.0635 ha of forest land (comprising 141.5635 ha forest and 108.5 ha mangrove area (98 ha within the site + 10.55 ha falling within offsite infrastructure alignment, being contiguous patches).
- b) The Stage-1: In - Principle Forest clearance was received vide F.No. 8-98/2012-FC dated 17.12.2013 and Stage-II FC was received vide F. No 8-95/2012-FC dated 21.04.2017 for the entire area of 250. 0635 ha of forest land.
- c) CIDCO obtained permission from the Bombay High Court vide its order dated 29.10.2013, to clear 108.5 ha area under mangrove cover.
- d) Upon receiving Stage-1, Forest Clearance, following compliances have been done by CIDCO:
 - Compensatory afforestation land of 250.0635 ha transferred to State Forest Department, in Sudhagad Taluka, Raigad.
 - Payment of NPV to Forest Department.
 - Compensatory mangrove plantation carried out through State Forest Department, on 109 ha in Kolekhar village.

4. CIDCO further informed the Committee that they are facing constraints to develop the arterial road (A-B) along the North Boundary on 8 Stilt Bridges. Since the EHVT lines have to pass through in a duct along the same corridor, the completion of bridges is leading to delays in completion of EHVT corridor and thus affecting timelines for entire NMIA project. The area under the Stilt Bridges (3.05Ha) is already part of total mangrove area (108.8 Ha) for which Forest Clearances and permission from Bombay High Court have been obtained and compliances thereof completed by CIDCO.

5. In view of the above, CIDCO has requested for partial waiver of the condition imposed by EAC in its 112th meeting held on 11th May 2012, in respect of section A-B of the arterial road which states that *in mangrove areas the road shall be on stilt.*

6. The Committee deliberated the request of CIDCO and observed that about 3.05 ha of mangrove will be affected by construction of road for the section in so far as the present request of CIDCO is concerned. The Committee also noted that these mangroves are in

isolated patches and compensatory mangrove plantation in 109 ha has been taken up by the State Forest Department Maharashtra at suitable places and progressing quite satisfactorily. The Committee in view of larger public interest decided that the request can be granted subject to strict compliance of three times mangrove replantation of the affected mangrove area of 3.05 ha, at appropriate location as per the plan and estimate of State Forest Department/ suitable Govt agency so as to get successful plantation. A mid-term third party assessment may also be carried out to ensure the success of plantation. The Committee further decided that CIDCO shall intensify mangrove replantation/regeneration in consultation with mangrove Conservation Cell of Maharashtra and shall submit six monthly progress report of mangrove plantation/regeneration along with survival percentage, to the MCZMA.

The meeting ended with a vote of thanks to the Chair.
