

## Chapter 3: Project Clearances under CRZ Notifications

To implement the CRZ notifications which sought to regulate developmental activities in the coastal areas, MoEF&CC classified the coastal areas into different zones based on their vulnerabilities. Activities in these zones were to be restricted to the activities specified in the CRZ notifications and industries falling in the CRZ areas had to seek prior clearance from the MoEF&CC/SEIAA, based on recommendations of NCZMA/SCZMA. Over the last two decades, development activities were granted clearances according to the provisions of the EIA Notification 2006 and CRZ Notification 1991/ 2011/2019 (whichever applicable). The clearances were accorded by the following authorities subject to recommendations given by the concerned SCZMAs:

**Table 3.1: Various authorities mandated to accord clearance to projects in CRZ areas**

Type of Projects	Authorities mandated to accord clearance
For the projects attracting EIA Notification 2006	MoEF&CC or SEIAA
For the projects not covered by the EIA Notification, 2006 but attracting para 4 (ii) of the CRZ Notification	MoEF&CC
For construction projects involving more than 20, 000 sq.m. built up area	MoEF&CC
For construction of building projects less than 20,000 sq.m. built up area	State /Town Planning authorities

Projects are approved by MoEF&CC/SEIAA based on the Environment Impact Assessment (EIA) report submitted by the Project Proponents<sup>20</sup> (PP). EIA report consists of the Environment Management Plan (EMP) which proposes mitigation measures to be taken by the PP to reduce adverse environment impact. EIA process aids the decision maker to carry out a cost benefit analysis of the project proposals and are the most important tool to ensure sustainable management of the coastal space. The main steps in the EIA process depicted in the **(Annexure 1)** in the form of a process flowchart.

Audit studied the project clearance process of sampled projects that were accorded approvals by MoEF&CC /SEIAA. The audit observations are given in the succeeding paragraphs.

### 3.1 Project approvals despite Inadequacies in EIA reports

Audit observed many infirmities in preparation of EIA reports, despite which the projects based on these EIA reports were approved. This would affect the quality of decision making regarding the conservation of coastal ecosystems. Some of these are discussed below:

#### (i) Preparation of EIA by non- accredited consultants

MoEF&CC in its instructions (March 2010) stipulated that the EIA received for a given project after July 2010 would be considered for Environmental Clearance, only if the EIA was conducted by the consultants accredited by National Accreditation Board of Education &

<sup>20</sup> The agency which proposes to set up a project.

Training (NABET)/ Quality Council of India (QCI). Further, the consultants could carry out EIA in only those sectors for which they were accredited.

Audit observed 21 project approvals (**Annexure 2**) where the EIA consultant was non-accredited or was not accredited for the sector specific to the project. A few cases are illustrated as below:

**Table 3.2: Preparation of EIA by non-accredited consultants**

Project	Project approval	Consultant for EIA
Laying of Natural Gas pipeline by Mahanagar Gas Ltd, Maharashtra	Accorded clearance by MoEF&CC in 2018	The project entailed transportation and distribution of natural gas by laying of pipelines from Uran to Navi Mumbai Municipal Corporation. The consultant JV Analytical Services, Pune was not accredited for Pipeline Sector.
Construction of Hotel Building in Mangalore, Dakshina Kannada District by M/s. Motimahal Hotels Pvt. Ltd., Karnataka	Accorded clearance by MoEF&CC in 2017	The Environment Management Plan and the Disaster Management Plan which formed a part of the EIA was proposed by the project proponent itself and an accredited consultant was not appointed for this project.

**(ii) Use of outdated baseline data for Environment Impact Assessment:**

MoEF&CC in its instructions (August 2017) had specified that the baseline data<sup>21</sup> should not be older than 3 years, at the time of submission of the proposal for grant of Environmental Clearance. Audit observed 12 project approvals (**Annexure 3**) where the EIA made use of outdated baseline data, where the data collected was outdated by 2 to 11 years. Some cases are discussed below:

A. The project '**Construction of 35 Km Road coastal road from Princess Flyover to Worli in Mumbai**', was accorded clearance by MoEF&CC in 2017. Government of Maharashtra in June 2011 constituted a Joint Technical Committee (JTC) to examine various options in the construction of the Coastal Road in Mumbai and its impact on the environment. The JTC report, a component of EIA study (2016) justified the construction of road for smoother traffic movement based on comprehensive Traffic Studies conducted for Mumbai Metropolitan Region in 2008. MoEF&CC approved the project in 2017 without updating the baseline study and without taking into account the major infrastructural development projects in the vicinity during this period.

B. The project '**Development of the petroleum, chemical and petrochemical investment region (PCPIR) in Dahej, District Bharuch of Gujarat**' aimed to establish production facilities for petroleum, chemicals and petrochemicals in the region. As per the Terms of Reference approved by MoEF&CC in 2013, the project proponent was to carry out surface water quality analysis. Audit observed that the EIA report of the project included

<sup>21</sup> Baseline study serves the purpose of a base reference against which the changes due to implementation of the project are measured.

water quality analysis data pertaining to 2010-11. The baseline data was outdated by more than 7 years. The project was accorded clearance by MoEF&CC in 2017.

C. The project '**Construction of Mumbai Trans- Harbour Sea link (MTHL)**' by M/s **Mumbai Metropolitan Region Development Authority** was accorded clearance by MoEF&CC in 2013. As the impacts of the project on mangroves, habitat of flamingos and mudflats were not addressed in the EIA, the National Green Tribunal in October 2015 ordered that MoEF&CC needs to consider the project afresh. Audit observed that the project proponent applied to MoEF&CC in 2015 and the project was granted clearance in December 2015 based on EIA report which used the baseline data of only air, water, noise, soil quality, pertaining to the year 2011 while the information regarding the migratory birds visiting the area pertained to 2008<sup>22</sup>. Thus, the baseline data was outdated by four to seven years.

**(iii) Environment impacts not fully analyzed in the EIA**

EIA aims in evaluating the full range of effects on the environment of the proposed project which begins with the evaluation of ecological significance of the project area i.e., identification of significant biodiversity in the project area. The ecological evaluation is followed by a detailed impact prediction analysis. Audit observed that MOEF&CC granted project approvals even though the EIA did not comprehensively address the ecological aspects in the project area. It was observed that in respect of 14 project clearances (**Annexure 4**) out of 43 sampled projects approved by MoEF&CC, the environment impact studies failed to identify key biodiversity in the area and did not include mitigation measures to alleviate the risks faced by the unique biodiversity. Some cases are illustrated below:

**Table 3.3: Cases where Environment Impact Studies failed to identify key biodiversity in the area**

Project	Approved	Biodiversity not assessed/mitigation measures not taken up
<b>Expansion of facilities at port Redi, Sindhudurg, by M/s Redi Port Ltd. in Maharashtra</b>	Accorded clearance by MoEF&CC in 2018	The project area was home to 56 species of phytoplanktons, 27 species of freshwater fishes and mangroves. EIA study did not assess the impact of reclamation activities on these.
<b>Laying of Natural Gas pipeline, Mumbai by Mahanagar Gas Ltd, Maharashtra</b>	Accorded clearance by MOEF&CC in 2018	The EIA study, failed to identify the presence of mangroves existing in the area and did not assess the impact of the project on these ecosystems.
<b>Deepening of Approach Channel by Mormugao Port Trust in Goa</b>	Accorded clearance by MoEF&CC in 2016	Neither the impacts nor the mitigation plan for endangered species windowpane oyster <sup>23</sup> , corals and associated life forms in Chicalim-Sancole Bay, four kms away from the dredging area. These biotas were identified by the PP and formed a part of the EIA report

<sup>22</sup> Assessment made by the Salim Ali Center for Ornithology and Natural History (SACON).

<sup>23</sup> Which is classified as endangered species by IUCN.

**(iv) Disaster management not fully addressed in the EIA**

EIA studies include assessment of large scale technological and sudden onset of disasters resulting from natural hazards to prevent and mitigate consequent environmental damage. The Disaster management plan (DMP) is one of the key prerequisites that the project proponent has to submit to the approval authorities. We observed 16 projects clearances (**Annexure 5**) by MoEF&CC that were either devoid of DMPs or did not specifically address disasters. A few cases are highlighted below:

**Table 3.4: Clearances granted in absence of DMPs or where they did not address specific disasters**

Project	Approval	Deficiency in Disaster management plan
<b>Redevelopment of Edible Oil Transit Terminal by Ruchi Infrastructure Limited at Chennai, Tamil Nadu</b>	Accorded clearance by MoEF&CC in 2018	The project area was prone to floods and cyclones. The EIA did not contain Disaster Management Plan to address these issues.
<b>Setting up of Mini Bulk Carriers Handling Facility by Kolkata Port Trust, West Bengal</b>	Accorded clearance by MoEF&CC in 2017	Project site was classified as a severe intensity seismic zone <sup>24</sup> . As per the recommendations of the WB SCZMA, the project area was prone to cyclonic storms. The EIA report was devoid of disaster management plan to address this.
<b>Development of four berths in Western Dock Arm in New Mangalore port, Karnataka</b>	Accorded clearance by MoEF&CC in 2016	Project site was classified as Zone III in accordance with the BIS, 2000, Seismic Map of India and had moderate exposure to earthquakes, storms, cyclones and Tsunami. The Disaster Management Plan did not envisage any mitigation measures.

Thus, deficiencies in the preparation of EIA reports like use of old baseline data, EIA reports made by non-accredited consultants, lack of efforts to address disasters and failure to address the full range of ecological impacts in the EIA would weaken the process to conserve the coastal ecosystem.

### **3.2 Deficiencies in the Environment Management Plan (EMP)**

The EMP consists of all mitigation measures under each activity of the project during construction, operation and the entire life cycle of the development activity, along with costs and aims to minimize adverse environmental impacts of the project. As per the EIA Notification 2006, the project proponent was required to make provisions for and earmark detailed budget for EMP. Also, as per the EIA Notification 2006, the EMP should include

<sup>24</sup> in accordance with the Bureau of Indian Standards (BIS) 2000, Seismic Map of India.

description of all the administrative aspects of ensuring that mitigation measures are implemented and their effectiveness monitored.

(i) **Mitigation Activities not included in EMP**

We observed in 13 project clearances (**Annexure 6**) where activities forming a part of the mitigation plans like mangrove conservation/ replantation biodiversity conservation plan, rain water harvesting plan failed to be included in the EMP as the same was left to the project proponent (PP) to be carried out. Also, we observed that MoEF&CC did not verify whether the same had been carried out by the project proponent as directed. A few cases are highlighted below:

A) The project '**Modification of existing iron ore terminal to handle coal at Kamarajar port' Tamil Nadu** was approved by MoEF&CC in 2018. MoEF&CC, while granting the clearance, directed the PP to design a management plan for prevention of fires. Also, the PP was to create an inventory of floral composition of the biota of marine and intertidal biotopes and draw up a detailed marine biodiversity conservation management plan. However, it was observed that these activities did not form a part of the EMP, and the cost of implementation was not worked out by the PP.

B) The project '**High Speed Railway Project across CRZ areas' in Mumbai** was approved by MoEF&CC in 2019. While recommending this project, the EAC imposed a specific condition that a robust conservation and management plan for Thane Creek Flamingo Sanctuary with detailed action plan for immediate implementation in consultation with the concerned agency in the State. However, it was observed that the EMP was devoid of any information regarding the costs to be incurred for this activity.

(ii) We observed that in nine project clearances (**Annexure 7**) by MoEF&CC, the project proponent had neither earmarked any quantifiable funds for EMP nor provided details of the cost break-up of the EMP budget. Further in two cases, we observed that project proponent did not include cost of activities that were to be undertaken as a part of mitigation measures.

A few instances are highlighted below:

A) The project which entailed setting up of '**Sewage Treatment Plant in CRZ-I area in Malad, Maharashtra**' was approved by MoEF&CC in 2017. Around 36 hectares of mangrove cover was required to be compromised and compensatory afforestation of 180 hectares was required under the project. The CRZ clearance required the Project Proponent to develop a mangrove conservation plan in consultation with the Mangrove Foundation of Maharashtra or any reputed Institute for rehabilitation of mangroves. We observed that though the EMP stipulated removal and replantation of the mangroves, the cost for the same were not prescribed.

B) Another project '**Construction of Mumbai Coastal Road' in Maharashtra** which was approved by MoEF&CC in 2017 involved reclamation of around 90 hectares. The mitigation measures involved installation of noise barriers all along the coastal road, appropriate

handling of solid and liquid wastes and preparation of marine biodiversity conservation plan for the region from an institute which had an expertise in the field. However, the EMP only comprised of activities relating to management of air, water, soil and noise pollution around the project site.

Failure of the EMP to address the full range of ecological impacts of the project would weaken the process of ensuring projects are not detrimental to the coastal area.

### 3.3 Absence of cumulative impact studies for project clearances

Cumulative environmental impact assessments are significant to study the incremental effects resulting from the combined influence of various actions at the project area. Mitigation, monitoring and management of the environment can be recommended taking into consideration the risks from the combined effects of the projects in an area. As per the EIA Notification 2006, PPs were to provide information regarding the factors which could lead to detrimental environmental effects or which have the potential for cumulative impacts of the project with other existing or planned activities in the locality. We observed that in 11 project clearances (**Annexure 8**), no information was given regarding the cumulative effect. Instances were noted where the PPs did not conduct any substantive cumulative impact studies. A few cases are highlighted below.

A. The project **'Laying of an effluent pipeline' by Madhu Silica Pvt. Ltd. (MSPL) in Bhavnagar, Gujarat** was granted clearance by MoEF&CC in 2015. The project envisaged for 10 MLD of effluent disposal to the marine outfall which was already disposing 20 MLD of effluents from Chitra Industries Association and Bhavnagar Municipal Corporation. CPCB had had listed Bhavnagar as one of heavily polluted industrial clusters. Despite this, that clearance was granted to the project without conducting cumulative environmental impact assessment studies

B. In two projects, **'International Leather Complex by Adani Port and SEZ Ltd.'** and **'Marine disposal of treated effluent through dedicated pipeline by M/s Hyacinths Pharma Pvt. Ltd. in Andhra Pradesh**, the EAC recommended (2014) a cumulative study to assess the impact of marine disposal, considering the presence of other marine outfalls in vicinity of the proposed project. EIA studies did not include any cumulative EIA and the projects were approved in 2015. In another pharmaceutical project, **'Setting up of bulk drug unit by Divi's laboratories, East Godavari District in Andhra Pradesh'** was accorded clearance by MoEF&CC in 2019. Though the EIA report had identified a number of marine outfalls around the project site, no cumulative study was undertaken by the PP. The EAC failed to address this during the appraisal.

Failure to address cumulative effects of the project in light of other projects in the area would increase the risks to the ecology of the coastal areas.



### 3.4 Non-verification of information provided by project proponents

We observed three cases of project approvals where the MoEF&CC failed to make independent efforts to verify the veracity of the opinion given by private consultants. MoEF&CC merely relied on the information submitted by the Project Proponent with respect to potential ecological risks due to the project activities. It is to be noted that some of the project clearances were quashed later by the NGT on learning that the PP had deliberately suppressed vital information while requesting for clearance.

A. The project '**Mumbai Trans-harbour sea link (MTHL) by M/s Mumbai Metropolitan Region Development Authority (MMRDA)**' was accorded clearance by MoEF&CC in 2013. The clearance as per the information provided by the project proponent indicated that the area of mangroves and mudflats affected under the project was 0.18 hectares. As per the Maharashtra Coastal Zone Management Authority (MCZMA) recommendation, the affected area was 0.99 hectares (i.e. 0.06 hectares at Sewri and 0.93 hectares at Chirle). The project involved diversion<sup>25</sup> of 38.58 hectares of mangrove areas along with 8.84 hectares of forest land. It was also observed by NGT the impacts on costal ecosystem comprising of mudflats and flamingos had not been evaluated by the PP. The clearance thus granted by MoEF&CC was quashed in October 2015 on grounds that critical information had been suppressed by the project proponent. The project was considered afresh and was granted clearance in December 2015 after addressing the requirements of NGT.



Fig. 2: Mangroves in the Sewri area in 2018 Fig. 3: Mangroves in the Sewri area in 2021

B. The project '**Laying of treated effluent disposal pipeline in the Gulf of Kutch at Mithapur in Gujarat by M/s Tata Chemicals Ltd**' was accorded clearance by MoEF&CC in 2017. According to an EAC meeting, Poshitra Bay which is adjoining area to the effluent discharge point was known to be the last remaining feeding ground of Critically Endangered Dugong species<sup>26</sup>. Poshitra was also an endemic site for critically endangered molluscs<sup>27</sup>. The EIA study was silent about marine fauna around the project site and the EIA report merely stated that 'marine reptiles and mammals common to the Gulf would not be affected due to the construction activities since they keep away from such sites.' It was observed that

<sup>25</sup> As per the appeal filed by Sh. Dileep B.Nevatia in the NGT in 2013.

<sup>26</sup> The Western Indian population was confined to this part of Gulf of Kutch.

<sup>27</sup> Such as *Sakuraeolis gujaratica* and *Anteaeolidiella poshitra*.

MoEF&CC accepted the PP's assertion and did not recommend environmental impact analysis to verify the critical facts.

C. The project '**Expansion of Adani Petronet (Dahej) Port in Gujarat**' involved reclamation of 23 hectares of intertidal mudflats. They are areas of high biological productivity with abundant invertebrates which provide food for migratory birds. Also, they function as breeding grounds for many fish species. However, the EIA study of this project stated that the mudflats in the project area were biologically inactive. Audit observed that MoEF&CC accepted the opinion of the PP and did not independently examine this issue and accorded clearance in 2016.

Thus, failure on part of MoEF&CC to verify information critical to conservation of the coastal ecosystem would impact its conservation.

### 3.5 Deficiencies in the process of Public Hearing

Public hearings provide an opportunity to those directly affected by the project to express their views on the environmental and the social impacts of the proposal. Public consultation may provide new information, improve understanding and help the EIA process to be transparent and fair. Public hearings are to be conducted for projects attracting EIA Notification 2006. We observed five cases of project approvals (**Annexure 9**) where the project proponent failed to adhere to various provisions regarding public consultation.

Audit observations for some cases are as follows:

A. The project '**High-Speed Railway corridor by National High Speed Rail Corporation Ltd.**' approved by MoEF&CC in 2019 passed through the states of Gujarat, Dadra & Nagar Haveli and Maharashtra. The Public hearing for this project was conducted in 12 locations in these states. It was noticed that the notice period for public hearing in all the 12 locations ranged between 03 to 15 days<sup>28</sup>, and the notice was published only in a local newspaper<sup>29</sup>. Also, in response to the issues raised during public hearing regarding the impact of vibrations on Greater flamingos of Thane bird sanctuary, the PP stated during the public hearing that the impact of vibrations caused by construction activities would have no adverse impact on flamingos. However, when the same concern was raised by the EAC, the PP responded that the impact of vibrations would be understood only when the site work starts. Mismatch between the information given in public hearing and that furnished during the EAC meeting was noted by the audit.

B. The project involving setting up of '**Mini Bulk Carriers Handling Facility at Haldia dock Complex, by Kolkata Port Trust**' was granted EIA clearance by MoEF&CC in 2017. It was observed that 46 persons apart from the SPCB and the port authorities had attended the public hearing. However, the EIA report did not include any of the responses from the local communities raised during the hearing.

<sup>28</sup> The minimum notice period is 30 days.

<sup>29</sup> One national paper and 1 vernacular paper.



Deficiencies in the process of public hearings which provide valuable input on impacts to local community, would violate the principles of equity and that of sustainable development.

### 3.6 Grant of clearance to projects without giving due consideration to Ecologically Sensitive Areas (ESAs)

During examination of the project clearances, we observed two instances where clearances were granted without factoring in the presence of Ecologically Sensitive Area in and around the project area. Some of these cases are illustrated below.

Table 3.5: Non-factoring in the presence of Ecologically Sensitive Area in and around the project area

Project	Approval	Sensitive area not considered
<b>Cochin Residential Development Project by TRIF Kochi Projects</b>	Accorded clearance by MoEF&CC in 2016	It was observed that though Mangalavanam Bird sanctuary was situated within a distance of 400 metres from the project site, clearance from NBWL was required as it was located within 10 Kms of an ecosensitive zone around a wildlife sanctuary, however, the same was not taken.
<b>Mumbai Manmad pipeline project by Bharat Petroleum Corporation Limited, Maharashtra,</b>	Accorded clearance by MoEF&CC in 2015	It was observed that against 3.17 hectares of mangroves to be replanted, no replantation was taken up.

Such clearances would affect the ecosystem balance of these fragile and vulnerable areas.

### 3.7 Irregular Grant of clearances and recommendations by the State Coastal Zone Management Authorities

#### 3.7.1 SCZMA exceeded authority to clear projects

The SCZMAs are required to examine the project proposals, assess the risks posed by the project and potential impact of the same on the ecosystem. As per CRZ Notification 2011, SCZMAs are to examine the project proposals that attract the notification and recommend them to approval authorities i.e., MoEF&CC or SEIAA for grant of clearance. Audit observed 20 cases where the SCZMA usurped the powers of clearance granting authorities and granted clearance to the projects. A few cases have been highlighted below:

A. MoEF&CC stipulated (December 2012) that if a project requiring Environmental Clearance was located within the eco-sensitive zone around a Wildlife Sanctuary or National Park<sup>30</sup>, the PP was required to obtain prior clearance of National Board of Wildlife (NBWL). We observed that the project **Establishment of Kundhukal Fishing Harbour in TamilNadu** was located within 1 km from Kurusadai Island which was a part of the Core area of Gulf of Mannar Marine National Park (GoMMNP), in which activities can be carried out only after obtaining prior approval from the NBWL. However, TN SCZMA granted CRZ clearance for the project in 2018 without the requisite prior clearance from the NBWL.

<sup>30</sup> Or in absence of delineation of such a zone, within a distance of 10 kms from its boundaries.

B. SCZMA of Karnataka in 2015, granted CRZ clearance to a project with an objective to **strengthen the 7.76 km long embankment along the left bank of estuarine stretch of Aghanashini River**. Though the proposed project area was in ecologically sensitive zone (CRZ I), it was observed that the SCZMA accorded clearance without carrying out an EIA or a detailed study of the environment, the aquatic life and effect on the mangroves. Also, grant of clearance by SCZMA was irregular as SCZMAs could only recommend for clearance as MoEF&CC/SEIAA are the approval bodies.

### 3.7.2 Project approval without submission of mandated documents

We observed 46 project approvals where the proponent failed to submit mandatory documents such as EIA reports, disaster management report, risk assessment report, CRZ maps, No Objection Certificate from the concerned State Pollution Control Boards for the projects involving discharge of effluents, sewage etc. as detailed at **Annexure 10**. Some cases are illustrated below:

A. The project **'Construction of Tuna Fishing Harbour in Tiruvottiyur, Chennai by Fisheries Department, Govt. of Tamil Nadu'** was granted clearance by TN SCZMA in 2017. The project aimed at decongesting the Chennai fishing harbour and to create facilities for catching, processing of Tuna Fish. The EIA report of the project proponent revealed that the project involved construction of Desalination plant, intake of Sea water, discharge of treated effluents, RO rejects into the Sea. The SCZMA in its clearance had stipulated provision of ETP of adequate capacity for treatment of sewage and trade effluents from vessel washing. Also, the unit was advised not to generate effluents from fish packing facility in the harbour. This necessitated the requirement of No objection Certificate from SPCBs, however, we observed that the same had not been taken in the extant case.

B. The project **'Additional Salt Works (2395.15 acres) located at village Kalatalav and Narmad, Bhavnagar district in Gujarat'** was granted clearance by SEIAA in 2017. We observed that the clearance was granted in the absence of mandatory documents, namely EIA Report including the marine and the terrestrial components, risk assessment report, Environment Management Plan, the CRZ map with HTL/LTL marked by the authorized agency which was highly irregular.

Grant of project approvals in excess of its authority and without mandatory documents would weaken the checks placed in the approval mechanism and thus, hinder conservation of the coastal ecology.

### 3.8 Modification of CRZ notification to permit specific projects

MoEF&CC amended the CRZ notification 2011 to allow for two specific development projects in the state of Maharashtra. The projects are discussed as below.

A. The project for **'Construction of a Coastal Road in Mumbai by Municipal Corporation of Greater Mumbai (MCGM)'** was accorded clearance by MoEF&CC in 2017. The project required reclamation of land in CRZ-I area which was not permissible as per the

provisions of the CRZ Notification 2011. Hence, on the basis of a recommendation received from SCZMA of Maharashtra, MoEF&CC amended the CRZ Notification 2011 in 2015 allowing for construction of road by way of reclamation in CRZ area.

B. A project of '**Construction of a memorial and a statue of Chhatrapati Shivaji Maharaj, at Nariman Point, Mumbai**' along with art museum, amphitheatre, exhibition gallery, marine aquarium, coastal/ marine resources interpretation centre, cafeteria, lavatories, medical facilities, stalls and offices were also planned. Maharashtra Coastal Zone Management Authority recommended the project to MoEF&CC in 2014 as a special dispensation under the CRZ Notification 2011. Based on the recommendation of the Maharashtra SCZMA, MoEF&CC in December 2014 amended CRZ Notification 2011 to allow for the construction of the memorial in CRZ-IV areas (which included water areas from the low tide line to 12 nautical miles on the seaward side) on case-to-case basis. However, audit examination revealed lapses in the EIA process of the project. Audit observed that the EIA was prepared by a non-accredited consultant and EIA lacked comprehensive ecological evaluation of the project site. Further, though the project attracted EIA appraisal as per the EIA Notification 2006, the project was exempted from public hearing and was granted environmental clearance in 2015.

Modification of CRZ notifications for approval of specific projects not only sets a bad precedence but also ends of defeating the efforts to conserve the coastal ecosystems.

### **3.9 Non-inclusion of major infrastructure project categories in the EIA Notification**

The provisions of CRZ notification requires the projects that attract both EIA Notification 2006 and CRZ Notification to undergo the approval process as per the EIA Notification. However, the EIA Notification 2006, does not comprehensively cover all kinds of development projects. Audit noted that projects by nature and scale of operation attracted the comprehensive EIA assessment in addition to CRZ clearances. However, these projects were approved without undergoing the multistage process of EIA. This gap in the project approval mechanism resulted in awarding project clearance without Terms of Reference (ToRs) and public consultation. The projects are discussed below:

A. **Mumbai Coastal Road:** As construction of municipal roads do not fall in any of the categories of project attracting EIA Notification, the proposed project of Mumbai Coastal Road was granted clearance under CRZ Notification in 2017. Thus, the project which had otherwise significant environmental concerns bypassed the critical stage of public hearing as CRZ Notification does not provide for public consultation in the approval process. It is pertinent to note that Rule 4 (e) of the Notification envisaged that MoEF&CC may under a specific or general order specify the projects which require prior public hearing of project affected people.

B. **Mumbai Trans-harbour Sea link (MTHL):** The project involved construction of a 22 Km long road bridge across Mumbai Harbour between Sewri and Chirle. The bridge passed through CRZ-I area comprising of mudflats (at Sewri and Shivaji Nagar), mangroves and a

flamingo breeding site. The project was granted environmental clearance as per EIA Notification 1994 and CRZ Notification 1991 in 2005. As the project work could not begin in the stipulated time period, the EC expired. In 2015, the project was granted clearance as per the provisions of the CRZ Notification 2011. The project did not attract provisions of EIA Notification 2006 as standalone bridges did not fall into any category of EIA Notification. This resulted in approving the project without ToRs and public consultation, though the project included land acquisition, rehabilitation and resettlement of local residents. It is pertinent to note that the standalone bridges now find a place in the Draft EIA Notification 2020, however the bridges with the built-up area  $\geq 1,50,000$  sq. m or 15 hectares, as this project, would be treated as Category B2 project and its clearance would require only two processes i.e., preparation of Environment Management Plan and its appraisal by SEIAA. Thus, the project would still not be considered in a comprehensive manner as main processes such as public consultation and preparation of an EIA Report would be skipped.

### 3.10 Conclusion

- There were deficiencies in the project approval mechanism of MoEF&CC. EIA studies lacked holistic ecological evaluation and failed to identify the key ecological risks and downplayed potential ecological impacts. Clearances were granted to the Project Proponents though the projects failed to address the impact on vulnerable flora and fauna.
- Failure to perform cumulative impact assessment resulted in the grant of clearances to projects without studying the combined effects of individual impacts in the project area.
- MoEF&CC failed to ensure that the Project Proponents earmarked budget for EMP.
- The Ministry relied on the Project Proponent without carrying out independent verification of the information furnished by the Proponent/EIA studies.
- There were cases where MoEF&CC amended the CRZ notification to facilitate for approval of individual projects. These modifications were made without conducting any technical studies on the repercussions of the same to ecosystems and impacted the entire coastline.
- As such, the process of grant of clearances for setting up projects could not ensure fully that the proposed projects would not have a detrimental impact on the coastal ecology.