

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE
MEMORANDUM OF APPLICATION

ORIGINAL APPLICATION NO. 106 OF 2022

IN THE MATTER OF:

VANASHAKTI & ANR.

.... APPLICANTS

VERSUS

UNION OF INDIA & ORS.

... RESPONDENTS

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S. No.	PARTICULARS	PAGE
1.	Para-wise Reply affidavit on behalf of Union of India, Ministry of Environment, Forest and Climate Change (Respondent No.1), Union Of India.	
2.	A copy of MoEF&CC O.M No. 12/1/2019-IA-III(E-122245) dated 26/10/2021 is annexed herewith and marked as Annexure-R1/1.	
3.	A copy of the National Action Plan on Climate Change (NAPCC) was released by the Hon'ble Prime Minister of India on the 30th of June 2008, is annexed herewith and marked as Annexure-R1/2.	
4.	A copy of the Guidelines for updation/ preparation of CZMP as per CRZ Notification, 2019 issued vide OM dated 26-6-2019 is annexed herewith and marked as Annexure-R1/3.	
5.	A true copy of the order dated 11/04/2022 is annexed herewith and marked as Annexure-R1/4.	

6.	A true copy of the order dated 13/03/2024 is annexed herewith and marked as Annexure-R1/5.	
7.	A true copy of the order dated 08/01/2024 is annexed herewith and marked as Annexure-R1/6.	

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PARA-WISE REPLY ON BEHALF OF RESPONDENT NO. 1, UNION OF
INDIA, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE
CHANGE.

MOST RESPECTFULLY SHEWETH:

I, E. Thirunavukkarasu, S/o Shri. M. Elangovan aged about 56 years, presently working as Scientist 'E' in the Ministry of Environment, Forest & Climate Change (hereinafter referred to as MoEF&CC) do hereby, in my official capacity, solemnly affirm and state on oath as follows:

1. That I am authorized by the Competent Authority in the Ministry, New Delhi to swear the present affidavit on behalf of the MoEF&CC on the basis of the official records maintained therein.
2. At the outset, I deny all averments, submissions, statements, allegations made therein except those specifically admitted herein after.



3. It is humbly submitted that the Respondent Ministry had submitted a detailed counter affidavit in pursuance to the direction of Hon'ble Tribunal. However, as directed by Hon'ble Tribunal vide its order dated 14/02/2024, the Respondent Ministry is submitting para-wise reply to the petition.

4. It is also humbly submitted that the petitioner himself in Para 4 of his petition has admitted that he had raised objections and suggestions to the Draft CRZ Notification, 2018 when it was published for public consultation. Further, the petitioner has not contested about (non) consideration of the suggestions given by him. Now after a lapse of more than 5 years the petitioner is challenging the CRZ Notification 2019. Therefore, on this ground itself, the petition is liable to be dismissed.

5. It is humbly submitted that the Ministry of Environment Forest & Climate Change (MoEF&CC) issued the initial CRZ Notification on 19th February, 1991, under Section 3 of the Environment Protection Act, 1986 read with Rule 5(3)(d) of the Environment (Protection) Rules, 1986, with the prime objective of ensuring livelihood security to fishing and other local communities living in coastal areas, and to conserve/protect coastal stretches while also promoting development of coastal zone based on scientific principles.

This notification was superseded by the CRZ Notification, 2011 issued *vide* S.O. 19(E), dated 06/01/2011. The said notification *inter alia* deals with categorization of CRZ areas, permissible and prohibited activities, regulation of permissible activities in CRZ areas, procedure for clearance, preparation of Coastal Zone Management Plans, mapping and areas requiring special consideration etc.

The notification was amended from time to time based on representations received from the coastal State Governments, Union Territory administrations and other stakeholders, and over time, need was felt to undertake a comprehensive revision of the CRZ Notification, 2011. The MoEF&CC accordingly constituted a Committee in June 2014, under the Chairmanship of Dr. Shailesh Nayak (Secretary, Ministry of Earth Sciences) to examine the



accordingly constituted a Committee in June 2014, under the Chairmanship of Dr. Shailesh Nayak (Secretary, Ministry of Earth Sciences) to examine the various issues and concerns of Coastal States/UTs and other stakeholders for recommending appropriate changes in the CRZ Notification, 2011.

Based on wide-ranging consultations with State Governments and other stakeholders, the Shailesh Nayak Committee submitted its recommendations in 2015. The recommendations were further examined in consultation with all Stakeholders including Members of Parliament of Coastal States and Union Territories besides other concerned Ministries of Government of India and a draft notification viz. CRZ Notification, 2018 was issued on 18th April, 2018 inviting comments from public at large.

Based on suggestions and comments received and recognizing the necessity for balancing the imperatives of conservation and protection of the fragile coastal ecosystems and sustainable development and livelihoods for local coastal communities in the present day context, the Union Cabinet approved the new Coastal Regulation Zone Notification on 31/12/2018 and same was finally issued *vide* G.S.R 37(E), dated 18/01/2019.

This new CRZ Notification, i.e. CRZ, 2019 is expected to go a long way in meeting the aspirations of coastal communities besides ensuring welfare of poor and vulnerable population residing in the coastal areas and in meeting their livelihood needs. Overall, this new CRZ Notification will result in greater economic growth while conserving the coastal eco-systems, thereby creating as well as providing greater livelihood opportunities and better quality of life for the coastal communities.

The new CRZ Notification, 2019 issued *vide* G.S.R 37(E), dated 18/01/2019, will however become effective only after the Coastal Zone Management Plans (CZMPs) of the respective coastal states are aligned and updated based on the provisions of the new notification. To this effect, the MoEF&CC have issued a *'Guidelines for updation of Coastal Zone Management Plan prepared as per*



CRZ Notification, 2011 to align it with CRZ Notification, 2019' to all coastal states for immediate action.

As on date the CZMP 2019 of Odisha, Karnataka, Maharashtra (Two districts i.e., Mumbai and Mumbai Sub-Urban) and ICRZ Plan of Andaman Nicobar Island (Great Nicobar and Little Andaman) have been approved by MoEF&CC. It would be relevant to mention here that in case where CZMP has not been prepared as CRZ Notification 2019, the CZMP as per CRZ Notification 2011 is applicable. As per the CRZ Notification, 2019, *"All coastal States and Union Territory Administrations shall revise or update their respective coastal zone management plan (CZMP) framed under CRZ Notification, 2011 number S.O. 19(E), dated 6th January, 2011, as per provisions of this notification and submit to the Ministry of Environment, Forest and Climate Change for approval at the earliest and all the project activities attracting the provisions of this notification shall be required to be appraised as per the updated CZMP under this notification and until and unless the CZMPs is so revised or updated, provisions of this notification shall not apply and the CZMP as per provisions of CRZ Notification, 2011 shall continue to be followed for appraisal and CRZ clearance to such projects"*.

The islands located along the mainland (offshore and inshore within tidally influenced water bodies) are covered under the Coastal Regulation Zone (CRZ) notification, whereas Andaman and Nicobar and Lakshadweep group of islands are covered under the Island Protection Zone (IPZ) Notification, 2011, issued on 6th January 2011 under the Environment (Protection) Act, 1986. Akin to CRZ Notification, the Island Coastal Regulation Zone (ICRZ) Notification, 2019 was also issued in supersession of IPZ Notification, 2011 vide S.O.1242 (E), dated 08/03/2019. This new notification will however become effective only after the ICRZ / IIMPs of the islands are revised and updated as per the provision of the new notification.

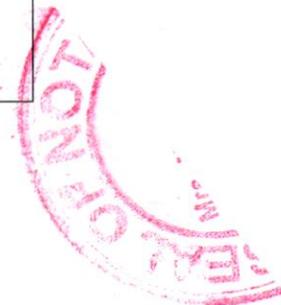
6. That in compliance of the last order dated 14/02/2024 of this Hon'ble Tribunal, this answering respondent is submitting para-wise reply to the petition of O.A No. 106 of 2022 in tabular form as follows:



Paragraph no./ Contents as per petition of O.A No. 106/2022	Para wise reply by the answering respondent.
<p>Para 1. The Addresses of the Applicants are as given above for the service of notice of this Application.</p>	<p>No comments as Statement of fact submitted by the applicant.</p>
<p>Para 2. The addresses of the Respondents are as given above for the service of notices of this Application.</p>	<p>No comments as Statement of fact submitted by the applicant</p>
<p>Para 3. Applicant No.1 is a Public Trust registered under the Bombay Public Trusts Act, 1950. Applicant No.1 's office is at the address set out above. Applicant No. 1 has been actively pursuing various environmental and other social causes in public interest in and around Mumbai. Applicant No. 1 is actively involved in sustained efforts towards conservation of coastal zones, forests, coastal and inland wetlands and wildlife and have also undertaken programs to ensure sustainable livelihood options for the tribal Population of the country. Applicant No. 1 also has a sub-unit called Sagmarine conservation work. Applicant No. 1 has also been instrumental in Shakti which undertakes in seeking release of much delayed CZMP Maps under the CRZ Notification, 2011. Applicant No. 2 is a citizen of India and is the Projects Director of Vanashakti, the Applicant No. 1.</p>	<p>No comments as Statement of record being submitted by the applicant in the paragraph.</p>



<p>Para 4. Applicants have been working consistently for more than a decade for the protection of forests, rivers, wetlands, mangroves, creeks, floodplains, beaches, National Parks and Wildlife Sanctuaries in Mumbai and Maharashtra. Applicant has not only undertaken various socio environmental outreach programmes aimed at developing a sense of environmental awareness amongst the younger population of Mumbai by ensuring their active participation in afforestation and cleaning activities but it has also taken an active role in using law as a tool to bring systemic change in protecting the environment. Applicant has been instrumental in securing protective orders from various constitutional courts and this Hon'ble Tribunal such as complete ban on reclamation and destruction of all coastal and inland wetlands in Maharashtra by the High Court of Bombay, fine of Rs. 100 Cr. as restoration costs imposed by the Supreme Court & Hon'ble NGT on various industrial bodies and government organisations for restoration of Ulhas River, complete ban on felling of trees in Sawantwadi-Dodamarg Corridor by High Court, complete ban on felling of trees in Aarey Forest by Hon'ble NGT & HC,</p>	<p>It is humbly submitted that the petitioner himself has admitted that he had placed his objections and suggestions to the Draft CRZ Notification, 2018 when it was published for public consultation. Further, the petitioner has not contested about (non) consideration of the suggestions given by him. Now after a lapse of more than 5 years the petitioner is challenging the CRZ Notification 2019 and on this ground alone the petition is liable to be dismissed.</p>
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direction to IIT Bombay to prepare a comprehensive report on cleaning of Mithi river by Supreme Court, a fine of more than Rs.30 Cr. on Municipal Corporation of Greater Mumbai (MCGM) by Hon'ble NGT for cleaning up sewage pollution in creeks of Mumbai, ban on any construction activity on flood plains in Maharashtra by High Court and initiating much-delayed declaration of "Critical Wildlife Habitats" in all Protected Areas of Maharashtra. Further, Applicant has *inter alia* challenged vires of various delegated legislations such as challenge to Wetlands Rules, 2017 before the Supreme Court wherein notice has been issued, challenge to withdrawal of river regulation zone before the High Court of Bombay, which is pending final hearing. Further, Applicant had placed its objections and suggestions to the Draft CRZ Notification, 2018 when it was published for public consultation.

Para 5. Respondent No. 1 is the Ministry of Environment, Forests and Climate Change and is the authority responsible for the protection and preservation of the environment and prevention and abatement of environmental degradation in the country. In the present case, Respondent

No comments as the para is with respect to description of parties submitted by the applicant.

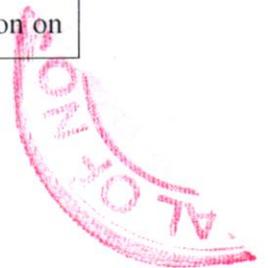


<p>No. 1 is the authority responsible for issuing and notifying the impugned Notification. Respondent No. 2 is the Environment Department of Maharashtra, and is responsible for the protection of the environment in the state. Respondent No. 3 is the Maharashtra Coastal Zone Management Authority (MCZMA), charged with the responsibility of protecting the coast of the State and regulating related activities thereof. Respondent No. 4 is the National Coastal Zone Management Authority (NCZMA) charged with the responsibility of protecting the coast of the country and regulating related activities.</p>	
<p>Para 6. This Application challenges various provisions of the Coastal Regulation Zone Notification 2019 ("CRZ 2019"). A copy of CRZ 2019 is annexed hereto as ANNEXURE A-1. CRZ 2019 has superseded CRZ 2011. A copy CRZ 2011 is attached hereto as ANNEXURE A-2. A copy of the Draft Notification, 2018 dated 18.04.2018 is attached hereto as ANNEXURE A-3.</p>	<p>It is humbly submitted that with the prime objective of ensuring livelihood security to fishing and other local communities living in coastal areas, and to conserve/ protect coastal stretches while also promoting development based on scientific principles, the CRZ Notification was issued vide S.O. 114(E), dated 19/02/1991. This notification was superseded by the CRZ Notification, 2011 and issued</p>

vide S.O. 19(E), dated 06/01/2011. The said notification covered categorization of CRZ areas, permissible and prohibited activities, regulation of permissible activities in CRZ areas, procedure for clearance, preparation of Coastal Zone Management Plans, mapping and areas requiring special consideration etc. The notification was amended from time to time based on representations received from the coastal state Governments, Union Territory administrations and other stakeholders, and a need was felt overtime to undertake a comprehensive revision of the notification. The Ministry of Environment, Forest and Climate Change had accordingly constituted a Committee in June 2014 under the Chairmanship of Dr. Shailesh Nayak (Secretary Ministry of Earth Sciences) to examine the various issues and concerns of Coastal States/ UTs and other stakeholders for



<p>[Note- Paras 7 and 8 of the Petition are missing in the OA 106 document]</p>	<p>recommending appropriate changes in the CRZ Notification, 2011. The Shailesh Nayak Committee held wide ranging consultations with State Governments and other stakeholders and submitted its recommendations in 2015. The recommendations were further examined in consultation with Members of Parliament of Coastal States and Union Territories besides other concerned Ministries of Government of India and a draft notification viz. CRZ Notification, 2018 in supersession of CRZ Notification, 2011 was issued in April, 2018 for inviting comments from public at large. A number of suggestions and comments were received by the Central Government and based on overall imperative of sustainable development of coastal areas and need for conserving the coastal environment, the Union Cabinet has approved the new Coastal Regulation Zone Notification on</p>
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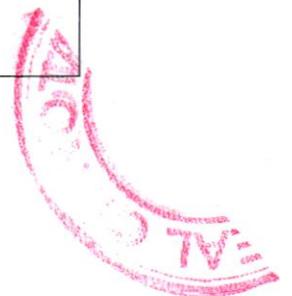


31/12/2018 and finally issued vide G.S.R 37(E), dated 18/01/2019. This new CRZ Notification is expected to go a long way in meeting the aspirations of coastal communities besides ensuring welfare of poor and vulnerable populations. **Overall, this new CRZ Notification, 2019 will result in sustainable economic growth and development of the coastal and marine areas while conserving the coastal eco-systems, thereby creating greater livelihood opportunities and better quality of life of coastal communities.**

The new CRZ Notification, 2019 issued vide G.S.R 37(E), dated 18/01/2019, will however become effective only after the Coastal Zone Management Plans (CZMPs) of the respective coastal states are aligned and updated based on the provisions of the new notification. To this effect the Ministry of Environment, Forest and



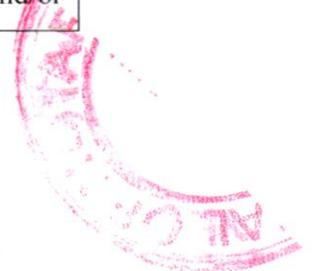
	<p>Climate Change has issued 'Guidelines for updation of Coastal Zone Management Plan prepared as per CRZ Notification, 2011 to align it with CRZ Notification, 2019' to all coastal states for immediate action.</p> <p>The CZMP as per CRZ Notification, 2019, has been approved for State of Odisha, Karnataka and Maharashtra. Further, the ICRZP as per ICRZ Notification, 2019 has been approved for Great Nicobar Island and Little Andaman Island.</p> <p>That, for the rest of the Coastal States, CZMP/ICRZP as per CRZ Notification, 2011 and IPZ Notification, 2011 are presently applicable.</p> <p>[Note- Paras 7 and 8 of the Petition are missing in the petition copy of OA 106 of 2022]</p>
<p>Para 9. The provisions of the Notification under challenge are harmful to the environment and represent a severe regression both from the protections incorporated in (and/or principles and/or</p>	<p>It is humbly submitted that the averments of the Applicants in this para and in the sub-paras a) to o) are without any basis and are denied.</p>



<p>rationale thereof) under earlier CRZ Notifications. The topic areas and consequent provisions of the CRZ 2019 under challenge in the present Petition are as under:</p> <p>a) Bifurcation of CRZ-III into CRZ-IIIA AND IIIB, And Reduction of 200 Meter NDZ to 50 Meters in CRZ-IIIA [Regulation 2.3.1 and 2.3.2]</p> <p>b) Reduction in The CRZ for Tidal Influenced Water Bodies from 100M TO 50M [Regulation 1.0 (ii)]</p> <p>c) Change of FSI Norms in CRZ-II from those existing in 1991 to those Presently Existing [Regulation 5.2 (iii) and 5.2 (iv)]</p> <p>d) Procedure for Clearance of Projects including Dispensing with EIA, Risk Assessment Report, And Disaster Management Plans in certain cases [Regulation 8 (i) (b) and 8 (i) (c)]</p> <p>e) Dilution of essential components in preparation of CZMP (Annexure - IV)</p> <p>f) Dilution of essential components 111 Application Form for CRZ Clearance (Annexure - V)</p>	<p>The CRZ Notification, 2019 has been notified by the Government of India vide notification No. G.S.R. 37(E) dated 18/01/2019, based on the report submitted by the six-member Committee (Annexure A-4 of the Applicant) to examine the issues of Coastal States/UT Governments, relating to CRZ Notification, 2011 and to examine the errors or inconsistencies and suggest procedural simplification in the said notification. The Committee comprised Dr Shailesh Nayak, Secretary, Ministry of Earth Sciences, Mr Shashi Shekhar, Addl. Secretary, MoEF&CC, Prof. R. Ramesh, Director, NCSCM, Dr M. Baba, Former Director, CESS, Shri Hardik Shah, Member Secretary, Gujarat CZMA and Dr.A.Senthil Vel, Additional Project Director, SICOM. The following six basic principles have been considered and adopted by the Committee in formulation of the report:</p>
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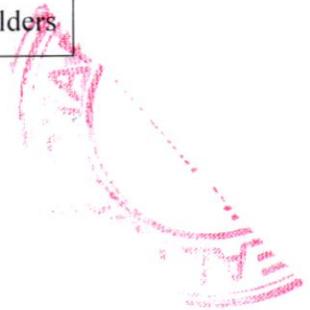
<p>g) Dilution Of Protection For Mangroves And Mangrove Buffer [Regulation 5.1.1.(i), Regulation 5.1.1.(ii)]</p> <p>h) Changes in The Regulation Of Permissible Activities (Hotels, Port Development, Airport) In the CRZ [Regulation 5.1.2(i)(a), Regulation 5.2 (v), Regulation 5.4(ii)(a); Regulation 5.3 (g), Regulation 5.3 (v);</p> <p>i) Deleting Items from The List Of Prohibited Activities In The CRZ (Waste Disposal, Land Reclamation, Fish Processing units, and dressing of Sand Dunes) [Regulation 4 (i) and (ix)]</p> <p>j) Increase in The Number Of Petroleum And Chemical Products Permitted To Store In CRZ Areas Except For CRZ-I(A) [Annexure II Regulations (xvi) to (xxiii)]</p> <p>k) Dilution of CRZ- I by Removing the Term 'Associated Biodiversity' In Respect of Protection of Coral Reefs [Regulation 2.1.1 (a) (ii)]</p> <p>l) Reduction in CRZ from 50 Meters To 20 Meters On Islands [Regulation 10.2 (ii)]</p>	<p>Conservation and protection of Ecologically Sensitive Areas such as coastal geomorphology and Architectural & Heritage sites.</p> <p>Integration of development /economic and growing needs of the Society with coastline preservation.</p> <p>Vulnerability of the coastal environment to natural and manmade hazards.</p> <p>Conflict of CRZ regulations with the existing norms issued by the States/UTs as well as by the Central Government from time to time.</p> <p>Application of space technology for management of coastal and marine environment.</p> <p>Issues related to capacity Building in Coastal Zone Management.</p> <p>Thus, the Applicants' statement that the provisions of the Notification under challenge are harmful to the environment and represent a severe regression both from the protections incorporated in (and/or</p>
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<p>m) Construction of Statues / Monuments [Regulation 5.4 (xv)]</p> <p>n) Deletion of Special Provisions for Koliwadass and Gaothans in Greater Mumbai.</p> <p>o) Deletion of Special Provisions for Mumbai.</p>	<p>principles and/or rationale thereof) under earlier CRZ Notifications are unfounded and without any basis.</p> <p>Further, the CRZ Notification, 2019 was issued by the Central Government with a view to conserve and protect the unique environment of coastal stretches and marine areas, besides providing livelihood security to the fishing communities and other local communities in the coastal areas and to promote sustainable development based on scientific principles taking into account the dangers of natural hazards, sea level rise due to global warming and to declare as Coastal Regulation Zone the coastal stretches of the country and the water area up to its territorial water limit, excluding the islands of Andaman and Nicobar and Lakshadweep and the marine areas surrounding these islands.</p>
<p>Para 10. The Applicant shall deal with each of the areas of challenge independently. The Applicant's</p>	<p>No comments.</p>



<p>submissions with respect to the provisions of CRZ 2019 are set out in detail below.</p>	
<p>Para 11. CRZ 2019 has brought about a radical change in the erstwhile regulatory framework and prevailing safeguards. As is clear from the summary in the foregoing paragraphs, CRZ 2019 takes away or dilutes almost all-important measures, in force, to protect the environment. Apart from the irreparable environmental damage that will be caused, CRZ 2019 is also legally flawed. It suffers from various infirmities and legal defects. These may be summarised below:</p> <p>(i) Many of the new provisions violate the right to live in a healthy environment and consequently the right to life of citizens of India under Article 21 of the Constitution of India. They are also manifestly arbitrary as they are based on no reasoning whatsoever, and therefore violate Article 14 of the Constitution of India.</p> <p>(ii) The reasons cited for enacting many of the proposed changes have no nexus with the object sought to be achieved by them. The same are therefore arbitrary and unconstitutional and violate Article 14 of the Constitution of India.</p>	<p>It is humbly submitted that the averments of the Applicants in this para and in the sub-paras (i) to (vi) are without any basis and are denied. CRZ Notification, 2019 contains stringent provisions for environmental safeguards, which inter-alia include paras (ii), 4. (x), 5.1.1 (i), 5.2(vi), 5.3(iii), 5.3(v), 5.4(xv), 10.2 (ii)(b), etc.</p> <p>The CRZ Notification, 2019 has been notified by the Government of India vide notification No. G.S.R. 37(E) dated 18/01/2019, based on the report submitted by the six-member Shailesh Nayak Committee to examine the issues of Coastal States/UT Governments, relating to CRZ Notification, 2011 and to examine the errors or inconsistencies and suggest procedural simplification in the said notification. The draft notification has also gone through a wide stakeholders</p>



<p>(iii) Many of the new provisions re-enact provisions that have been struck down as unconstitutional by Supreme Court or have been read down by the Supreme Court in earlier judgments.</p> <p>(iv) Many of the new provisions are contrary to the recommendations of various Committees set up by the Govt. of India to review the CRZ regime.</p> <p>(v) Many of the new provisions were not included in the Draft CRZ Notification. They have therefore been passed in violation of Section 5(3) of the Environment Protection Act, 1986. They are not provisions introduced in an emergency, as the 2019 Notification has been under consideration for a number of years;</p> <p>(vi) The nature of the changes made clearly reflect that CRZ 2019 is less a provision to protect the environment from damage and more a provision to protect unregulated construction by diluting well considered and well thought through existing protections and safeguards.</p>	<p>consultation before the final approval of Union Cabinet.</p>
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Background facts leading to CRZ 2019

Para 12. CRZ 2019 supersedes CRZ 2011.

It would therefore be gainful to advert to the material (Reports and/or observations) which records, discusses and documents matters of environmental concern. This is important because in the exercise leading to CRZ 2019 being notified, this material was noticed, which it, for most of the material, is evident from CRZ 2019 itself. Copies of various Reports which were considered in the process leading to CRZ 2019 and/or on which it is based are attached hereto as under:

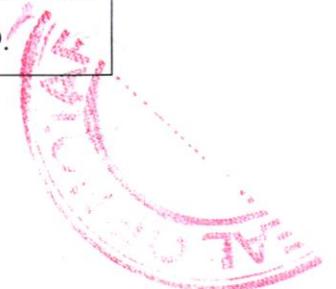
A copy of the Nayak Committee Report is attached hereto as **ANNEXURE A-4**.

A Copy of the Swaminathan Committee Report is attached hereto as **ANNEXURE A-5**.

A copy of the Final Frontier Report is attached hereto as **ANNEXURE A-6**.

A copy of the File noting of the MoEF on CRZ 2019 is attached hereto as **ANNEXURE A-7**.

The averments of the Applicants in this para and in the sub-paras (i) to (vi) are without any basis and are denied. The CRZ Notification, 2019 has been notified by the Government of India vide notification No. G.S.R. 37(E) dated 18/01/2019, based on the report submitted by the six-member Shailesh Nayak Committee to examine the issues of Coastal States/UT Governments, relating to CRZ Notification, 2011 and to examine the errors or inconsistencies and suggest procedural simplification in the said notification. 'Swaminathan Committee Report' enclosed by the Applicants as ANNEXURE A-5 was for review of the CRZ Notification, 1991 and was submitted on 9/02/2005. The 'Final Frontier Report' enclosed by the Applicants as ANNEXURE A-6 was to examine the comments received by the Ministry (MoEF) on the draft Coastal Management Zone Notification, 2008 and was submitted on 16/07/2009.



	Thus, the Applicants' statements are without any basis.
<p>A. BIFURCATION OF CRZ-III INTO CRZ-IIIA AND CRZ-IIIB, AND REDUCTION OF 200 METER NDZ TO 50 METERS IN CRZ-IIIA</p> <p>Para 13. In CRZ 2019, the erstwhile CRZ-III has been bifurcated into CRZ-IIIA and CRZ-IIIB. The No Development Zone ("NDZ") in a part of this bifurcated area i.e. CRZ-IIIA has been reduced to 50 meters.</p> <p>Para 14. CRZ-III was defined in the 2011 notification as under: <i>"areas that are relatively undisturbed and those that do not belong to either CRZ- I or II, which includes coastal zone in rural areas (develop and undeveloped) and also areas within municipal limits or in other legally designated urban areas which are not substantially built-up".</i></p> <p>Para 15. Regulation 2.3 dealing with CRZ-III in the 2019 notification reads as under:</p>	<p>In response to the Para 13 to 17, it is humbly submitted that the applicant has only reproduced the relevant provisions of the CRZ Notification, 2019, in para-Nos. 13, 14, 15 and 16.</p> <p>The Applicants' statement in para 16 that <i>"in more densely populated areas, where the toll/strain on the environment is in greater need of environmental protection, the opposite has been done"</i> is without any basis and scientific reasoning.</p> <p>It is submitted that, as per the Shailesh Nayak Committee report, several coastal States brought to the notice of the Committee, the need to reduce the No Development Zone in CRZ-III areas. The Committee after detailed discussion on the issues relating to local communities living in coastal</p>



2.3 CRZ-III:

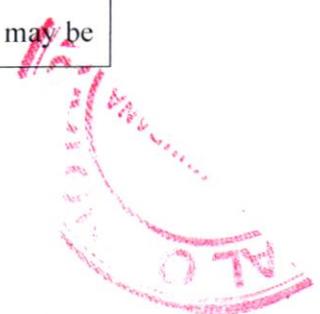
Land areas that are relatively undisturbed (viz. rural areas, etc.) and those which do not fall under CRZ-II, shall constitute CRZ-III, and CRZ-III shall be further classified into following categories: -

2.3.1 CRZ-III A:

Such densely populated CRZ-III areas, where the population density is more than 2161 per square kilometre as per 2011 census base, shall be designated as CRZ-III A and in CRZ-III A, area up to 50 meters from the HTL on the landward side shall be earmarked as the 'No Development Zone (NDZ)', provided the CZMP as per this notification, framed with due consultative process, have been approved, jailing which, a NDZ of 200 meters shall continue to apply.

Para 16. In CRZ 2019, it can therefore be seen that CRZ-III has been bifurcated into CRZ-IIIA and CRZ-IIIB the former of which is an area where the population is more than 2161 person per square kilometre as per 2011 census base, and the latter where the population density is less than 2161. The NDZ for CRZ-IIIA has been relaxed to 50 meters. Therefore, in more densely populated areas, where the toll/strain on the environment is in greater

areas was of the opinion that as per the information provided by State Government these local communities are put into great hardship due to the restrictions imposed by the CRZ Notification especially the NDZ specified in the CRZ-III areas. The local communities who possess land in such NDZ are deprived of the opportunity to construct or expand their houses. Further, the NDZ in the small islands in these water bodies is also restrictive and imposes restrictions on the housing/tourism facilities. It was brought to the notice of the Committee by State Government that some of these rural areas in Kerala, Karnataka and other places are thickly populated with more than 2000 people/km. Kerala being a State which has very less area for habitation is facing serious issues with regard to housing and other development activities. The Committee, after detailed discussion was of the view that the rural areas may be



<p>need of environmental protection, the opposite has been done.</p>	
<p>Challenge:</p> <p>Para 17. The challenge to this provision is based on the following grounds:</p> <p>(i) The basis for the said reduction has no rational nexus with the object of the said reduction. The same is therefore arbitrary and violates Article 14 of the Constitution. The Nayak Committee that examined changes to the CRZ has recommended this bifurcation and consequent relaxation of the No Development Zone (NDZ) in CRZ IIIA. This recommendation appears to have been made on the representations made by State Governments that some rural areas in Kerala, Karnataka and other places are thickly populated with more than 2000 people per square km. The local communities who possess land in such NDZ were according to these representations, deprived of opportunities to construct or expand their houses. The population density standard of 2161 people per sq .km appears to be taken from standard set up in class III towns of 2001 census of India. This reasoning is arbitrary for a number of reasons:</p>	<p>divided based on the population density. The categorization of such populated rural areas shall be as thickly populated and other rural areas. The thickly populated rural areas shall be those which have a population density of more than 2161 people/km which is as per Class-III towns of 2001 census of India. Other rural areas would be those which are less than 2161 people/km. The Committee taking into consideration the hardships faced by the local communities and keeping in view the need for housing recommends that the NDZ may be reduced to (i) 50 m in the densely populated rural areas and (ii) 200 m NDZ along the other rural areas. The housing of the communities in densely populated areas could be taken up landward of the above NDZ subject to the following conditions:</p> <p>(i) In densely populated CRZ-III areas, development can be taken up in accordance with the local prevailing norms</p>



	<p>including the height regulations. The local authorities shall ensure that:</p> <ul style="list-style-type: none">a. no activities shall be undertaken that would cause shoreline change including disturbing the sediment balance in the coastal waters;b. adequate provisions/facilities shall be built to provide for quick and timely rescue, relief and rehabilitation measures in case of natural calamities.,c. adequate open space shall be provided (to maintain aesthetics including adequate ground cover for fresh water recharge) and also to meet the emergencies during natural disasters;d. all structures shall be provided with groundwater recharge facilities. Further, drawl of groundwater shall be regulated as per the norms laid down by the local ground water authority;e. no discharge of untreated sewage/effluents. All buildings shall be provided with water recycling systems and shall use
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	<p>the recycled water for noncontact purposes such as gardening, farming, washing and flushing;</p> <p>f. no dumping of solid waste;</p> <p>g. no conversion of land earmarked for parks, gardens, schools, hospitals and dispensaries, defense establishments, disaster management and other public utility areas including areas meant for fisheries.</p> <p>(ii) Rural areas are those areas which are less populated. In such areas, development of new houses of local communities can be taken up beyond NDZ which is 200 m from the HTL. Expansion of existing houses in accordance with the prevailing local Town and Country Planning Regulations can be taken up subject to overall height of the construction not exceeding 9m with ground plus one floor. For development of these rural areas, all provisions listed in a. to h. above shall be adhered to.</p>
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	<p>In the NDZ of CRZ-III areas, all traditional activities including fisheries, public amenities, recreational facilities and foreshore requiring facilities can be taken up in larger public interest as per the relevant provisions contained in the State and Central legislations and those contained in this notification. Repairs and reconstruction of existing authorized structure in the NDZ shall be taken up as per the local Town and Country Planning Regulations.</p> <p>It is also submitted that in CRZ-II areas which are developed/densely populated areas (e.g. Greater Mumbai), construction of buildings for residential purposes, schools, hospitals, institutions, offices, public places, etc. shall be permitted on the landward side of the existing road, or on the landward side of existing authorized fixed structures, as per para 5.2 (ii) of CRZ</p>
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	<p>Notification, 2019. In other words, if there is an existing road/ existing authorised fixed structure in a plot in a CRZ II area, at a distance of 10 m from the HTL on the landward side, then construction of buildings etc are permissible beyond 10 m from the HTL on the landward side. Thus, the effective NDZ can effectively turn out to even 10 m (far less than the 50 m NDZ in CRZ-IIIA) in a CRZ-II area, which entirely depends on the existence of existing road, or existing authorised fixed structure.</p> <p>However, the Applicant has not challenged this provision (5.2 (ii)) of CRZ Notification, 2019 which shows that the petitioner has been trying to mislead the Hon'ble Tribunal with distorted and half/incomplete facts.</p>
<p>Firstly, under CRZ 2011 (and indeed under CRZ 2019), there was a specific provision for construction/ reconstruction of dwelling units of traditional coastal</p>	<p>It is humbly submitted that the Applicant has only cited the case of construction/ reconstruction of dwelling units</p>



communities permitted between 100 and 200 meters from HTL (which was within the NDZ of 200 meter under CRZ, 2011). Similarly, there was a provision for construction of facilities that were required for local inhabitants on a case-to- case basis. In Regulation 5.3(ii)(a), (c) and (d), similar provision has been made for coastal communities in CRZ 2019. Therefore, a blanket relaxation cannot be said to have any nexus with the objective enunciated by the Nayak Committee for protecting "coastal communities". The rights of coastal communities were adequately addressed under CRZ 2011. Even if that needed a revisit, they were addressed by Regulation 5.3 (ii) (a) (c) and (d) of CRZ 2019. Making essential relaxation for addressing legitimate concerns of a few (coastal communities) can by no stretch of logic or reason be the basis to grant a bonanza (at the cost of huge environmental damage) to the 'many' who had no legitimate concerns. Clearly, the manner in which a general relaxation has been done, indicates that the needs of 'coastal communities' was nothing but an excuse. The dilution of the NDZ and CRZ- IIIA therefore has no nexus with its purported object and must therefore be struck down. Indeed, if the comments to

of traditional coastal communities in support of his argument in para 17(i)(a). However, in para 5.3(iii) there are other important provisions/ Regulations of activities for CRZ-III areas beyond NDZ, apart from construction/ reconstruction of dwelling units of traditional coastal communities. The same are listed below.

a. *Development of vacant plots in designated areas for construction of beach resorts or hotels or tourism development projects subject to the conditions or guidelines at Annexure-III to this notification.*

Construction or reconstruction of dwelling units, so long it is within the ambit of traditional rights and customary uses such as existing fishing villages, etc. and building permission for such construction or reconstruction will be subject to local town and country planning rules, with an overall height of construction not exceeding 9 meters and with only two floors



the draft CRZ notification are perused, it is clear that a large number comments received from the Coastal communities opposed the impugned notification. That apart, there is no consideration as to whether or how the provisions of CRZ 2011 were adequate/inadequate to deal with the needs of traditional coastal communities.

(ground + one floor).

The local communities including fishermen may be permitted to facilitate tourism through 'home stay' without changing the plinth area or design or facade of the existing houses.

Construction of public rain shelters, community toilets, water supply drainage, sewerage, roads, bridges, etc.

Limestone mining:

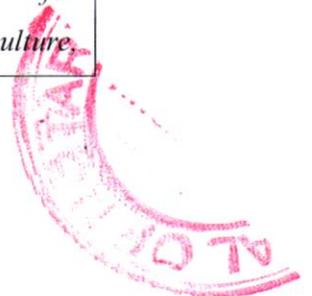
Selective mining of limestone minerals may be permitted in specific identified areas under the mining plans, which are adequately above the height of HTL, based on the recommendations of reputed National Institutes in the mining field such as Council of Scientific and Industrial Research (CSIR), Central Mining Research Institute etc., provided that the extraction of minerals shall be carried out not below a height of 1 meter above the HTL and an adequate barrier shall be created so as to



safeguard against saline water incursion and subject to appropriate safeguards related to pollution of coastal waters and prevention of coastal erosion.

Mining of atomic minerals notified under Part-B of the First Schedule of Mining and Minerals (Development and Regulation) Act, 1957 (67 of 1957) occurring as such or in association with one or other minerals by such agencies as authorised by Department of Atomic Energy, Government of India, as per mining plan by the Atomic Mineral Directorate for Exploration and Research.

Drawing of groundwater and construction related thereto shall be prohibited within 200 meters of HTL except for the use of local communities in areas inhabited by them and in the areas between 200 to 500 meters of the HTL, groundwater withdrawal may be permitted only through manual means from ordinary wells for drinking, horticulture,



	<p><i>agriculture and fisheries, etc. where no other source of water is available and restrictions for such drawal may be imposed by the designated Authority by State Government or Union territory Administration in the areas affected by sea water intrusion, however, for horticulture and agriculture purpose, micro irrigation promoted by Government welfare schemes shall be permitted.</i></p> <p><i>Development of airports in wastelands and non-arable lands in CRZ-III areas with adequate environmental safeguards.</i></p>
<p>Secondly, there has been absolutely no consideration of the environmental impact of the said relaxation by either the Nayak Committee or the MoEF. A need to relax is but one facet. The environmental consequences of such relaxation are equally important. There is however no consideration whatsoever in the consequences. At the very least, a balancing exercise was called for and a well- considered solution which was mindful</p>	<p>It is humbly submitted that the requirement of Environment Impact Assessment (EIA) as laid down under the Environment Impact Assessment (EIA) notification number S.O. 1533(E), dated the 14th September, 2006, have already been incorporated in the various provisions of CRZ Notification, 2019.</p>



of the 'effects' of relaxation, devised. This was one of the reasons that the Supreme Court struck down a Notification reducing the CRZ area from 100m to 50 meters for rivers, creeks, and backwaters in the ***Indian Council for Environment-Legal Action !!***. The stated basis for the same is merely the population density without having regard to ecological and geomorphological features of an area. The only avowed basis has been the rights of local communities to construct or expand their houses, which in any event had specific provision made for the same in CRZ 2011.

The Applicant's statement in para 17 (i) (b) that the stated basis for the same i.e. relaxation of the No Development Zone (NDZ) in CRZ IIIA is merely the population density without having regard to ecological and geomorphological features of an area, is without any basis, due to the reason that the mangrove, mudflat, salt marsh and other ecologically sensitive areas are mapped and demarcated separately and independently as CRZ-IA (No Go) areas, irrespective of the width of the NDZ and even if they occupy large areas. The width of the NDZ/CRZ has no bearing on demarcation of mangroves, mudflats etc.

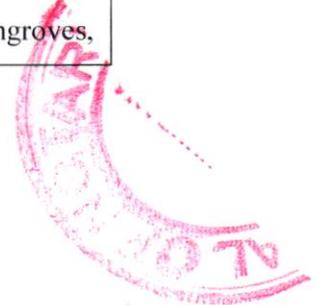
All ecologically sensitive areas (ESAs) and the geomorphological features which play a role in maintaining the integrity of the coast have been classified as CRZ- IA areas (No Go areas). These are:
Mangroves (in case mangrove



	<p><i>area is more than 1000 square meters, a buffer of 50 meters along the mangroves shall be provided and such area shall also constitute CRZ-I A)</i></p> <p><i>Corals and coral reefs;</i></p> <p><i>Sand dunes;</i></p> <p><i>Biologically active mudflats;</i></p> <p><i>National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas under the provisions of Wild Life (Protection) Act, 1972 (53 of 1972), Forest (Conservation) Act, 1980 (69 of 1980) or Environment (Protection) Act, 1986 (29 of 1986), including Biosphere Reserves;</i></p> <p><i>Salt marshes;</i></p> <p><i>Turtle nesting grounds;</i></p> <p><i>Horse shoe crabs' habitats;</i></p> <p><i>Sea grass beds;</i></p> <p><i>Nesting grounds of birds;</i></p> <p><i>Areas or structures of archaeological importance and heritage sites.</i></p>
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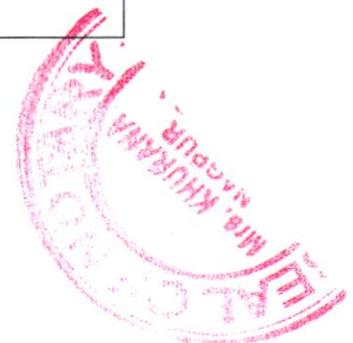
	<p>In fact, one more category of ESA namely 'Eco-Sensitive Zones' (ESZ) has been added in the list of ESAs/CRZ-I Areas, which was not available in CRZ Notification, 2011, vide MoEF&CC O.M No. 12/1/2019-IA-III(E-122245) dated 26/10/2021 (copy enclosed as ANNEXURE-R1-1).</p> <p>The Applicant's statement in para 17 (i) (b) that the stated basis for the same i.e. relaxation of the No Development Zone (NDZ) in CRZ IIIA is merely the population density without having regard to ecological and geomorphological features of an area, is without any basis, due to the reason that the mangrove, mudflat, salt marsh and other ecologically sensitive areas are mapped and demarcated separately and independently as CRZ-IA (No Go) areas, irrespective of the width of the NDZ and even if they occupy large areas. The width of the NDZ/CRZ has no bearing on demarcation of mangroves,</p>
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	<p>mudflats etc.</p> <p>The Applicant's statement in para 17 (i) (b) that "the only avowed basis has been the rights of local communities to construct or expand their houses, which in any event had specific provision made for the same in CRZ 2011", is also without any basis. As already enumerated in the reply to para 17(i)(a) above, there are other important provisions/ Regulations of activities for CRZ-III areas beyond NDZ, apart from construction/ reconstruction of dwelling units of traditional coastal communities, in para 5.3(iii) of the CRZ Notification, 2019.</p>
<p>What has been completely ignored is that the above relaxation will heavily increase the risk of collapsing all coastal infrastructure in rural areas due to coastal flooding attributed to sea level rise and will also cause intrusion of excess saltwater into inland farmlands, thereby adversely affecting paddy farms and seriously threatening food security of various coastal regions of coastal states. A</p>	<p>It is humbly submitted that the scientific research paper cited in para 17(i)(c) by the Applicant (ANNEXURE A-8) is titled "<i>Paradigms of climate change impacts on some major food sources of the world: A review on current knowledge and future prospects</i>" deals with combating Climate change</p>



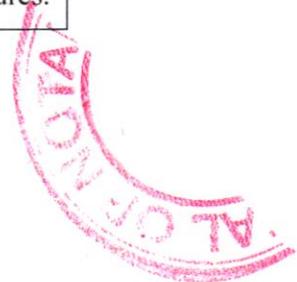
<p>copy of a scientific research paper in support of the said data is attached hereto as ANNEXURE A-8.</p>	<p>impacts and Agricultural adaptation and mitigation strategies.</p> <p>In this context, the National Action Plan on Climate Change (NAPCC) was released by the Hon'ble Prime Minister of India on the 30th of June 2008 (copy of PIB release enclosed as ANNEXURE-R1-2). It outlines a national strategy that aims to enable the country to adapt to climate change and enhance the ecological sustainability of India's development path. It stresses that maintaining a high growth rate is essential for increasing living standards of the vast majority of people of India and reducing their vulnerability to the impacts of climate change.</p> <p>The NAPCC comprises eight missions, including the National Mission for Sustainable Agriculture (NMSA).</p> <p>These eight National Missions form</p>
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	<p>the core of the National Action Plan.</p> <p>They focus on promoting understanding of climate change, adaptation and mitigation, energy efficiency and natural resource conservation.</p> <p>NMSA has been made operational from the year 2014-15, it aims at making agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific integrated /composite farming systems; soil and moisture conservation measures; comprehensive soil health management; efficient water management practices and mainstreaming rain-fed technologies.</p> <p>The Ministry of Environment, Forest and Climate Change (MoEF&CC) is the coordinating Ministry of NAPCC. The broad policy initiatives of the Central Government are supplemented by actions at the level of state</p>
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	<p>governments and Union Territories.</p> <p>Thus, it is submitted that the Central Government and Respondent-1 are already addressing the concerns of the Applicant through a major National Action Plan on Climate Change (NAPCC).</p>
<p>Para 18. In respect of the above the Applicant makes prayers (a), and (b).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA may kindly be dismissed.</p>
<p>B. REDUCTION IN THE CRZ FOR TIDAL INFLUENCED WATER BODIES FROM 100m TO 50m:</p> <p>Para 19. Tidal-influenced waterbodies include creeks, lagoons, estuaries, ponds (that are influenced by tide), and backwaters. CRZ 2019 has reduced the CRZ for tidal- influenced waterbodies from 100m to 50 meters. Regulation 1.0 (ii) of CRZ 2019 states as under:</p> <p>(ii) CRZ shall apply to the land area between HTL to 50 meters or width of the creek, whichever is less on the landward</p>	<p>It is submitted that, as per the Shailesh Nayak's Report of the Committee to Review the issues relating to the CRZ Zone Notification, 2011, the suggestions and comments received by coastal states and UTs were examined.</p> <p>It was indicated that the CRZ boundary along tidal influenced water bodies based on salinity ingress is highly confusing and in several cases not practical due to various hydro dynamic and geomorphological features.</p>



side along the tidal influenced water bodies that are connected to the sea and the distance upto which development along such tidal influenced water bodies is to be regulated shall be governed by distance upto which the tidal effects are experienced which shall be determined based on salinity concentration of five parts per thousand measured during the driest period of the year and distance up to which tidal effects are experienced shall be clearly identified and demarcated accordingly in Coastal Zone Management Plan (hereinafter referred to as the CZMP) 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, and till such time the CZMP to this notification is approved, the limit of 100 meters or width of the creek whichever is less, shall continue to apply.

Explanation.- For the purposes of this subparagraph the expression "tidal influenced water bodies" means the water bodies influenced by tidal effects from sea in the bays, estuaries, rivers, creeks, backwaters,

The States/UTS requested for doing away with this kind of parameter for determining CRZ boundary. Therefore, as per the Report of the Committee to Review the issues relating to the CRZ Zone Notification, 2011, the NDZ along backwaters, estuaries, creeks, and so on, of the state may be limited to 50 m instead of 100 m. It may be noted that in most of the period after the introduction of CRZ Notification, 1991, the NDZ applicable to backwaters was only 50 m. Also, as per CRZ Notification, 2011, the NDZ for backwater islands is only 50 m and the proposal is only to extend this provision to the entire backwaters and tidal-influenced water bodies.

Further, as per the Report, there are many riverine Islands and long stretches of rivers with tidal influence. Traditional fishermen as well as other inhabitants are there all along the river and islands. These traditional families were finding it difficult to expand the



<p>lagoons, ponds that are connected to the sea.</p>	<p>dwelling units due to family expansion. CRZ for the islands in the State of Karnataka was 100 m or width of the river/creek. Therefore, the CRZ limit in the islands of the state as well as all along the rivers also to be limited to 50 m or width of the river/creek whichever is less as provided for Kerala. The Government of Karnataka had requested for 50 m width from the HTL on the landward side as the CRZ area for the islands within the backwaters.</p>
<p>Challenge:</p> <p>Para 20. The Challenge to this reduction in the area of CRZ to 50 mts is on three grounds:</p> <p>The Supreme Court struck down a similar amendment reducing the CRZ from 100 m to 50m in the case of <i>Indian Council for Indian Council for Environment- Legal Actions vs Union of India &Ors</i> [(1996) 5 SCC 281]. The area that comprised the CRZ in CRZ Notification 1991 was 100 meters. This was sought to be reduced to 50 meters by a Notification dated 18th August 1994. This amendment was</p>	<p>It is humbly submitted that the Applicant's contention that the decision of the Hon'ble Supreme Court in the case of <i>Indian Council for Indian Council for Environment-Legal Actions vs Union of India &Ors</i> [(1996) 5 SCC 281] squarely applies, on all fours, to the present case, are without any basis, due to the reason that mangrove, mudflat, salt marsh and other ecologically sensitive areas are mapped and</p>



<p>challenged and the Hon'ble Supreme Court held that there was no basis given for the reduction in the said area. It noted that even the Vohra Committee which had been set up to look into the demand into the tourism industry did not make any such recommendation either from an environmental point of view or otherwise and therefore, the proposal did not appear to have been made for any valid environmental reasons and was therefore arbitrary. Furthermore, the court noted that in some areas like Goa, there are mangrove areas that need protection which stretch to more than 100 meters from the river bank and this contention had not been denied. Therefore, the court in the absence of any justification for this reduction, concluded that the relaxation was done for some extraneous reasons. The reduction in the distance of CRZ from 100 to 50 meters was therefore held to be contrary to the object of the Environment (Protection) Act, 1986 and was held to be illegal and was struck down • This decision squarely applies, on all fours, to the present case.</p>	<p>demarcated separately as CRZ-IA (No Go) areas, irrespective of the width of the NDZ and even if they occupy large areas.</p>
<p>The only reasoning for this change appears in the file noting of Ministry of Environment that "<i>These tidal-influenced waterbodies do not generally get flooded</i>".</p>	<p>It is humbly submitted that the Applicant's contention are without any basis. The CRZ Notification, 2019 contains</p>

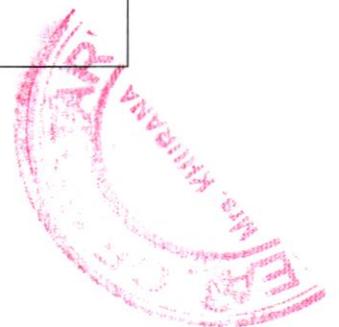
<p>This has no co-relation to the objects of the Environment (Protection) Act, 1986 and is therefore arbitrary and illegal. Indeed, in the draft notification recommended by the Nayak Committee the CRZ for tidally influenced waterbodies is shown as 100 meters. Therefore, the Nayak Committee has in fact recommended 100 meters as the correct area which ought to come within the purview of CRZ in the case of tidally influenced waterbodies. Both Reports of the Swaminathan Committee of February 2005 and 16th July 2009 (titled "<i>Final Frontier</i>"), note that the Hon'ble Supreme Court in the judgement in the case of <i>Indian Council for Environment-Legal Actions vs Union of India &Ors.</i> struck down the proposed reduction in area of CRZ from 100 to 50 meters. The said reports did not make any recommendation to reduce the area from 100 to 50 meters. None of the Committee Reports recommended reduction in the said CRZ area. The file noting in the MoEF also shows that none of these aspects have been considered.</p>	<p>various stringent provisions for environmental safeguards, in paras (ii), 4. (x), 5.1.1 (i), 5.2(vi), 5.3(iii), 5.3(v), 5.4(xv), 10.2 (ii)(b), etc, which are listed below.</p> <p><i>"(ii)..... 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....."</i></p> <p><i>4. (x) In order to safeguard the aquatic system and marine life, disposal of plastic into the coastal waters shall be prohibited and adequate measures for management and disposal of plastic material shall be undertaken in the CRZ.</i></p> <p><i>5.1.1 (i) Eco-tourism activities such as mangrove walks, tree</i></p>
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huts, nature trails, etc., in identified stretches areas subject to such eco-tourism plan featuring in the approved CZMP as per this notification, framed with due consultative process, public hearing, etc. and further subject to environmental safeguards and precautions related to the Ecologically Sensitive Areas, as enlisted in the CZMP.

5.2 (vi) Temporary tourism facilities shall be permissible in the beaches which shall only include shacks, toilets or washrooms, change rooms, shower panels; walk ways constructed using interlocking paver blocks, etc, drinking water facilities, seating arrangements, etc. and such facilities shall however be permitted only subject to the tourism plan featuring in the approved CZMP as per this notification, framed with due consultative process or public hearing, etc. and further subject to environmental safeguards.

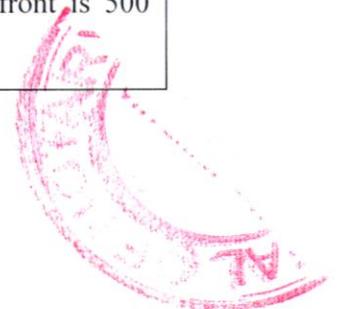
	<p>5.3 (iii) (e) <i>safeguard against saline water incursion and subject to appropriate safeguards related to pollution of coastal waters and prevention of coastal erosion.</i></p> <p>5.3 (v) <i>Development of airports in wastelands and non-arable lands in CRZ- III areas with adequate environmental safeguards.</i></p> <p>5.4 (xv) <i>Construction of memorials or monuments and allied facilities by the concerned State Government in CRZ-IV (A) areas, in exceptional cases, with adequate environmental Safeguards</i></p> <p>10.2 (ii) (b) <i>foreshore facilities, such as fishing jetty, fish drying yards, net mending yard, fishing processing by traditional methods, boat building yards, ice plant, boat repairs and the like, may be taken up in CRZ limits subject to due environmental safeguards.</i></p>
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<p>Therefore, the decision, as taken, is without any basis whatsoever. Worse, it ignores the Supreme Court decision (noted above) which underscores the necessity for there being a "justification". The absence of any justification for permitting any relaxation has now in fact been replaced with material which militates against relaxation. "No material to justify relaxation" has now become "abundant material to justify non relaxation". Despite this, for no stated reason or basis, relaxations have been permitted.</p>	<p>It is humbly submitted that the Applicant's contention are without any basis. In the present case of CRZ Notification, 2019, the relaxation has been given subject to environmental safeguards mentioned in page 31 of the Notification and reproduced below.</p> <p><i>"(ii)..... 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"</i></p>
<p>The said changes would also adversely impact coastal populations. The reduction in CRZ would affect erosion in tidal influenced water bodies which are crucial to protection of coastal communities from rising sea levels. Tidal influenced water bodies form a conducive environment for mangroves to grow in the mudflats, which act as major natural barriers against drastic natural coastal disasters including a buffer</p>	<p>It is submitted that the applicant's contention are without any basis, due to the reason that mangrove, mudflat, salt marsh and other ecologically sensitive areas are mapped and demarcated separately and independently as CRZ-IA (No Go) areas, irrespective of the width of the</p>



<p>against rising sea levels. The Hon'ble Supreme Court in <i>Indian Council for Environment Legal Actions</i> had already noted that one of the consequences of lowering the CRZ is that it would adversely affect mangroves that would grow beyond 50 meters from the intertidal bodies in various States such as Goa. The Final Frontier Report of July 2009, which formed the basis for the 2011 CRZ Notification emphasized on the fact that the Indian Coast is vulnerable to climate change at two levels - firstly, from growing intensity of cyclonic storms to sea surges and secondly eventual sea level rise. A copy of the judgment is annexed and marked herewith as ANNEXURE - A-9.</p>	<p>NDZ and even if they occupy large areas. The width of the NDZ/CRZ has no bearing on demarcation of mangroves, mudflats etc.</p>
<p>According to a recently published scientific article, the global Mean Sea Level is likely to rise 20-30 cm by 2050 and high enough to threaten land currently home to a total of 150 (140-170) million people to a future permanently below the High Tide Line by 2050. 70% of the total number of people worldwide currently living on land that will be affected by this. rise in sea levels are in eight Asian countries which includes India. A copy of the said Article is attached hereto as ANNEXURE A-10. The IPCC</p>	<p>It is submitted that the Applicant's contention that "allowing intense development closer to the sea by reducing the CRZ limit to 50 meters would exacerbate the risk for the coastal infrastructure and vulnerability of coastal populations", are without any basis, due to the reason that the CRZ along the seafront is 500 m, not 50 m.</p>

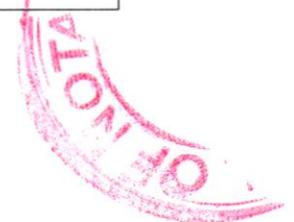


(Intergovernmental Panel on Climate Change - a UN body) Reports of 2018 and 2019 have also concluded the same. The practical consequence of this study was addressed in an article published in New York Times whereby it is predicted that as far as Mumbai is concerned, at least 50% of South Mumbai and entire Central Suburban Mumbai will be underwater by 2050, if stricter measures to protect the coastline is not undertaken. A copy of the New York Times article is attached hereto as **ANNEXURE A-II**. If a reduction of CRZ area from 100 to 50 meters in today's alarming situation is proceeded with, the entire city of Mumbai will face extreme adverse challenges from keeping itself protected from the coastal flooding since many mangrove areas located on Mumbai coasts (both Western and Eastern Coasts) extend beyond 50 meters. Further, allowing intense development closer to the sea by reducing the CRZ limit to 50 meters would exacerbate the risk for the coastal infrastructure and vulnerability of coastal populations. A copy from an article from the Observer Research Foundation is attached hereto as **ANNEXURE A-12**.

The said changes would also cause other damage to the environment, Tidal influenced water bodies are rich in bio diversity and need extra protection. Many sites form sites for migratory birds such as Flamingos at certain times of the year. They are also the breeding grounds for fishes and crustaceans like crabs etc. that live close to the coast. Various ecologically important areas may exist on creeks beyond 50 meters such as salt marshes, coastal waterbodies, inter-tidal lakes & inter-tidal grasslands wherein habitats of crustacean species and Gastropods & other shell species are found. Reducing the CRZ in such circumstances would have a drastic impact on the food chain in such a fragile ecosystem. Mangroves are one of the many ecological indicators of inter tidal activity. The presence of intertidal fauna and flora has to be recognised and protected.

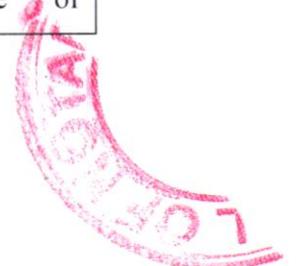
The Applicant's contention that various ecologically important areas may exist on creeks beyond 50 meters such as salt marshes, coastal waterbodies, inter- tidal lakes & inter-tidal grasslands wherein habitats of crustacean species and Gastropods & other shell species are found. Reducing the CRZ in such circumstances would have a drastic impact on the food chain in such a fragile ecosystem, are without any basis, due to the reason that the mangrove, mudflat, salt marsh and other ecologically sensitive areas are mapped and demarcated separately and independently as CRZ-IA (No Go) areas, irrespective of the width of the NDZ and even if they occupy large areas. The width of the NDZ/CRZ has no bearing on demarcation of mangroves, mudflats etc.

In fact, one more category of ESA namely 'Eco-Sensitive Zones' (ESZ) has been added to the list of ESAs/CRZ-IA areas,



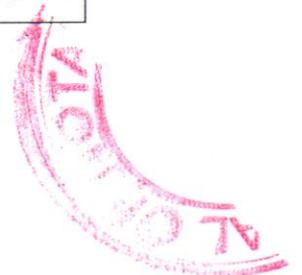
	<p>which was not available in CRZ Notification, 2011, vide MoEF&CC OM No. 12/1/2019-IA-III(E-122245) dated 26/10/2021 (copy enclosed as ANNEXURE-R1-1).</p> <p>In this regard, the notified Eco-Sensitive Zone (ESZ) area around the Thane Creek Flamingo Sanctuary, in Mumbai/Thane, Maharashtra has been demarcated in the Coastal Zone Management Plan prepared as per CRZ Notification, 2019, <u>in addition to the notified Flamingo Sanctuary</u> itself. This takes care of the Applicant's statements regarding sites for migratory birds / Flamingos. In the CRZ Notification, 2011, the ESZ was not part of the list of ecologically sensitive areas. This itself makes the CRZ Notification, 2019 more environmentally robust as compared to the CRZ Notification, 2011. Calling for withdrawal of CRZ Notification, 2019 would negate</p>
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	such robust environmental safeguards built in the 2019 notification.
Para 21. In respect of the above, the Applicant makes prayers (c), (d) and (e).	In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.
<p>A. CHANGE OF FSI NORMS IN CRZ-II FROM THOSE EXISTING IN 1991 TO THOSE EXISTING AS ON 18th JANUARY 2019</p> <p>Para 22. Regulations 5.2 (iii) and (iv) of CRZ 2019, provides that FSI (floor space index)/ FAR (floor area ratio) shall be as per relevant town and country planning norms as on the date of CRZ 2019 i.e. 18th January 2019. This removes the freeze on town planning norms in the earlier CRZ which were frozen on the date of coming into force of CRZ 1991 in the judgment of the Supreme Court in <i>Suresh Estates vs Municipal Corporation of Greater Mumbai &Ors.</i> [(2007) 14 SCC 439]. A copy of the judgment is attached hereto as ANNEXURE A-13.</p> <p>C.</p>	<p>It is humbly submitted that this issue has been addressed at length in para 2.4.12 (Disparity in DCR in CRZ and Non-CRZ areas) and para 2.4.13 (CRZ II and III related issues pertaining to Town and Country Planning norms) of the Shailesh Nayak Committee report (Annexure A-4 of the Applicant). The report mentions that there were several disparities in the DCR between CRZ and Non-CRZ areas. For example, the DCR within the CRZ area is applicable as on 1967 whereas in the Non-CRZ areas, the DCR applicability would be as per the present regulations. It was brought out that the applicability of DP&CR of 1967 is retrograde and against the principle of</p>



	<p>Planning. It was indicated to the Committee that the DCR regulations of 1967 inhibits development in the city and it would be unrealistic and anachronistic keeping in view the growing population.</p> <p>The Government of Maharashtra indicated that this disparity among various norms has led to confusion and has restricted development. The Government of Maharashtra also requested to provide uniform FSI/FAR for the city of Mumbai as per the prevailing Town & Country Planning regulations for undertaking development of Slum Redevelopment schemes, development of dilapidated buildings and cessed and unsafe buildings. The report mentions that the BMC had already requested the Secretary, Environment and Principal Secretary Urban Development, Govt. of Maharashtra on 9th March 2012 that there is a need to adopt a uniform DCR for the</p>
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	<p>entire Mumbai city and the same was conveyed to the MoEF&CC, New Delhi.</p> <p>As per para 3.1.1 of the report, the Committee examined the issue with regard to the applicability of Development Plan (DP) and Development Control Rules (DCR) of various years as presented by Maharashtra. The DCR of 1967 which was applicable under the CRZ Notification, 1991 inhibits certain developments in the CRZ areas of the city. With the growing population and to address the housing issues of Mumbai and other coastal cities in the country it is important that the local Town and Country Planning Regulations are made applicable uniformly in the coastal areas. The disparity in the regulations, governing constructions in the CRZ area is hindering development and causing hardship to the local communities. In fact, it is found that the restrictions imposed have actually led to land encroachment and development</p>
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	<p>of illegal slums particularly along the beaches of Mumbai.</p> <p>As per para 3.1.2 of the report, the Committee examined the issues of Slums in Mumbai in great detail. It was brought to the notice that these slums exist in extremely unhygienic conditions with no proper basic infrastructure. The slums are thickly populated and the population is prone to risks of flooding, cyclone, and so on. There are no proper roads or passage to evacuate the people during calamities. Since the slums are proliferating in unhygienic and inhuman conditions, it is the responsibility of the State Government to provide basic descent housing facility to the people. This is one of the fundamental requirements of the people. In view of the urgency and in the public interest, the Committee is of the opinion that the CRZ Notification, since its implementation from 1991, has not addressed the issues</p>
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appropriately. The Committee also examined the Office Order of September, 1998 issued by MoEF&CC which freezes the FSI as on 19.2.1991 including the Orders of Hon'ble High Court of Bombay which has upheld the above Orders of MoEF&CC. The Orders of Hon'ble High Court of Bombay in freezing the FSI as on 1991 have also been examined. The Orders of the Hon'ble High Court in this matter does not prevent the Government to amend the law. Hence, the Committee is of the opinion that in view of the serious environmental and social issues arising due to proliferation of slums the matter should be left to the State Governments to implement the slum rehabilitation schemes as per the concerned State Government norms issued from time to time. The Committee is of the opinion that rehabilitation of the slum areas is an urgent matter to be addressed in most of the cities of the country particularly in the



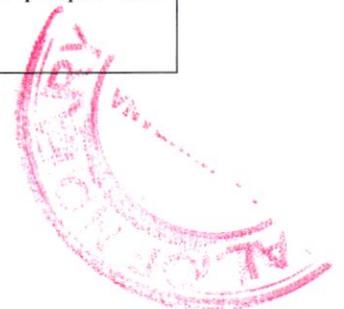
coastal areas as they are vulnerable to hazard from the sea. However, the Committee recommends that while undertaking such housing for slum rehabilitation in the CRZ-II areas, the following shall be strictly adhered to:

All construction activities shall be undertaken in these coastal municipalities on the landward side of the road included in the approved developmental plan or authorized structure(s).

All developmental activities shall be undertaken (in these municipal areas) as per the prevailing local Town and Country Planning Regulations subject to certain environmental safeguards mentioned in the report.

Thus, it is submitted that regulations 5.2 (iii) and (iv) of CRZ 2019, fixing FSI (floor space index)/ FAR (floor area ratio) as per relevant town and country planning norms as on the date of CRZ 2019 i.e. 18th

	<p>January 2019, have been incorporated in the CRZ Notification, 2019 to avoid disparity in DCR in CRZ and Non-CRZ areas and bring uniformity and to facilitate providing basic descent housing facility to the people, which is one of the fundamental requirements of the people and in public interest.</p>
<p>Para 23. CRZ 2011 contained a provision stating that the FSI, FAR, and other local town and country planning norms would be as "existing". This was the exact same wording as in CRZ 1991. The Hon'ble Supreme Court in <i>Suresh Estates</i> interpreted this provision in CRZ 1991 to mean that the town and country planning norms as of the date of coming into force of CRZ 1991 would apply. It may be pointed out here for clarity the provisions of CRZ 2011 were modified to clarify that the applicable local town planning norms including FSI, FAR would be as of 19th February 1991.</p>	<p>Reply: As brought out in the reply to para 22 above, it is submitted that regulations 5.2 (iii) and (iv) of CRZ 2019, fixing FSI (floor space index)/ FAR (floor area ratio) as per relevant town and country planning norms as on the date of CRZ 2019 i.e. 18th January 2019, have been incorporated in the CRZ Notification, 2019 to avoid disparity in DCR in CRZ and Non-CRZ areas and bring uniformity and to facilitate providing basic descent housing facility to the people, which is one of the fundamental requirements of the people and in public interest.</p>

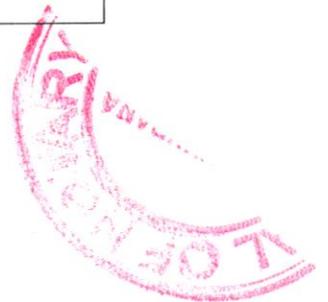


Para 24. Therefore, CRZ 2019 has changed the applicable town planning norms from those that were applicable on coming into force of CRZ 1991 to those in force on coming into force of CRZ 2019 i.e. 18th January 2019. The disastrous implications thereof are only too evident, since development in ecologically and environmentally vulnerable areas will now catastrophically mushroom exponentially.

It is humbly submitted that as per para 3.1.1 of the Shailesh Nayak Committee report, the Committee examined the issue with regard to the applicability of Development Plan (DP) and Development Control Rules (DCR) of various years as presented by Maharashtra. The DCR of 1967 which was applicable under the CRZ Notification, 1991 inhibits certain developments in the CRZ areas of the city. With the growing population and to address the housing issues of Mumbai and other coastal cities in the country it is important that the local Town and Country Planning Regulations are made applicable uniformly in the coastal areas. The disparity in the regulations, governing constructions in the CRZ area is hindering development and causing hardship to the local communities. In fact, it is found that the restrictions imposed have actually led to land encroachment and development of illegal slums particularly

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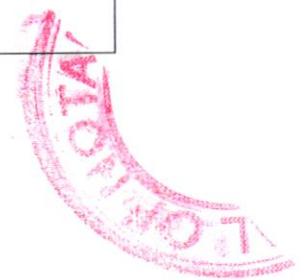
	<p>along the beaches of Mumbai.</p> <p>Further, as per para 3.1.3 of the Shail esh Nayak Committee report, the Committee had detailed discussions with regard to the dilapidated, cessed and unsafe buildings. The Committee examined the existing provisions at para 8V(c), titled "Redevelopment of dilapidated, cessed and unsafe buildings", under CRZ Notification, 2011 including the amendment to the Notification. The Committee observed that in para 8V(c)(2)(ii) of the Notification dated 6 January 2011 provided for FSI and FAR, as per prevailing Town and Country Planning Regulations. However, in the amendment dated 29 March 2011 to the CRZ Notification, 2011, the Ministry has frozen the FSI/FAR as on 6 January 2011. Now, State Government seeks the implementation of the original provisions of CRZ Notification, 2011.</p>
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	<p>Thus, it is seen that the Shailesh Nayak Committee has brought out that the CRZ Notification, 2011 itself had provisions for FSI/FAR as per prevailing Town and Country Planning Regulations (para 8V(c)(2)(ii)) and the same was amended freezing the FSI/FAR as on 6 January 2011 and not as per 1967/1991.</p> <p>It is submitted that regulations 5.2 (iii) and (iv) of CRZ 2019, fixing FSI (floor space index)/ FAR (floor area ratio) as per relevant town and country planning norms as on the date of CRZ 2019 i.e. 18th January 2019, have been incorporated in the CRZ Notification, 2019 to avoid disparity in DCR in CRZ and Non-CRZ areas and bring uniformity and to facilitate providing basic descent housing facility to the people, which is one of the fundamental requirements of the people and in public interest.</p>
<p>Challenge: Para 25. The challenge to the said provision is based on the following</p>	<p>As brought out in detail in the replies to paras 22, 23 and 24 above, it is humbly submitted</p>

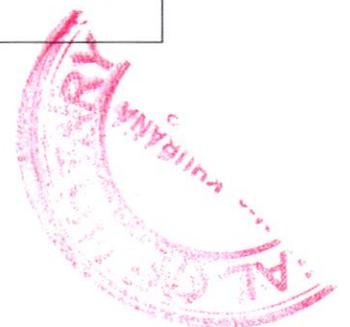


<p>grounds:</p> <p>The enormity of what this change involves is to be seen to be believed. This change will, by itself, destroy the coastal environment. This change will also have devastating consequences even on the standard of life of persons living in these areas. A Table setting out the permissible FSI structure for Mumbai under DCR 1991 and DCR 2034, graphically brings this home.</p>	<p>that regulations 5.2 (iii) and (iv) of CRZ 2019, fixing FSI (floor space index)/ FAR (floor area ratio) as per relevant town and country planning norms as on the date of issuance of CRZ 2019 i.e. 18th January 2019, have been incorporated in the CRZ Notification, 2019 to avoid disparity in DCR in CRZ and Non-CRZ areas and bring uniformity and to facilitate providing basic descent housing facility to the people, which is one of the fundamental requirements of the people and in public interest.</p>								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%; text-align: center;">S</th> <th style="width: 25%;">DEVELOPMENT ACTIVITIES IN CRZ AREAS (As per CRZ, 2019)</th> <th style="width: 20%;">FSI under DCR 1967(a)s applicable to CRZ areas under CRZ 1991 & 2011)</th> <th style="width: 50%;">FSI under DCPR 2034 (as applicable to proposed CRZ 2019)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>New construction of residential</td> <td>(i) Coast along Tardeo, Haji</td> <td>Total permissible FSI is linked to road width (width)- (FSI)</td> </tr> </tbody> </table>	S	DEVELOPMENT ACTIVITIES IN CRZ AREAS (As per CRZ, 2019)	FSI under DCR 1967(a)s applicable to CRZ areas under CRZ 1991 & 2011)	FSI under DCPR 2034 (as applicable to proposed CRZ 2019)	1	New construction of residential	(i) Coast along Tardeo, Haji	Total permissible FSI is linked to road width (width)- (FSI)	
S	DEVELOPMENT ACTIVITIES IN CRZ AREAS (As per CRZ, 2019)	FSI under DCR 1967(a)s applicable to CRZ areas under CRZ 1991 & 2011)	FSI under DCPR 2034 (as applicable to proposed CRZ 2019)						
1	New construction of residential	(i) Coast along Tardeo, Haji	Total permissible FSI is linked to road width (width)- (FSI)						



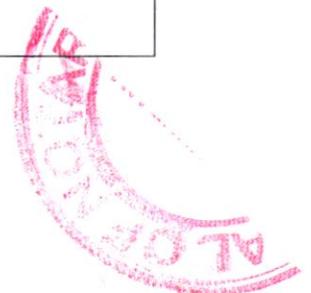
buildings in CRZ- II on the landward side)	Ali,		
	Worli,	I. Island City	
	Mahal	Upto 9m -1.8	
	axmi-	9m-12m-2.7	
	1.66	12m-18m-3.24	
	(ii)	18m -27m-3.65	
	Coast	Above 27m-	
	along	4.05	
	Napea		
	n Sea	II. Suburbs	
Road,	Upto 9m- 1.35		
Carnac	9m-12m-2.7		
Road,	12m-18m-2.97		
Mahi	18m-27m-3.24		
m	Above 27m-		
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way			
(upto			
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		(iv) Recla mation areas of MHA DA in Mahi mCrek (Bandr a West)- 2.00 (v) Areas close to shore/ creek in 'M' ward - 0.75 or 0.5 (vi) Backb ay Recla mation Schem es I & II-		
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		2.45 (vii) Backb ay Recla mation Schem ed III to VI- 3.5		
2	New construct ion of office space develop ment m CRZ-II	Same as above.	Total Permissible FSI is linked to road width (Greater than 12m road width only)	
4	Reconstr uction of authorize d buildings in CRZ-		Redevelopment of construction of staff quarters of govt/MCGM/ statutory bodies	

	II	<p>on govt lands - 4.0 [DCR 33(3A)]</p> <p>Redevelopment of construction of staff quarters of govt/MCGM/ statutory bodies on private lands - 3.0 for min. 12m road width & 4.0 for min. 18m road width. [DCR 33(3B)]</p> <p>Redevelopment of MHADA Hsg schemes - 4.0 plus upto 70% incentives [DCR33(5)}</p> <p>Reconstruction of cessed buildings undertaken by Co-operative Hsg.</p>	
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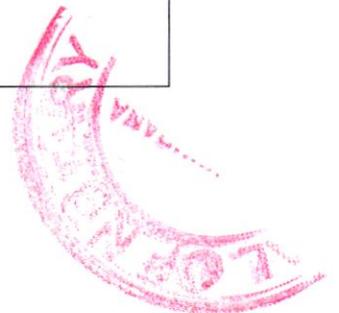


			<p>Society - 3.0 plus upto 50% more</p> <p>Incentive FSI [DCR33(7)]</p> <p>Reconstruction/ Redevelopment of cluster buildings by MHADA/MCG M - 4.00 plus upto 100% incentives [DCR 33(9)]</p> <p>Redevelopment under SRA Scheme - 4.0 plus incentives [DCR 33(10)]</p>
5	Construct ion of Hotels in CRZ-II areas	N/A	<p>Road width - FSI</p> <p>Min. 12m - 3.0</p> <p>Min. 18 m - 4.0</p> <p>Min.27m-5.0</p> <p>Plusupto 50% additional incentives [DCR33(4)]</p>



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6	Construction of Hotels in CRZ-III areas	N/A	DCR not applicable as CRZ, 2019 itself states that maximum FSI shall be 1.33	
<p>DCR 2034 was the result of a planning exercise which came into force on 1st September, 2018 (& certain additional provisions were notified on 13th November, 2018), this exercise factored in the load based on DCR 1991 in coastal areas. The exponential increase that CRZ 2019 would bring forth was not in contemplation. Therefore, quality of life, air, water, open spaces, noise, population etc. will all catastrophically deteriorate/diminish. Indeed, in places like Mumbai, a drastic increase in FSI in coastal areas will have a disproportionate impact on the population that has not at all been considered when planning for DCR 2034 was done. Coastal areas constitute 53.58 sq.km which is approximately 10% of the area of Mumbai and 26% of the total area of Greater Mumbai is affected by CRZ. If there were a drastic revision of FSI norms (as contemplated in CRZ 2019),</p>				



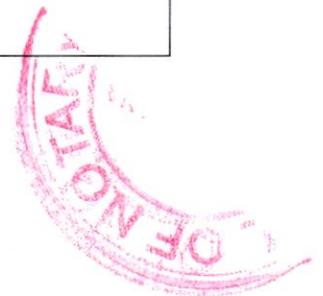
<p>it would constitute a "modification of a substantial nature" under Sections 22A (a) and (c) of the Maharashtra Regional and Town Planning Act. Such a revision would normally require an elaborate procedure to be followed, and study to be conducted before being permitted. Nothing of the sort has been done before modifying CRZ 2019, and its consequential impact on DCR 2034.</p>	
<p>The proposed changes have no rational nexus with any environmental reasons. The environmental impact of the same has not been considered in any of the recommendations. The Nayak Committee does not provide any scientific/environmental analysis and merely states the following at Para 3.1.2:</p> <p><i>"The Committee also examined the Office Order of September, 1998 issued by MoEF&CC which freezes the FSI as on 19.2.1991 including the Orders of Hon'ble High Court of Bombay which has upheld the above Orders of MoEF&CC. The Orders of Hon'ble High Court of Bombay in freezing the FSI as on 1991 have also been examined. The Orders of the Hon'ble High Court in this matter does not prevent the Government to amend the law. Hence,</i></p>	<p>It is humbly submitted that the allegations of the Applicant are without any basis. As brought out in detail in the replies to paras 22, 23 and 24 above, it is submitted that regulations 5.2 (iii) and (iv) of CRZ 2019, fixing FSI (floor space index)/ FAR (floor area ratio) as per relevant town and country planning norms as on the date of CRZ 2019 i.e. 18th January 2019, have been incorporated in the CRZ Notification, 2019 to avoid disparity in DCR in CRZ and Non-CRZ areas and bring in uniformity and to facilitate providing basic decent housing facility to the people, which is one of the fundamental</p>

the Committee is of the opinion that in view of the serious environmental and social issues arising due to proliferation of slums the matter should be left to the State Governments to implement the slum rehabilitation schemes as per the concerned State Government norms issued from time to time."

This reasoning has no rational nexus with the implementation of Slum Rehabilitation Schemes and redevelopment of dilapidated buildings. In CRZ 2011, an extensive regimen was set up especially considering Slum Rehabilitation Scheme; and dilapidated, cessed and unsafe buildings. Therefore, the said recommendation cannot be said to furnish any valid reasoning at all. If the aim was to ensure redevelopment of slum areas as well as dilapidated, cessed and unsafe buildings, there was no need to make a general relaxation in the date on which relevant town and country planning norms shall apply.

In the various other committee recommendations and comments of MOEF, no specific reason has been provided for why there should be a general relaxation of the date on which the FSI/FAR are frozen and the extension of the

requirements of the people and in public interest.



<p>same from I 9th February 1991 to 18th January 2019. Indeed, as pointed out earlier, these provisions in respect of the areas sought to be protected were already provided for in CRZ 2011. The said provision is therefore manifestly arbitrary.</p>	
<p>Para 26. In respect of the above the Applicant makes prayers (f), and (g).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>PROCEDURE FOR CLEARANCE OF PROJECTS INCLUDING DISPENSING WITH EIA, RISK ASSESSMENT REPORT, AND DISASTER MANAGEMENT PLANS IN CERTAIN CASES –</p> <p>Para 27. Regulations 8. (i) (c) and (d) of CRZ 2019 grants an exemption to building construction projects and housing schemes which are less than the threshold limit mentioned in the EIA Notification of 2006, from submitting a comprehensive EIA study, Risk Assessment Report and Disaster Management Plan. No such exemption was provided in the 2011 Notification. The threshold Unit prescribed for building construction projects and housing schemes, under the EIA Notification, is 20,000 sq/mtr. Therefore,</p>	<p>It is humbly submitted that as per the "<i>LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE</i>", given in the EIA Notification, 2006, the threshold limit given for Building and Construction projects at Sl. No. 8(a) is "≥20,000 sq. mtrs" and the Applicant himself has mentioned the same in para 27 of his petition. Thus, the same has been incorporated in CRZ Notification, 2019.</p>

<p>every proposal involving an area of less than 2,00,000 sq.ft. can now be sanctioned with no need to do an EIA Study, Risk Assessment, etc.</p>	
<p>Challenge: The said provision may seem innocuous at first blush but is far from so. The provision places no cap on the number of such projects and the aggregate area covered thereby. It is therefore possible to put up unlimited construction in a CRZ area by merely submitting (and getting approval) separate proposals for individual buildings each below 2 Lac Sq. Ft., which in the first instance is a significant area.</p>	<p>The Applicant has based his arguments on his own assumptions. Regulations 8. (i) (c) and (d) of CRZ 2019 are based on the provisions of EIA Notification, 2006.</p>
<p>The said provision was not in the 2018 Draft Notification which required all project proponents to submit a comprehensive EIA report with cumulative studies, risk assessment report and a disaster management plan for CRZ Clearance. This was advisedly so.</p>	<p>As stated in the reply to para 27 (i) above, the regulations 8. (i) (c) and (d) of CRZ 2019 are based on the provisions of EIA Notification, 2006.</p>
<p>(iii). This contravenes Rule 5(3) of the Environment (Protection) Rules, 1986 ("EPR") which requires that the relevant change has to be published and objections from the public be invited thereon and considered. It is clear that this was not an</p>	<p>Rules 5 and 5(3) of the Environment (Protection) Rules, 1986 ("EPR") deals with imposing prohibition or restrictions on the locations of an industry or the carrying on of</p>



<p>emergency measure by its very nature. The process of a review of CRZ 2011 has been underway for a long time period.</p>	<p>processes and operations in an area. As stated in the reply to para 27 (i) above, the regulations 8. (i) (c) and (d) of CRZ 2019 are based on the provisions of EIA Notification, 2006.</p>
<p>Dispensing with EIA for housing and building projects that have a large footprint is grossly arbitrary and illegal as the exercise of EIA to ensure that environmental and developmental concerns are appropriately balanced on the basis of the most accurate information available, more so for coastal areas. To meet its objective to ensure protection of coastal stretches and to sustainably develop the coast without losing its sanctity, CRZ 2011 sought preparation of an EIA Report even for all those projects which were outside the ambit of EIA Notification, 2006 but were falling within CRZ areas. CRZ 2019 seeks to remove requirement of preparing an EIA Report and thereby, making the fragile coastline more vulnerable to concretization and thereby, defeating the purpose of CRZ Notifications.</p>	<p>It is humbly submitted that the Regulations 8. (i) (c) and (d) of CRZ 2019 are based on the provisions of EIA Notification, 2006.</p>

<p>Para 28. In respect of the above the Applicant makes prayers (k), and (l).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>E. DILUTION OF ESSENTIAL COMPONENTS IN PREPARATION OF CZMP's</p> <p>Para 29. In CRZ 2019, there have been drastic changes in the manner in which CZMP's have to be prepared. These have tremendous consequences on the environment at a practical level, and influence/inform on each and every aspect of the CRZ Notification. This primarily flows from the changes to Annexure IV of the Notification. The manner and mode of preparation of the CZMP is fundamental as deficiencies in the same could lead to all the protections/provisions of CRZ 2019 a dead letter. These lacunae are as under:</p> <p>(i) Firstly, CRZ 2019 leaves scope for arbitrary demarcation and seeks no second layer of verification for ground truthing, which involves the process of physically visiting the areas, taking note of GPS coordinates and accordingly marking the same on the Map in hand. This is a crucial exercise to verify satellite imagery/data with actual ground conditions.</p>	<p>MoEF&CC (Respondent 1) notified the Guidelines for updation/ preparation of CZMP as per CRZ Notification, 2019, vide OM dated 26-6-2019 (copy enclosed as Annexure R1-3). The Template for CZMP REPORT given in Annex-1 of the Guidelines very much provides for a separate Chapter (6.1. Field mapping and map preparation) to be written in the CZMP report as well as field photographs to be enclosed to the report (Annexure-II: Field photographs). Thus, ground truthing /field mapping is very much a part of the exercise.</p>



<p>(ii) Under CRZ 2011, pollution levels in the water area were required to be demarcated, as per water quality standards set by Central Pollution Control Board. CRZ 2019 does away with this requirement. It is essential to demarcate pollution levels to understand which coastal areas are critically polluted and require urgent attention and urgent protection/conservation. This will have an essential role to play in determining CRZ in areas such as in Tidal influenced water bodies, in conducting EIA studies etc.</p>	<p>It is humbly submitted that the petitioner is trying to mislead the Hon'ble Court with distorted facts as there was no provision in CRZ Notification 2011 to demarcate the area as per water quality standards. It is humbly submitted that the CZMP preparation as per CRZ 2019 is much more scientific than it was in CRZ 2011. The Template for CZMP REPORT given in Annex-1 of the Guidelines for updation/ preparation of CZMP as per CRZ Notification, 2019, notified vide MoEF&CC OM dated 26-6-2019 (Annexure R1-3), duly provides for a separate Chapter on Pollution (2.4. Pollution and waste management issues) to be written in the CZMP report.</p>
<p>(iii) CRZ 2011 considered important geomorphological features such as landward (monsoonal) berm crest in the case of sandy beaches, rocks, headlands, cliffs, seawalls or revetments or embankments while demarcating in HTL or LTL. 23 CRZ 2019 has excluded the</p>	<p>It is humbly submitted that Mapping of geomorphological features for demarcation of the High Tide Line (HTL) had already been mapped for preparation of the CZMPs of Coastal States/UTs under the</p>



<p>entire Regulation relating to this. It is necessary to demarcate all features on the coastline to ensure that the coastline with all its natural features is safeguarded so that these can be assessed against project proposal for granting of clearances/permissions.</p>	<p>CRZ Notification, 2011 itself. The Manual on Demarcation of High Tide Line and Low Tide Line & Preparation of CZMP has been published and is available at: https://ncscm.res.in/guidelines-manuals/. As per the said manual all geomorphological features such as flotsam, landward (monsoonal) berm crest in the case of sandy beaches, permanent terrestrial vegetation, coastal sand dunes, rocks, headlands, cliffs, seawalls / embankments, mangroves, mudflat/tidal flat etc, while demarcating HTL.</p> <p>The High Tide Line (HTL) and Low Tide Line (LTL) have been approved by the MoEF&CC (Respondent 1) as part of the CZMPs of various States/UTs prepared under the CRZ Notification, 2011.</p> <p>Further, as per para 1 of Annexure IV of CRZ Notification, 2011, "<i>Demarcation of High Tide</i></p>
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	<p><i>Line (HTL) and Low Tide Line (LTL) as carried out by NCSCM for the entire coastline of the country, has been made available to the Coastal States or Union territories and only such demarcation of HTL and LTL shall be applicable for all purposes of this notification”.</i></p> <p>Thus, the guidelines for demarcation of HTL/LTL were already issued under the CRZ Notification, 2011 and these guidelines stand valid till date.</p>
<p>Para 29 (iv). The 2011 Notification protected the dwelling units of local communities including that of the fishers against relocation if the units are located on the seaward side of the hazard line and mandated the State Government to provide necessary safeguards from natural disasters to such dwelling units. This has been excluded from the present notification. This adversely impacts the life and livelihoods traditional communities existing on the seaward side of the hazard line. This is also a telltale indicator of the real intent behind the extensive and far-reaching changes which have been</p>	<p>It is humbly submitted that Para 9 (iv) of CRZ Notification, 2019 provides for the following provision:</p> <p><i>“The dwelling units of the traditional coastal communities including fishermen, tribals as were permissible under the provisions of the Coastal Regulation Zone notification, 2011 number S.O. 19(E), dated the 6th January, 2011, but which have not obtained formal approval from</i></p>



<p>introduced.</p>	<p><i>concerned authorities under the said Notification shall be considered by the respective Coastal Zone Management Authority and the dwelling units shall be regularised...</i>"</p> <p>Further, paras 5.3 (ii)(a) and Para 5(iii) of Annexure IV of CRZ Notification, 2019 provides for preparation of detailed plans for coastal fisher communities in view of expansion and other needs, provisions of basic services including sanitation, safety, and disaster preparedness.</p> <p>In view of above, it may kindly be seen that the petitioner has been repeatedly trying to mislead the Hon'ble Tribunal with distorted facts.</p>
<p>Para 29- Challenge:</p> <p>(i) The Shailesh Nayak report includes no reason whatsoever with respect to the above- mentioned differences in preparation of CZMP's between the CRZ 2011 and CRZ 2019. In the file notings of MoEF on Shailesh Nayak Report, it is stated/commented that ground verification</p>	<p>It is humbly submitted that MoEF&CC (Respondent 1) notified the Guidelines for updation/ preparation of CZMP as per CRZ Notification, 2019, vide OM dated 26-6-2019 (Annexure R1- 3). The Template for CZMP REPORT</p>



and rectification has been assigned to NCSCM to rest ambiguities resulting from multiorganizational demarcation, and that it shall be prepared based on methodology approved by the MoEF&CC (including ground verification). However, there has been no mention of such methodology as well. The absence of such criteria in the CZMP's would render CRZ 2019 a dead letter at a practical level.

given in Annex-1 of the Guidelines very much provides for a separate Chapter (6.1. Field mapping and map preparation) to be written in the CZMP report as well as field photographs to be enclosed to the report (Annexure-II: Field photographs). Thus, ground truthing /field mapping/ground verification is very much a part of the exercise and the Applicant's averments to the contrary are without any basis.

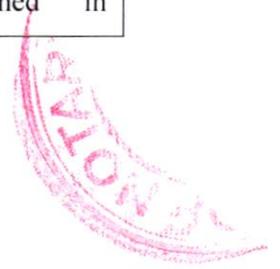
Additional Information as to the preparation of CZMPs as per CRZ Notification, 2019 and important Court matters wherein direction has been passed to expedite the updation of the CZMP as per CRZ Notification, 2019 :

O.A. No. 04 of 2013 with Appeal No. 18 of 2017 (NGT, SZ) titled C.H. Balamohan vs. Union of India &Ors

The Hon'ble, NGT (SZ) *vide* order dated 11/04/2022 in O.A. No. 04 of 2013 with Appeal No.



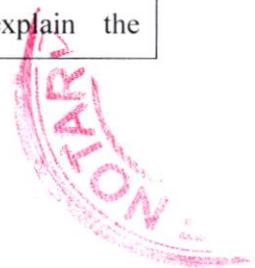
	<p>18 of 2017 titled C.H. Balamohan vs. Union of India &Ors., had directed as follows:</p> <p><i>“83. Accordingly, we direct Chief Secretaries of the Costal State/UT to finalise the CZMP and get them approved by MoEF within 2 months. The approved CZMP shall contain the parameters as listed in the CRZ 2019 Notification including high, medium and low erosion stretches for such erosion prone areas...”</i></p> <p>A true copy of the order dated 11/04/2022 is annexed herewith and marked as Annexure-__</p> <p>• O.A. No. 249 of 2023 in re: News item published in Newspaper The Hindu dated 19.03.2023 titled “India’s Sinking Island with O.A. No. 795 of 2023 titled News item titled, “Third of India’s coastline vulnerable to erosion- here are the worst-hit states appearing in Indian Express dated 06/12/2023</p> <p>It is humbly submitted that in O.A. No. 249 of 2023- In re: News item published in</p>
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	<p>Newspaper The Hindu dated 19.03.2023 titled "India's Sinking Island" wherein the Hon'ble National Green Tribunal, Principal Bench has taken suo moto cognizance. Moreover, the Hon'ble NGT, PB in O.A. No. 795 of 2023 vide order dated 16/01/2024 has taken suo moto cognizance of newspaper report published in Indian Express dated 06.12.2023 with the title "Third of India's coastline vulnerable to erosion - here are the worst hit states". Report says that various beaches in Coastal areas/States like Maharashtra, Tamil Nadu, Kerala, Karnataka etc. are vulnerable to erosion and are getting damaged on account of lack of proper management due to non-finalization of Coastal Regulatory provisions i.e. Coastal Zone Management Plan. Vide order dated 16/01/2024, O.A. No 795 of 2023 has been tagged along with O.A. No. 249 of 2023.</p>
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	<p>The Hon'ble Tribunal in the aforesaid matters <i>vide</i> order dated 08/01/2024 has directed that, “ <i>...Since, in spite of the direction of NCZMA, the CZMP/ICRZP have not formulated the plan. Hence respondent no. 14 is required to ensure that the plan is prepared by each Coastal Management Authority and Union Territory Coastal Management Authority expeditiously within a time bound period...</i> ” Moreover, as per the last order dated 13/03/2024, the Hon'ble Tribunal has directed the Chief Secretaries/ LGs of Coastal States/Union Territories under consideration to file the affidavit before the Tribunal within six weeks disclosing the outer limit within which the CZMP/ICRZP as per CRZ Notification, 2019 will be finally be formulated/ revised and submitted to the MoEF&CC, failing which the Concerned Chief Secretary will appear virtually on the next date of hearing and explain the</p>
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	<p>reason for non- submission of such an affidavit.</p> <p>It is humbly submitted that strict directions have been passed by the Hon'ble Tribunals to expedite the updation of the CZMP as per CRZ Notification, 2019. It is humbly submitted that as on date, CZMP as per CRZ Notification, 2019 have been approved for the State of Odisha, Karnataka and Maharashtra. The ICRZP as per ICRZ Notification, 2019 has been approved for Great Nicobar Island and Little Andaman Island. That, for the rest of the Coastal States, CZMP/ICRZP as per CRZ Notification, 2011 and IPZ Notification, 2011 are presently applicable.</p> <p>It is humbly submitted that in compliance of the above, this Ministry has been taking all necessary measures to expedite the CZMP updation as per CRZ Notification, 2019.</p>
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<p>Para 30. In respect of the above the Applicant makes prayers (m), and (n).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>DILUTION OF PROTECTION FOR MANGROVES AND MANGROVE BUFFER</p> <p>Para 31. There has been a reduction/dilution of protection of mangroves in CRZ 2019. This topic can be divided into three parts: Before doing so, it is extremely important to highlight the immense importance of mangroves to the environment and also the critical role they play in protecting persons and property in coastal areas from natural disasters such as cyclones; tsunamis etc. In this behalf, the following observations made by the Hon'ble High Court of Bombay in <i>Bombay Environmental Action Group &Anr. vis State of Maharashtra&Ors. (PILNo. 87 of2006)</i>, while relying upon <i>Krishnadevi Malchand Kamathia and Ors. vis Bombay Environmental Action Group &Ors. (2011) 3 SCC 363</i> may be noted:-</p> <p><i>"55. Mangroves ecosystems play a vital role in human life. In the subsequent part of this judgment, we have quoted a decision of the Apex Court which notes</i></p>	<p>The Applicant's statement in para 31 that there has been a reduction/dilution of protection of mangroves in CRZ 2019, is without any basis, due to the reason that the CRZ Notification, 2019 contains various stringent provisions for conservation and protection of mangroves, some of which are given below. Para 2.1.1(a)(i): Mangroves (in case mangrove area is more than 1000 square meters, a buffer of 50 meters along the mangroves shall be provided and such area shall also constitute CRZ-I A); Annexure I: The coastal and marine Ecologically Sensitive Areas (ESAs) and the geo morphological features play a vital role in maintaining the functions of the coast. Mangroves, beaches, coral reefs, etc., aid in controlling coastal erosion, shoreline</p>



<p><i>that the mangroves forests are of great ecological importance and are also ecologically sensitive. Considering the vital role played by the mangroves which can be seen from what is set out above, if a citizen is to lead a meaningful life as contemplated by Article 21 of the Constitution of India, the mangroves will have to be preserved and protected. Considering the drastic effects of destruction of mangroves on the environment, the destruction of mangroves and the failure of the State to take steps for its restoration will amount to violation of fundamental rights guaranteed by Article 21 of the Constitution."</i></p>	<p>change, saltwater intrusion and also serve as natural defence against coastal hazards such as storm surges, cyclones and tsunamis. The ESAs maintain the biological integrity of the coast by providing direct and indirect ecosystem services to the coastal livelihood. In addition, several invaluable archaeological and heritage sites are also located along the coast. Hence conservation and protection of the above areas, features and sites become necessary. Annexure III: Construction of beach resorts or hotels shall not be permitted in Ecologically sensitive areas (such as marine parks, mangroves, coral reefs, breeding and spawning grounds of fish, wildlife habitats and such other area as may be notified by the Central Government or State Government or Union territory administrations).</p>
<p>Challenge: Increasing the types of permissible activity: The 2019 Notification adds "etc."</p>	<p>The Applicant has chosen to quote the subject provision in a selective manner, to suit his</p>



to the definition of eco-tourism activities permitted in mangrove areas which includes mangrove walks among other things. This insertion makes the definition of eco-tourism activities non- exhaustive. This sub-Regulation wasn't included in the earlier Notification. There are no reasons given for adding the word "etc." to the definition of eco-tourism activities. It is designed to expand and expands the term and to top it off, is extremely vague. The Notification uses the word "etc" and not "or the like" which would have clearly brought in the ejusdem generis principle,. - therefore, the definition of permissible activities is vague and therefore arbitrary.

argument, whereas the provision has to be read and understood in its entirety. The provision is reproduced below.

“Eco-tourism activities such as mangrove walks, tree huts, nature trails, etc., in identified stretches areas subject to such eco-tourism plan featuring in the approved CZMP as per this notification, framed with due consultative process, public hearing, etc. and further subject to environmental safeguards and precautions related to the Ecologically Sensitive Areas, as enlisted in the CZMP”

Thus, it is submitted that the word “etc” given in the provision applies only to ‘Eco-tourism activities’ and not to any other activity . Further, as per the above provision, such activities will be allowed only subject to such eco-tourism plans featuring in the approved CZMP as per the notification, framed with due consultative process, public hearing, etc. and



	<p>further subject to environmental safeguards and precautions related to the Ecologically Sensitive Areas, as enlisted in the CZMP. Thus, the provision is valid.</p>
<p>Challenge:</p> <p>(ii) Change in Buffer Zone: There has been a complete change in the permissible activities in the buffer zone. CRZ 2019 adds another Regulation which permits laying of pipelines, transmission lines, conveyance systems/mechanisms and construction of road on stilts etc. that are required for public utilities in the mangrove buffer area. This is without any reasoning or consideration. It is also contrary to the recommendations of the Swaminathan report.</p> <p>The Swaminathan report mentioned the benefit of the buffer area of 50m which was to be around the mangrove stretch.</p> <p>"In addition to the diversity of the habitat, the mangroves play an important role in a sediment repository, stabilises shoreline, a buffer against storm surges (that would otherwise have a more damaging effect on the coast. Its positive impact was noticed in the Bangladesh cyclone of 1991. In the</p>	<p>The Applicant may have misunderstood the term "buffer against storm surges" given in the Swaminathan Committee report and cited by the Applicant, to be "50m mangrove buffers" given in the CRZ Notification, 2019. "Buffer against storm surges" refers to mangroves themselves which act as a buffer against cyclones and storm surges.</p> <p>Thus, the Swaminathan Committee report cited by the Applicant has highlighted the benefit of mangroves which <i>act as a buffer against cyclones and storm surges</i>. The part of the report cited by the Applicant does not mention about 50m mangrove buffers given in the CRZ Notification, 2019.</p> <p>In the 50 m mangrove buffer</p>



recent Gujarat and Orissa cyclones the devastation was reported to have been lesser where sufficient mangrove buffers were present" .

In its 87th meeting in January 2014, the Maharashtra CZMA decided that there should be a policy to manage the 50 m buffer zone around the mangrove area of 1,000 m or more. it resolved that a green belt has to be developed by project proponents in the proximity of the mangrove areas in the 50 m buffer zone for the protection of existing mangroves."

However, the Shailesh Nayak Report drastically changed the purpose of the buffer land area. It recommended that:

"This buffer zone of 50 m shall be utilized for constructing walkways, interpretation centers, promenades public facilities for developing parks, research facilities related to mangrove biodiversity, facilities for conservation and the like. Further, in the mangrove area and in the buffer, all activities are prohibited except for laying of pipelines, transmission lines, conveyor belts, construction of road on stilts and other conveying mechanisms that are required for public use. Defense establishments such as watch tower could

areas, only such activities shall be permitted like laying of pipelines, transmission lines, conveyance systems or mechanisms and construction of road on stilts, etc. **that are required for public utilities and that too in accordance with the environmental safeguards that maybe prescribed in this regard by the Competent Authority.**



be taken up in the mangrove area" .

However, this is not the case in the notification. The MoEF file notings only mention that development project could be undertaken only if no other option exists, but does not seem to give any reasons for relaxing the requirements in the buffer area. The importance of the buffer area was noted by the Hon'ble Bombay High Court in PIL No. 87 of 2006 (Bombay Environmental Action Group &Anr. vis the State of Maharashtra &Ors). The final provision therefore goes against the very nature of a buffer area and changes the entire purpose of the buffer area.

Challenge:

Compensatory

Afforestation:

Compensatory Afforestation: In a mangrove area, if the construction of any road or sewage treatment plant is inevitable, a minimum of three times the mangrove area affected or destroyed or cut during the construction process shall be taken up for compensatory plantation of mangroves as per the 2019 Notification as opposed to five times that the CRZ 2011 Notification directs. The Shailesh Nayak Report itself states that the Government (State/Union) shall undertake 10 (ten)

It is submitted that there is no dilution in the provision in CRZ Notification 2019 from that in CRZ Notification 2011 regarding compensatory afforestation against mangrove. The provision states that a **minimum of three times** the mangrove area affected or destroyed or cut during the construction process shall be taken up for compensatory plantation of mangroves which was the same in CRZ



<p>times mangrove afforestation in lieu of the mangrove land area reclaimed for the purpose. Therefore the requirement of compulsory afforestation of only 3 times the affected area is contrary to all the reports. There is no reasoning for dilution of the requirement under CRZ 2011. This dilution is therefore illegal, unlawful, and arbitrary.</p>	<p>Notification 2011.</p>
<p>Para 32. In respect of the above the Applicant makes prayers (h), (i) and (j).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>G. CHANGES IN THE REGULATION OF PERMISSIBLE ACTIVITIES (HOTELS, PORT DEVELOPMENT, AIRPORT) IN THE CRZ</p> <p>HOTELS-</p> <p>Para33. The change in permissible activities can be bifurcated into the following sub- categories: (i) Hotels; (ii) Airports; and (iii) Port Development</p> <p>(i) HOTELS-</p> <p>Para34. There are 2 major issues in the new CRZ 2019 regime in respect of Hotels:</p> <p>(i) Expanding scope of Beach Resorts/hotels and (ii) Relaxation of</p>	<p>It is humbly submitted that as per the provision given in para 1 (CRZ-II) of Annexure III of CRZ Notification, 2019, is reproduced below.</p> <p><i>“Construction of beach resorts or hotels in designated areas of CRZ-II for occupation of tourist or visitors shall be subject to the following conditions,.....”</i></p> <p>Similarly, the provision given in para 2 (CRZ-III) of Annexure III of CRZ Notification, 2019, is reproduced below.</p> <p><i>“Construction of beach resorts and hotels in designated areas</i></p>



regulations in CRZ-III.

Challenge:

Para 35. Expanding scope of Beach Resorts/hotels: Firstly, Regulation 5.2 (v) & 5.4(iii)(a) read with, Annexure III of CRZ 2019 has expanded the scope of tourism development in CRZ areas by adding the words "tourism development projects" Therefore, while the draft 2018 Notification only permitted development of beach resorts and hotels in CRZ areas, the 2019 Notification permits construction of tourism development projects in addition to beach resorts or hotels. It may be pointed out that the CRZ 2011 prohibited reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities. Even the Draft CRZ notification, 2018 did not permit the construction of "Tourism Development Projects" in addition to Hotels. This contravenes Rule 5(3) of the Environment (Protection) Rules, 1986 ("EPR") which requires that the relevant change has to be published and objections from the public be invited thereon and considered. It is clear that this was not an emergency measure by its very nature. The process of a review of CRZ 2011 has been underway for a long time

of CRZ- III for occupation of tourists or visitors shall be subject to the following conditions,..."

Further, the provision given in the foot note to Annexure III of CRZ Notification, 2019, is reproduced below.

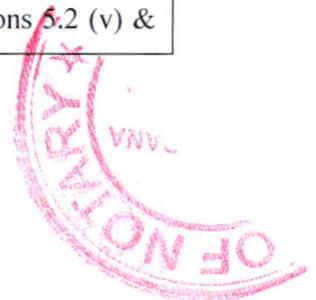
"Note: Construction of beach resorts or hotels shall not be permitted in Ecologically sensitive areas (such as marine parks, mangroves, coral reefs, breeding and spawning grounds of fish, wildlife habitats and such other area as may be notified by the Central Government or State Government or Union territory administrations)".

It is seen that the above regulations relate only to Construction of beach resorts or hotels and not to other tourism development projects.

Thus, regulations 5.2 (v) & 5.4(iii)(a) read with Annexure III of CRZ 2019 have NOT expanded the scope of tourism development in CRZ areas, as



<p>period. It is also arbitrary and illegal and violates Articles 14 and 21 of the Constitution of India.</p>	<p>claimed by the Applicant. The regulations 5.2 (v) & 5.4(iii)(a) have to be read with Annexure III of CRZ 2019 and the word 'tourism development projects', though used in the regulatory provisions as well as in the Heading of Annexure-III, these refer only to Construction of beach resorts or hotels and not to other tourism development projects. Annexure-III of CRZ Notification, 2019 contains guidelines only for Construction of beach resorts or hotels and not for any other tourism development projects.</p> <p>Annexure III of CRZ Notification, 2011 also contains guidelines for development of beach resorts or hotels in the designated areas of CRZ-III and CRZ-II for occupation of tourist or visitors with prior approval of the Ministry of Environment and Forests.</p>
<p>Para36. That apart, the expression "Tourism Development Project" is not defined. Tourism is of many types as are</p>	<p>It is humbly submitted that as stated in the reply to para 35 above, the regulations 5.2 (v) &</p>



<p>tourists. There can be any number of possibilities of projects which develop or promote tourism. E.g. Casinos promote tourism; Hospitals promote medical tourism. Museums, Art Galleries, Opera Houses; Theatres also promote tourism. High End Shopping Malls/High Streets promote shopping tourism. Sporting facilities promote tourism. A "Tourism Development Project" will therefore sound the death knell for the coastal ecology, This is therefore totally arbitrary, irrational and a source of unregulated and uncanalised power and therefore bad in law.</p>	<p>5.4(iii)(a) have to be read with Annexure III of CRZ 2019 and Annexure III of CRZ Notification, 2019 does not contain any of the terms such as Casinos, Hospitals, medical tourism, Museums, Art Galleries, Opera Houses, Theatres, High End shopping malls/High Streets, shopping tourism etc. Annexure-III of CRZ Notification, 2019 (as well as CRZ 2011) contains guidelines only for construction of beach resorts or hotels.</p>
<p>Para 37. In respect of the above the Applicant makes prayer (o).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>Para 38. Relaxation of regulations in CRZ-III: Secondly, Annexure-III of CRZ 2019 removes various restrictions on construction of "tourism development projects" such as</p> <p>(i) the restriction on construction for the distance of 200 mts from the shore for the construction of hotels in CRZ II and CRZ III.</p> <p>(ii) One example is the criteria relating to</p>	<p>It is humbly submitted that as per CRZ Notification, 2011, para 7, CRZ-II are areas that have been developed upto or close to the shoreline.</p> <p>Explanation.- For the purposes of the expression "developed area" is referred to as that area within the existing municipal limits or in other existing</p>



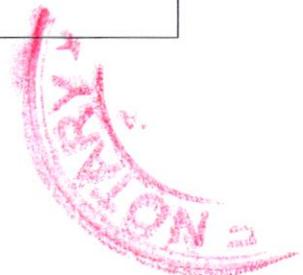
<p>FSI (which shall not exceed 0.33) is now restricted only to CRZ III, which was earlier applicable to both zones.</p> <p>(iii) Similarly, most of the other safeguards of the 2011 notification have been applied to CRZ III but not for CRZ II.</p>	<p>legally designated urban areas which are substantially built-up and has been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains;</p> <p>Further, CRZ-III are Areas that are relatively undisturbed and those do not belong to either CRZ-I or II which include coastal zone in the rural areas (developed and undeveloped) and also areas within municipal limits or in other legally designated urban areas, which are not substantially built up.</p> <p>That, as per CRZ Notification, 2019, para 2, CRZ-II shall constitute the developed land areas up to or close to the shoreline, within the existing municipal limits or in other existing legally designated urban areas, which are substantially built-up with a ratio of built-up plots to that of total plots being more than 50 per cent and have been provided</p>
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	<p>with drainage and approach roads and other infrastructural facilities, such as water supply, sewerage mains, etc.</p> <p>Further, CRZ-III are Land areas that are relatively undisturbed (viz. rural areas, etc.) and those which do not fall under CRZ-II, shall constitute CRZ-III, and CRZ-III shall be further classified into following categories: -</p> <p>2.3.1 CRZ-III A:</p> <p>Such densely populated CRZ-III areas, where the population density is more than 2161 per square kilometer as per 2011 census base, shall be designated as CRZ-III A and in CRZ-III A, area up to 50 meters from the HTL on the landward side shall be earmarked as the 'No Development Zone (NDZ)', provided the CZMP as per this notification, framed with due consultative process, have been approved, failing which, a NDZ of 200 meters shall continue to apply.</p>
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	<p>2.3.2 CRZ-III B: All other CRZ-III areas with population density of less than 2161 per square kilometer, as per 2011 census base, shall be designated as CRZ-III B and in CRZ-III B, the area up to 200 meters from the HTL on the landward side shall be earmarked as the 'No Development Zone (NDZ)'.</p> <p>2.3.3: Land area up to 50 meters from the HTL, or width of the creek whichever is less, along the tidal influenced water bodies in the CRZ III, shall also be earmarked as the NDZ in CRZ III.</p> <p>That the concerned regulation for CRZ-II areas is given in para 1(i) of Annexure-III of CRZ Notification, 2019 and the same is reproduced below.</p> <p><i>"construction shall be permitted only to the landward side of an existing road or existing authorized fixed structures";</i></p>
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	<p>This is totally in line with the respective regulation for CRZ-II areas.</p> <p>As far as CRZ-III areas are concerned, the provisions for beach resorts or Hotels are given at paras 5.3(ii)(f) and 5.3(iii)(a).</p> <p>FSI: The FSI regulations for CRZ-II areas have been provided separately in in para 5.2 of the notification.</p> <p>Other safeguards: Regulations regarding other safeguards for CRZ-II areas have been provided separately in the notification.</p>
<p>Para 39. The Shailesh Nayak Report did not comment on differentiation on the applicability of FSI upto 0.33 between CRZ-II and CRZ-III but it has merely recorded the objection of Government of Kerala that such a differentiation is required for "promotion of tourism". There has been no consideration of ecological factors. The BB Vohra committee formed in 1994 in effect recommended reducing</p>	<p>It is submitted that as stated in the reply to para 35 above, FSI regulations for CRZ-II areas have been provided separately in para 5.2 of the notification. The Applicant's statement regarding reducing the NDZ from 200 m to 50 m is only a repetition and the same has already</p>

<p>the NDZ from 200 m to 50 m for similar reasons i.e. to permit tourism activities. This was struck down by the Supreme Court in 1996 in Indian Council for Environment-Legal Action and the reasoning was found to be insufficient.</p>	<p>been addressed by Respondent-1 in the replies to paras 16 and 17 above.</p>
<p>Para 40. In respect of the above the Applicant makes prayer (p).</p>	<p>Reply to para 40: In view of the above submissions, it is prayed that the Petition/OA may kindly be dismissed.</p>
<p>(ii) AIRPORTS-</p> <p>Para 41. The 2011 Notification which specifically permitted only a green field airport at Navi Mumbai. Regulation 5.3 (v) of CRZ 2019 notification makes a departure from this to allow the development of airports in wastelands and non-arable lands in CRZ-III areas with adequate environmental safeguards.</p> <p>Challenge:</p> <p>(i) The draft Notification 2018 did not include a provision permitting development of airports in CRZ - III except for the Navi Mumbai airport whereas the 2019 Notification permits development of airports in wastelands and non-arable lands in CRZ-III areas with adequate safeguards. This contravenes</p>	<p>It is humbly submitted that Para 5.3 (v) of CRZ 2019, development of airports in wastelands and non-arable lands in CRZ-III areas is allowed only with adequate environmental safeguards has been inserted after due consideration on 26/11/2018.</p> <p>It was noted that there could be wastelands in the CRZ areas and this could be preferred over use of arable areas. For bringing about uniform regulations for the whole country and to ensure that special dispensations are being removed to the extent possible,</p>



Rule 5(3) of the Environment (Protection) Rules, 1986 ("EPR") which requires that the relevant change has to be published and objections from the public be invited thereon and considered.

(ii) There is no reasoning for any of the changes suggested above, the same are arbitrary and unreasonable. Also 'waste land and non-arable land' can more often than not have enormous benefits. The inclusion of the term in fact manifests the thought process involved which is really to avoid agrarian strife and not protect the environment, To put it simply, if farmers cannot complain and the land has no commercial value, the environment be damned. The Shailesh Nayak report vaguely states 'Though in several countries offshore airports are operating, this issue needs to be examined from both economic and environmental angles. It however provides no adequate reasoning or positive recommendation on the same.

it was agreed that airports in CRZ -III may be allowed subject to adequate environmental safeguards.

Reply to Challenge (i) & (ii): It is submitted that, Rules 5 and 5(3) of the Environment (Protection) Rules, 1986 ("EPR") deals with imposing prohibition or restrictions on the locations of an industry or the carrying on of processes and operations in an area. Further, the petitioner has not been able to provide a ground that if CRZ Notification, 2011 permits development of green field airport at Navi Mumbai, why **Development of airports in wastelands and non-arable lands** in CRZ-III areas should not be permitted as per CRZ Notification, 2019, with adequate environmental safeguards, which will be ultimately for the larger public benefit. It is also humbly submitted that all necessary studies as mentioned in Para 8 and Annexure V of the CRZ



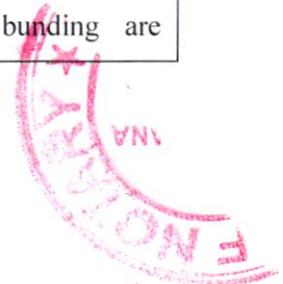
	<p>Notification 2019 are to be conducted for seeking CRZ Clearance.</p> <p>Therefore, the concerns of the petitioners are completely unfounded.</p>
<p>Para 42. In respect of the above the Applicant makes prayers (q), and (r).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>(iii) PORT DEVELOPMENT-</p> <p>Para 43. The 2019 notification now permits construction of ports in CRZ I B (Regulation 5.1.2(i)(a)) and in CRZ IV (Regulation 5.4(ii)(a)) which was not permitted in the earlier notification.</p>	<p>It is humbly submitted that as per Regulations at paras 5.1.2(i)(a) and 5.4(ii)(a) of CRZ 2019 that are reproduced below.</p> <p>Para 5.1.2(i)(a): <i>Activities shall be regulated or permissible in the CRZ-I B areas as under:-</i></p> <p><i>Land reclamation, bunding, etc. shall be permitted only for activities such as,-</i></p> <p><i>(a) foreshore facilities like ports, harbours, Jetties, wharves, quays, slipway, bridges, hover ports for coast guard, sea links, etc;</i></p>



	<p>Thus, Land reclamation, bunding, etc. shall be permitted in CRZ-IB areas only for activities such as,-</p> <p>(a) foreshore facilities like ports, etc.</p> <p>Para 5.4 (ii)(a):</p> <p>Activities shall be permitted and regulated in the CRZ IV areas as under:-</p> <p>Land reclamation, bunding, etc to be permitted only for activities such as.-</p> <p><i>(a) foreshore facilities like ports, harbours, Jetties, wharves, quays, slipway, bridges, sea links and hover ports for coast guard, etc;</i></p> <p>Thus, Land reclamation, bunding, etc. shall be permitted in CRZ-IV areas only for activities such as,-</p> <p>(a) foreshore facilities like ports, etc.</p> <p>This same activity is also permissible as per CRZ Notification, 2011 also, as per Para 3(iv)(a) of CRZ 2011,</p>
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	<p>which is reproduced below.</p> <p>Para 3(iv)(a): <i>Land reclamation, bunding or disturbing the natural course of seawater (are prohibited) except those,-</i></p> <p><i>(a) required for setting up, construction or modernisation or expansion of foreshore facilities like ports, harbours, jetties, wharves, quays, slipways, bridges, sealink, road on stilts, and such as meant for defence and security purpose and for other facilities that are essential for activities permissible under the notification;</i></p> <p>Thus, there is no difference between CRZ Notification, 2011 and CRZ Notification, 2019 regarding regulations for Land reclamation, bunding, etc for foreshore facilities like ports, etc.</p>
<p>Challenge:</p> <p>(i) No reasons have been mentioned in any of the reports or the file notings of the MoEFCC regarding the development of</p>	<p>Reply to Challenge 43(i): That, as brought about in the reply to para 43 above, Land reclamation and bunding are</p>



<p>ports. Shailesh Nayak report recommends reclamation of sea bed in CRZ-IV areas for construction of ports and harbour without any discussion on the adverse impact on marine biodiversity and marine ecosystem. No consideration has been given to fishing communities which will be adversely impacted due to development of ports. The major consequence of permitting reclamation of seabed will be the change in hydrology of coastal regions nearby which will lead to more coastal flooding and ingress of seawater, especially in the present scenario of rising sea levels due to global warming. The reclamation shall cause coastal erosion and accretion in adjacent areas and further reduce fishing resources for the traditional fisherfolk which will ultimately affect the fish stocks and fish productivity of the country.</p>	<p>permitted activities foreshore facilities like ports, harbours, jetties even in the CRZ Notification, 2011 and there is no difference between CRZ Notification, 2011 and CRZ Notification, 2019 regarding regulations for Land reclamation, bunding, etc for foreshore facilities like ports, etc. Thus, the contention of Applicant are not based on facts.</p>
<p>Para 44. In respect of the above the Applicant makes prayers (s), and (t).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed</p>
<p>H. DELETING ITEMS FROM THE LIST OF PROHIBITED ACTIVITES IN THE CRZ</p> <p>Para 45. This section is split into three parts. The following prohibited activities</p>	<p>It is humbly submitted that as per para 4 (v) of CRZ 2019,</p>



have now been permitted in CRZ areas under the 2019 Notification:

Units for waste disposal now permitted

Para 46. The 2019 Notification does not prohibit the setting up and expansion of units or mechanism for disposal of wastes and effluents, which was prohibited in the 2011 Notification. The 2011 Notification includes a statement which emphasises the need for phasing out of the discharge of untreated waste and effluents from industries, cities or towns and other human settlements within a period of 2 years by the concerned authorities, which has been deleted in the Draft Notification of 2018 and the 2019 Notification. Such units, by their very nature, impose a colossal environmental burden, including in terms of direct pollution. The removal of the prohibition, is therefore almost an inducement to pollute at nature's doorstep.

Discharge of untreated waste and effluents from industries, cities or towns and other human settlements comes under prohibited activities in CRZ areas.

Further, as per para 5 (ix) of Annexure IV of CRZ 2019, Construction of buildings or other activities shall be permitted under the CZMP provided adequate arrangements are made for proper management and disposal of solid and liquid wastes in accordance with the environmental standards, rules and statutes, and under no circumstances, untreated effluents shall be disposed of in the coastal waters.

It is also submitted that the Applicant has wrongly stated that setting up and expansion of units or mechanism for disposal of wastes and effluents, was prohibited in the 2011 Notification. As per para 3(v) of CRZ Notification, 2011, Setting



	<p>up and expansion of units or mechanism for disposal of wastes and effluents <u>are prohibited</u> <u>except facilities required for, -</u></p> <p>discharging treated effluents into the water course with approval under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);</p> <p>storm water drains and ancillary structures for pumping;</p> <p>treatment of waste and effluents arising from hotels, beach resorts and human settlements located in CRZ areas other than CRZ-I and disposal of treated wastes and effluents;</p> <p>In other words, CRZ Notification, 2011 does permit setting up of and expansion of units or mechanism for disposal of wastes and effluents for the above-mentioned categories (a), (b) and (c) of activities.</p>
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46- Challenge

(i) This provision is contrary to the spirit of the recommendations of the various committees. The Shailesh Nayak Committee Report time and again mentions the importance of zero discharge for buildings, industrial units, etc. and that efforts should be made to do the same. CRZ 2019 completely ignores this and does not include such a provision. Deletion of the provision that seeks phasing out of discharge of untreated waste and effluents from industries, cities or towns and other human settlements in CRZ areas within a period of 2 years from CRZ 2019 will substantially worsen the overall quality of a healthy coastal ecosystem in regions where discharge still continues and where phasing out of such activities are not yet undertaken. Deletion of such a provision in CRZ 2019 regularises and condones the violation of continuing such activities in CRZ areas by perpetrators and therefore, such a dilution gravely violates Doctrine of Non-Regression.

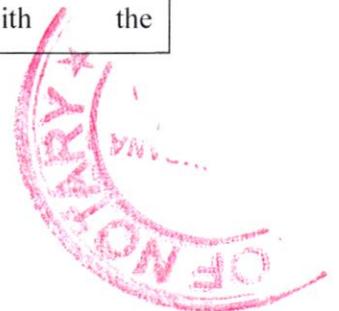
At the outset, the contention of the applicant that CRZ 2019 completely ignores the importance of zero discharge for buildings, industrial units, etc and does not include such a provision is denied. It is also submitted that the petitioner is trying to mislead the Hon'ble Tribunal.

In this regard, provisions under Para 4 (v) and Para 5 (ix) of Annexure IV of CRZ 2019 may be referred to which is mentioned as under:

Para 4 (v) of CRZ 2019:

Discharge of untreated waste and effluents from industries, cities or towns and other human settlements are prohibited.

Para 5 (ix) of Annexure IV of CRZ 2019: Construction of buildings or other activities shall be permitted under the CZMP provided adequate arrangements are made for proper management and disposal of solid and liquid wastes in accordance with the



	<p>environmental standards, rules and statutes, and <u>under nocircumstances, untreated effluents shall be disposed off in the coastal waters.</u></p>
<p>(ii) In respect of the above the Applicant makes prayers (u), and (v)</p>	<p>The Applicant may not have understood the above provisions of the CRZ Notification, 2019. In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed</p>
<p><u>(ii) Setting up and expansion of fish processing units</u></p> <p>Para 47. CRZ 2011 prohibited setting up and expansion of fish processing units including warehousing except for hatchery and natural fish drying in permitted areas whereas Regulation 4 (iii) of CRZ 2019 only prohibits setting up of fish processing units while permitting "expansion". Further, it does not include "warehousing" under the definition of fish processing units.</p> <p>Challenge:</p> <p>Para 48. This provision is contrary to the recommendations of the various committees. Usage of the words</p>	<p>It is humbly submitted that in this matter the Applicant has challenged the CRZ Notification 2019 and not the Shailesh Nayak committee Report. It is humbly reiterated that the CRZ Notification 2019 has been finalised after wide stakeholder consultation and approval of Union Cabinet. It is further stated that applicant has mentioned that this provision (4 (iii) of CRZ 2019) is contrary to the recommendations of the various committees. However, the Applicant has not cited</p>



<p>"expansion" and "warehousing" of fish processing units effectively means that existing fish processing units can be expanded and that any kind of warehouses of any built up area can be set up. The file notings of the Shailesh Nayak Committee Report mention that for fish processing units, modernization should be allowed on landward side to any extent and utilize the dynamic FSI of local body, but it does not ascertain or discuss environmental consequences of an expansion in the nature of an unlimited built-up area on the coastal environment. Therefore, indiscriminate modifications for expansion of fishing units and warehousing have now been permitted.</p>	<p>recommendation of any such Committee.</p> <p>Further, as per para 5.1.2 (viii) of CRZ 2019, existing fish processing units may utilise 25% additional plinth area for modernisation purposes (only for additional equipment and pollution control measures) subject to approval of the concerned State Pollution Control Board or Pollution Control Committee, among other conditions.</p> <p>Therefore, the concerns of the petitioner about unlimited expansion is unfounded.</p>
<p>Para 49. In respect of the above, the Applicant makes prayer (w).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p><i>(iii) dressing or altering the sand dunes, hills, natural features</i></p> <p>Para 50. CRZ 2011 prohibits "<i>dressing or altering the sand dunes, hills, natural features including landscape changes for beautification, recreation and other such purposes</i>" whereas Regulation 4 (ix) CRZ</p>	<p>It is humbly submitted that there is no explicit provision in CRZ 2019 which permits alteration of hills and natural features including landscape changes for beautification, recreation, and</p>



2019 only prohibits "*dressing or altering of active sand dunes*" leaving out hills and other natural coastal areas outside of areas prohibited for construction activities.

Challenge:

(i) According to a Ministry of Earth Sciences Report of 2018 titled "National Assessment of Shoreline Changes along Indian Coast" ("MoES Report), every landform, like a rocky coast, offers certain degree of resistance to erosion. That natural features such as rocky cliffs and headlands play an important role in controlling the morphology of the beach adjacent to them.

A copy of the said report is attached hereto as ANNEXURE A-14. That the extent of relaxation in 2019 Notification to alter hills and natural features including landscape changes for beautification, recreation, and other such purposes will create an ecological havoc as any sensitive coast that has hills and similar natural features can now be destroyed for "recreational purposes" and thereby, make the 2019 Notification more regressive and against the positive principles of conservation and protection.

other such purposes. Mining of sand, rocks and other sub-strata materials is also prohibited under CRZ Notification, 2019.

Further, as per para 7 (i) of CRZ 2019, even permitted activities attracting the provisions of this notification shall be required to obtain CRZ clearance prior to their commencement. Thus, no area is left out for any construction activity as claimed by the Applicant.



<p>Para 51. In respect of the above the Applicant makes prayers (x), and (y).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>I. DILUTION OF ESSENTIAL COMPONENTS IN APPLICATION FORM FOR CRZ CLEARANCE</p> <p>Para 52. In CRZ 2019, there have also been drastic change in the information required to be submitted along with the application form while applying for a CRZ Clearance. This has a material bearing on the information to be assessed while granting CRZ clearance. The Application Form at Annexure-V to CRZ, 2019 entirely deletes the following requirements concerning risk mitigation and risk avoidance that were required to be submitted under CRZ, 2011 such as:</p> <p>(i) whether project area is located in hazard zone,</p> <p>(ii) providing information on whether the project area is prone to cyclone, Tsunami, tidal surge, subduction, earthquake,</p> <p>(iii) risk of accidents involved,</p> <p>(iv) whether underground works is involved in the project area,</p> <p>(v) any production or manufacturing processes involved for the project,</p>	<p>It is humbly submitted that the CRZ Notification 2019 has duly included Risk Assessment Report and Disaster Management Plan as mentioned in Para 8 (i) of the said notification. Further, the Annexure IV of the CRZ Notification details out all the information required regarding the project to be submitted by the PP along with their application.</p> <p>In view of above, the concerns of the petitioner are unfounded.</p>



<p>(vi) any diversion or culverting of natural coastal area,</p> <p>(vii) any changes in any water body,</p> <p>(viii) influx of number of people on the project site,</p> <p>(ix) cumulative environmental impact</p> <p>(x) the extent of environmental sensitivity in the project area and surrounding areas in terms of migratory species, breeding, nesting, biosphere areas</p> <p>(xi) density of population</p> <p>(xii) sensitive man-made areas</p> <p>(xiii) fishing and/or surface resources</p>	
<p>Para 53. In respect of the above, the Applicant makes prayer (jj).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>INCREASE IN THE NUMBER OF PETROLEUM AND CHEMICAL PRODUCTS PERMITTED TO STORE IN CRZ AREAS EXCEPT FOR CRZ-I(A)</p> <p>Para 54. In Annexure-II read with Regulation 5.1.2(v) CRZ 2019, eight new chemicals are permitted for storage in Annexure- II to the CRZ Notification. These chemicals are Acetic Acid, Mono Ethylene Glycol, Paraxylene, Ethane,</p>	<p>It is humbly submitted that the newly added chemicals are of the same nature and this Ministry has received public comments/ suggestions for inclusion of the same in the Draft CRZ Notification,2018.</p> <p>Further it is humbly submitted that Technology has impacted our lives in several ways. Some</p>

Butadine, Methanol, caustic, Bitumen •
These substances were not included in CRZ 2011.

Challenge:

(i) The existing framework did a balancing exercise, by restricting the categories of products into two broad categories; namely (i) petroleum/fuel; and (ii) fertilizer. These were critical to the economy and imported in large quantities., The new list of products do not answer this description at all. These changes/additions (except for Acetic Acid and Mono Ethylene Glycol) were not even included in the Draft Notification, 2018. Therefore, the inclusion of Items (xviii) to (xxiii) in Annexure II to CRZ, 2019 contravenes Rule 5(3) of the Environment (Protection) Rules, 1986 ("EPR") which requires that the relevant change has to be published and objections from the public be invited thereon and considered. Therefore, the inclusion of the above entry is ultra vires the EPR and in particular, Rule 5(3) thereof.

(ii) There has also been absolutely no consideration of why the storage of the said additional chemicals ought to be permitted. In Shailesh Nayak Committee

of these include new products and processes, which increase efficiency with lower costs and Chemicals are no exception to these ever- changing dynamics of technology and it becomes essential to incorporate new chemicals. It is not the case of the Applicant that chemicals should not at all be stored in CRZ areas. Rules 5 and 5(3) of the Environment (Protection) Rules, 1986 ("EPR") deals with imposing prohibition or restrictions on the locations of an industry or the carrying on of processes and operations in an area.

report, there is no consideration of the said issue. File notings of the MoEF state that use of petroleum products ought to be permitted. However, it appears that apart from Acetic Acid & Butadine, none of the chemicals are reflected in the said Notifications. The Swaminathan Report of 2005 recommended prohibition of hazardous chemicals, except petroleum products in port areas. Lastly, the Final Frontier Report of 2009 does not speak of Petroleum Products but merely recommends that storage of Fertilizers be permitted. The inclusion of these additional chemicals is therefore arbitrary being based on no reasons whatsoever.

(iii) Furthermore, the above-mentioned chemicals are highly toxic and the nature and extent of harm that such toxic chemicals can cause are as under:

(a) Acetic Acid is a corrosive substance, where inhalation of concentrated vapour may cause serious damage to the linings of these organs and later, breathing difficulties may result. Even skin contact can lead to second degree burns. Environmental effects depend on the concentration and duration of exposure to acetic acid.



In high concentrations it can be harmful to plants, animals and aquatic life. Inhalation of acetic acid causes irritation to the nose, throat and lungs.

(b) Ethylene Glycol is also a dangerous chemical to store as it is highly combustible and if mixed with water and leaked into fields, a short term exposure of it can cause renal failure and brain injury.

(c) Xylene is used as a solvent in the printing, rubber, paint and leather industries. It is found in small amounts in airplane fuel, gasoline and cigarette smoke. It is found in small amounts in airplane fuel, gasoline and cigarette smoke. The main effect of inhaling xylene vapor is depression of the central nervous system, with symptoms such as headache, dizziness, nausea and vomiting. At very high levels of exposure, xylene can injure the liver and kidneys, but this is extremely unlikely to happen without noticeable effects on the nervous system.

(d) The ill-effects of storing methanol, Butadine, Ethanol and Bitumen arise from consequences that will entail after spillage of these chemicals. Specifically, Bitumen can disrupt the activities of soil microorganisms and affect the growth of plants and crops. Bitumen can also lead to



<p>absolute erosion of soil fertility. Similarly, Caustic, a fertilizer, also causes damage to the soil fertility.</p>	
<p>Para 55. The additional chemical products, as stated above, have been permitted for storage without carrying out any scientific study on the impact of storing such products in coastal areas.</p>	<p>It is submitted that all permitted activities are also regulated, meaning thereby, prior permission under the provisions of CRZ Notification 2019 shall be required for setting up storage facilities for permissible chemicals. The Procedure for CRZ clearance for permissible and regulated activities, including the requirement of rapid EIA and other relevant studies for projects is laid down in para 8 of the CRZ Notification, 2019. This is to ensure that environmental safeguards are not compromised in any manner.</p> <p>Therefore, the concerns of the petitioner is without any basis.</p>
<p>Para 56. In respect of the above the Applicant makes prayers (z) and (aa).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>



**DILUTION OF CRZ- IBY
REMOVING THE TERM
'ASSOCIATED BIODIVERSITY'
IN RESPECT OF PROTECTION OF
CORAL REEFS**

Para 57. The words 'associated biodiversity' along with Coral Reefs in the definition of CRZ- I has been deleted.

Challenge:

(i) This deletion is contrary to the recommendations of the various committees. Swaminathan Committee Report lays down details regarding the importance of reefs and how different countries have realised started taking steps for conserving the same. Shailesh Nayak Committee Report also mentions the importance of the protection of coral reefs along with their associated biodiversity and lays that their destruction is prohibited. In the file notings of the MoEFCC, it is stated that coral biodiversity is extremely important for the very existence of corals as they live in symbiotic relation, hence coral biodiversity should be addressed completely. It was only the Joint Secretary (as per the file notings) who recommended the deletion of the words "associated biodiversity" because it has no definite

It is humbly submitted that the term '**associated biodiversity**' not only applies to Coral Reefs but also to Mangroves, Mudflats, Salt Marshes, Sand dunes, National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas, Turtle nesting grounds, Horse shoe crabs' habitats, Sea grass beds, Nesting grounds of birds, etc.

These ecologically sensitive areas (ESAs) maintain key habitats, provide array of resources, support the survival and reproduction of species, allow for species movement and ensure the maintenance of natural processes in their habitats. Thus, the biodiversity associated with these ESAs are very much part of the ESAs and cannot be seen separately and in isolation.

meaning for identification. This was not clearly an issue for the Shailesh Nayak Committee.

(ii) The terms "associated biodiversity" are crucial to protecting reefs ecosystems. All coral reefs systems in India are very rich in biodiversity. There is an accumulation of various types of biotic factors in each ecosystem of coral reefs. The composition of coral reefs in India is unique and it includes near about 180 species of biotic algae, 20 species of sea weeds, 20 species sea grasses, 115 species of Poriferans, 5 species of Crustaceans, 110 species of Echinoderms, and 600 species of bony fishes. Besides, it should be noted that different species of crabs, gastropods, bivalves, cephalopods are also found in Indian coral reefs. Both stony and soft corals are found in the sub-tidal regions of reefs in India. Coral reef ecosystem has one of the highest biodiversity of any ecosystem in the world - more than a tropical rainforest. These live in a symbiotic manner with the coral reefs though they do not form part of the coral reefs themselves. Protecting the biodiversity in the coral reef area is as important as protecting coral reefs themselves. Once cannot survive without

It is not the intent of CRZ Notification, 2019 that the Coral Reefs should be protected but the associated biodiversity should not be protected. Protection of the associated biodiversity comes automatically with the protection of their habitats/ESAs.

Thus, the objections of the Applicant may deem as frivolous and without any basis.

In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed



<p>the other.</p> <p>(iii) In respect of the above the Applicant makes prayer (bb).</p>	
<p>REDUCTION IN CRZ FROM 50 METERS TO 20 METERS ON ISLANDS</p> <p>Para 58. In view of the unique coastal systems of backwater islands and islands along the mainland coast, along with space limitations in such coastal stretches, CRZ has been reduced from 50 meters in CRZ 2011 Notification to 20 meters in CRZ 2019 (Regulation 10.2(ii)) from the HTL on the landward side. Andaman & Nicobar Islands and Lakshadweep Islands are excluded since they are governed by a separate notification, viz. Island Protection Zone Notification, 2019.</p> <p>Challenge:</p> <p>Para 59. There is no distinction made between large and small islands. The reduced CRZ may be required/essential in smaller islands, but the same cannot be applied to all Islands. Islands in India range from the size of Mumbai to smaller islands in backwaters. The purported reason for change in the Shailesh Nayak Report is the hardships of local</p>	<p>It is submitted that the following Amendment to the CRZ Notification 2019, has been notified vide per para (d)(i) of amendment No. S.O. 5495 (E) dated 24/11/2022 (copy enclosed as Annexure R1-4).</p> <p><i>“in sub-paragraph 10.2, for clause (iii), the following clause shall be substituted, namely,</i></p> <p><i>“(iii) Integrated Island Management Plans, as applicable to smaller islands in Lakshadweep and Andaman and Nicobar by notification vide number S.O.1242 (E), dated the 8th March, 2019 (ICRZ Notification, 2019), shall be formulated by respective State Governments or the Union territory Administration for all</i></p>

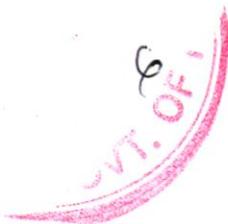
communities and the potential loss of tourism. File notings of the MoEF accepted the regulation for reducing the NDZ to 10 meters on backwater islands in CRZ II for "promoting tourism". It has been judicially settled, by a number of decisions, that Environmental Law must, where development is needed, be founded on 'sustainable development. Tourism cannot therefore be the be all and end all. This was done without dealing with taking account any of the environmental factors and environmental consequences of such reduction on the islands. It is submitted that the "loss of tourism" cannot be a ground for diluting environmental protections. No scientific rationale has been provided to show the basis of reducing the CRZ limits to a mere 20 meters is environmentally benign or made on rational scientific study, especially when sea level rise due to climate change is now certain in the near future. No expert study for such a reduction has been undertaken.

such islands and submitted to the Central Government and till the Integrated Island Management Plans are framed, provisions of this notification shall not apply and the Coastal Zone Management Plan as per provisions of Coastal Regulation Zone notification, 2011 number S.O.19(E), dated the 6th January, 2011, shall continue to apply."

Thus, IIMPs are to be prepared for the backwater islands and islands along the mainland coast, as per the provisions contained in the ICRZ Notification, 2019, which is applicable to smaller islands in Lakshadweep and Andaman and Nicobar.

Now, para 6(iii) of the ICRZ Notification, 2019 (copy enclosed as Annexure R1-5), states as follows:

"In view of the unique coastal systems and space limitations in these islands, a No Development Zone (NDZ) of 20



meters from the HTL on the landward side shall uniformly apply to such islands and activities shall be regulated as under ”:

Thus, the NDZ/CRZ of 20 m in the IIMPs of backwater islands and islands along the mainland coast, provided for in the CRZ Notification, 2019 is valid.

It is further submitted that the Applicant has not challenged the ICRZ Notification, 2019 (Annexure R1-5) and hence cannot challenge provisions under para 10.2 of CRZ Notification, 2019, which flows from the provisions under para 6(iii) of the ICRZ Notification, 2019.

It is also humbly submitted that the CRZ/NDZ of 20 m for the IIMPs of Lakshadweep Islands has been upheld by the Hon’ble Supreme Court of India in Judgement dated 19/08/2015, in Civil Appeal No. 4625-4626/2012 [UNION



	TERRITORY OF LAKSHADWEEP & ORS Vs SEASHELLS BEACH RESORT & ORS.]
<p>Para 60. In respect of the above the Applicant makes prayers (cc), (dd), and (ee).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>CONSTRUCTION OF STATUES/ MONUMENTS / MEMORIALS</p> <p>Para 61. CRZ 2019 permits construction of monuments and memorials and allied facilities by the concerned State Governments in exceptional cases.</p> <p>Para 62. Additionally, CRZ 2019 lays down that if the Central Government considers it necessary so to do, it can dispense with the requirement of public hearing for constructions of monuments and memorials if it is satisfied that the project will not involve rehabilitation and resettlement of the public or the project site is located away from human habitation.</p> <p>Reasons for change</p> <p>i) The Shailesh Nayak Report states that "With regard to monuments/memorials</p>	<p>Reply to Reasons for change - para 62 (i) & ii): Provisions given in para 5.4(xv) in CRZ Notification, 2019 for construction of memorials or monuments are reproduced below.</p> <p><i>Construction of memorials or monuments and allied facilities by the concerned State Government in CRZ-IV (A) areas, in exceptional cases, with adequate environmental safeguards, subject to the</i></p>

<p>proposed by the State/UT Government recommended by the local CZMA to be approved by MoEF&CC on a case-to-case basis taking into account the erosion control and other disaster mitigation measures. Wherever reclamation, if any, for the above projects are permitted, the original HTL as demarcated in the approved CZMP shall prevail. "</p> <p>ii) This Regulation is arbitrary and irrational as it does not consider large-scale environmental consequences of reclamation of sea bed, especially with zero limits placed on the built-up area permissible for construction of monuments and therefore, such large-scale unregulated projects do not fulfil the objective of the CRZ Notification.</p>	<p><i>following, namely: -</i></p> <p><i>the concerned State Government shall submit justification for locating the project in CRZ-IVA area along with details of alternate sites considered and weightage matrix on various parameters including environmental parameters, to State Coastal Zone Management Authority who will examine the project and make recommendation to the Central Government (Ministry of Environment, Forest and Climate Change) for grant of Terms of Reference (ToRs) for preparation of an environmental impact assessment report by the State Government;</i></p> <p><i>On grant of ToRs by the Central Government, the concerned State Government shall submit the draft Environmental Impact Assessment report (EIA) with Environmental Management Plan (EMP), draft Risk Assessment Report with Disaster Management Plan</i></p>
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(DMP) including on-site and off-site emergency plan and evacuation plan during emergency, to the State Pollution Control Board for conduct of public hearing for the proposed project in accordance with the procedure laid down under the Environment Impact Assessment (EIA) notification number S.O. 1533(E), dated the 14th September, 2006;

The concerned State Government shall, after addressing the relevant issues raised by the public during the public hearing referred to in sub-item (b), submit the final EIA, EMP, Risk Assessment and DMP, to the State CZMA for their examination and recommendation to MoEF&CC;

Thus, it may kindly be seen that the provision for Construction of memorials or monuments has been allowed only in exceptional cases and that too with sufficient safeguards including the requirement for

	public hearing, EIA, EMP, Risk Assessment and DMP etc which have been duly built in the provisions.
Para 63. In light of the above the Applicant makes prayers (ff) and (gg).	In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.
<p>DELETION OF SPECIAL PROVISIONS FOR KOLIWADAS AND GAUTHANS IN GREATER MUMBAI</p> <p>Para 64. In CRZ 2019, there is no special regime/provision for Koliwadadas and Gauthans in Greater Mumbai.</p> <p>Para 65. In CRZ 2011, Koliwadadas were declared as CRZ - III so as to ensure optimal protection of traditional coastal communities of Greater Mumbai. Their development, including repair, construction or reconstruction norms in these areas, can be carried out as per the Town and Country Planning Regulations. Koliwadadas were given a special protection under special consideration given to Greater Mumbai under CRZ 2011.</p>	<p>It is humbly submitted that the issue of fishermen and fishing villages has been dealt in more holistic and comprehensive manner in CRZ Notification 2019.</p> <p>Para 5 (iii) of Annexure-IV of CRZ Notification, 2019 has the following provisions for fishermen communities and fishing villages. In the CRZ areas, the fishing villages, common properties of the fishermen communities, fishing jetties, ice plants, fish drying platforms or areas infrastructure facilities of fishing and local communities such as</p>

<p>Para 66. In fact, Final Frontier report of 2009 perused, considered and recorded the objections of the local fishing communities (Kolis) that in the name of slum rehabilitation or reconstruction of dilapidated structures, the houses of local communities were given the least priority. The prime land, especially the sea-facing properties, belonging to these communities were sold at exorbitant costs by the developers, while the redeveloped area earmarked for fisherfolk was small and on marginal lands. They requested the Committee to debar all projects of slum redevelopment in these lands, arguing that only projects which secured their ownership should be permitted. It is based on these arguments that the Final Frontier Report recommended the government to strongly consider making a special case for fishing villages (Koliwadadas) in Mumbai and frame specific provisions to cater to the needs and demands of Kolis and suggested to restrict SRA styled re-development of koliwadadas in Mumbai. It is because of this recommendation that the CRZ 2011 brought special protectionist provisions for Koliwadadas.</p>	<p>dispensaries, roads, schools, and the like, shall be indicated on the cadastral scale maps. States and Union territories shall prepare detailed plans for long term housing needs of coastal fisher communities in view of expansion and other needs, provisions of basic services including sanitation, safety, and disaster preparedness.</p> <p>In view of above, the concerns of the Applicant are unfounded.</p>
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Para 67. However, the 2019 Notification deletes the special consideration of koliwadadas and merely includes fisher folk areas in CRZ – II and completely disregards the reasons as to why such special distinction was made for fisher communities of Mumbai.

Challenge:

(i) The first challenge is the lack of consultation with the local communities. There also does not appear to be any good reasoning as to why public consultation was not undertaken while taking away such protectionist provisions. The Shailesh Nayak Committee, without consulting the communities residing in Koliwadadas, concludes that CRZ 2011 restricted the development of Koliwadadas and sought to declare the Koliwada areas as CRZ-II to bring in development on par with other parts of Mumbai and meet the economic aspirations of the society. The Shailesh Nayak Committee Report completely disregards the fact that it was only because the traditional communities of Mumbai demanded for Koliwadadas to be protected under CRZ-III and be treated differently from slum areas of Mumbai did the relevant protectionist provision was drafted in CRZ, 2011.



<p>(ii) Secondly, the cultural heritage of traditionally occupied villages of Koliwada will be wiped out and the fishermen from Koli community (who are the original inhabitants of Mumbai) will be displaced from their villages. Kolis are Mumbai's most ancient artisanal fishers and form an intrinsic part of the cultural heritage of the city. Koli community will get fmihermarginalised, who has faced the brunt of developmental pressures from time immemorial and has sacrificed much of the lands for the development of the city as it stands today. The role of fishing communities in ecological sustenance and ecosystem maintenance has not been taken very seriously.</p>	
<p>Para 68. In respect of the above the Applicant makes prayer (hh).</p>	<p>In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.</p>
<p>O. DILUTION OF SPECIAL PROTECTIONS GRANTED TO GREATER MUMBAI IN CRZ 2011.</p> <p>Para 69. The entire special regime for Mumbai has been severely diluted in CRZ 2019. This had been introduced to deal with the peculiar problems of the environmental issues relating to degradation of mangroves, pollution of creeks and coastal waters, discharge of</p>	<p>Reply to Challenge – paras 69, 70, 71 (i) & (ii):</p> <p>This issue has been deliberated in detail by Shailesh Nayak Committee and further in Ministry. After due deliberation with all stakeholders specific provisions for fishermen</p>



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untreated effluents and disposal of solid waste, provision of decent housing to the poor section of society and lack of suitable alternatives in the inter connected islands of Greater Mumbai, the municipal limits of Greater Mumbai were thereby given a special consideration in the 2011 Notification.

Para 70. CRZ 2011 laid special emphasis on Greater Mumbai on subject matters ranging from Construction of Roads, Solid Waste disposal Sites, Slum Rehabilitation Schemes, Redevelopment of Dilapidated, Cessed and Unsafe Buildings to opens spaces and parks, and Koliwadass in Greater Mumbai. The reason for such special provision was that Mumbai, being an island city, is the most populated city in India by density and therefore, while lacking enough space to cater to the demands and needs of its overtly populated citizens, general provisions that apply to coastal areas regarding development could not have been implemented in toto in Mumbai. Such special protections were made keeping in the mind the fact that environmental concerns relating to protection of mangroves, creeks, mudflats, coasts, Arabian Sea, Western Ghats, National Park, etc. has remained at the forefront of government policies.

communities and fishing villages (Koliwadass) and Mumbai has been duly incorporated in CRZ Notification 2019:

a) Special provision for Mumbai has been given at para 3.3 of CRZ Notification, 2019. The same is reproduced below.

“Following coastal areas shall be accorded special consideration for the purpose of protecting the critical coastal environment and difficulties faced by local communities: -

- CRZ falling within municipal limits of Greater Mumbai”.

b) The details of special provisions for Mumbai are given at para 10.3 which inter-alia deals with protection and preservation of 'green lung' and construction of sewage treatment plants in CRZ-I in exceptional circumstances.

c) Para 5 (iii) of Annexure-IV of CRZ Notification, 2019 has detailed provisions for the benefit of fishermen communities and fishing villages (Koliwadass).



Para 71. However, this entire section was deleted in the Draft Notification of 2018 and the CRZ 2019 except for two Regulations, namely the Regulation for the protection of open spaces, parks, gardens and playgrounds in CRZ areas and for the construction of Sewage Treatment plants in CRZ-I area.

Challenge:

(i) Dilution of specific governing provisions for Greater Mumbai on subject matters ranging from Construction of Roads, Solid Waste disposal Sites, Slum Rehabilitation Schemes, Redevelopment of Dilapidated, Cessed and Unsafe Buildings to opens spaces and parks, and Koliwadass in Greater Mumbai is arbitrary. Mumbai, was unique in the sense of its size; shape; population; population density; location; urbanization. Therefore, cognizant of this, special provisions were advisedly made. There has been no change in this on account of intervening developments. In fact, the need for special provisions has increased. The earlier protections were made keeping in mind the developmental pressure on the sensitive coastal ecology of the Mumbai and that no circumstances are reflected in the, Committee Reports that suggest otherwise. This change was

In view of above, it is humbly submitted that the alleged contention of the petitioner is based upon frivolous facts.



recommended to the disparity between 1967 DCR which was applicable to CRZ areas in Mumbai and the current DCR which was applicable in other areas of Mumbai. Shailesh Nayak Committee Report suggested a uniform DCR for Mumbai without having special consideration for sensitive areas like CRZ. The committee termed this practice of following the 1967 regulation as one that would 'inhibit development in the city' and "unrealistic and anachronistic". It also notes that the Government of Maharashtra has requested to provide uniform FSI/FAR for the city of Mumbai as per the prevailing Town and Country Planning Regulations for undertaking development of slum redevelopment schemes, redevelopment of dilapidated buildings, cessed and unsafe buildings in CRZ Areas. The BMC has also suggested that integrated planning should take place of the city with CRZ I and CRZ III areas. The Shailesh Nayak Committee, therefore proposed that redevelopment which was stopped in CRZ as per CRZ 2011, should not be stopped altogether and thereby sought to do away with the special dispensation given to Greater Mumbai.

(ii) It has been pointed out earlier that in



the special provisions for Mumbai allowances were made for slum rehabilitation and dilapidated buildings. These issues could therefore not be a reason to make a blanket change in the regime for Mumbai even in the cases of areas not covered by Slums or dilapidated buildings. The said deletion is therefore manifestly arbitrary. Moreover, this is aggravated, when the effect of other changes is also considered.	
Para 72. In respect of the above the Applicant makes prayer (ii).	In view of the above submissions, it is prayed that the Petition/OA of the Applicant may kindly be dismissed.
Para 73-76 states the grounds that has been already answered by the answering Respondent in the above paras.	
Para 77 deals with the limitation	
Para 78 deals with the Prayers.	

7. In addition to the Para-wise reply above, the Respondent Ministry begs to submit the details of two important matters which are pending before Hon'ble NGT **wherein direction has been passed to expedite the updation of the CZMP as per CRZ Notification, 2019.** The details are as under:

- **O.A. No. 04 of 2013 with Appeal No. 18 of 2017 (NGT, SZ) titled C.H. Balamohan vs. Union of India &Ors**

The Hon'ble, NGT (SZ) *vide* order dated 11/04/2022 in O.A. No. 04 of 2013 with Appeal No. 18 of 2017 titled C.H. Balamohan vs. Union of India &Ors., had directed as follows:

“83. Accordingly, we direct Chief Secretaries of the Coastal State/UT to finalise the CZMP and get them approved by MoEF within 2 months. The approved CZMP shall contain the parameters as listed in the CRZ 2019 Notification including high, medium and low erosion stretches for such erosion prone areas...”

A true copy of the order dated 11/04/2022 is annexed herewith and marked as **Annexure-R1-6.**

- **O.A. No. 249 of 2023 in re: News item published in Newspaper The Hindu dated 19.03.2023 titled “India’s Sinking Island with O.A. No. 795 of 2023 titled News item titled, “Third of India’s coastline vulnerable to erosion- here are the worst-hit states appearing in Indian Express dated 06/12/2023**

It is humbly submitted that in O.A. No. 249 of 2023- In re: News item published in Newspaper The Hindu dated 19.03.2023 titled “India’s Sinking Island” wherein the Hon’ble National Green Tribunal, Principal Bench has taken suo moto cognizance. Moreover, the Hon’ble NGT, PB in **O.A. No. 795 of 2023** vide order dated 16/01/2024 has taken suo moto cognizance of newspaper report published in Indian Express dated 06.12.2023 with the title "Third of India’s coastline vulnerable to erosion - here are the worst hit states". Report says that various beaches in Coastal areas/States like Maharashtra, Tamil Nadu, Kerala, Karnataka etc. are vulnerable to erosion and are getting damaged on account of lack of proper management due to non-finalization of Coastal Regulatory provisions i.e. Coastal Zone Management Plan. Vide order dated 16/01/2024, **O.A. No 795 of 2023 has been tagged along with O.A. No. 249 of 2023.**

The Hon’ble Tribunal in the aforesaid matters vide order dated 08/01/2024 has directed that, “ *...Since, in spite of the direction of NCZMA, the CZMP/ICRZP have not formulated the plan. Hence respondent no. 14 is required to ensure that the plan is prepared by each Coastal Management Authority and Union Territory Coastal Management Authority expeditiously within a time bound period...*” Moreover, as per the last order dated 13/03/2024, the Hon’ble Tribunal has directed the Chief Secretaries/ LGs of Coastal States/Union



Territories under consideration to file the affidavit before the Tribunal within six weeks disclosing the outer limit within which the CZMP/ICRZP as per CRZ Notification, 2019 will be finally be formulated/revised and submitted to the MoEF&CC, failing which the Concerned Chief Secretary will appear virtually on the next date of hearing and explain the reason for non- submission of such an affidavit.

A true copy of the order dated 08/01/2024 is annexed herewith and marked as **Annexure-R1-7.**

8. It is humbly submitted that strict directions have been passed by the Hon'ble Tribunals to expedite the updation of the CZMP as per CRZ Notification, 2019. It is humbly submitted that as on date, CZMP as per CRZ Notification, 2019 have been approved for the State of **Odisha, Karnataka and Maharashtra.** The ICRZP as per ICRZ Notification, 2019 has been approved for **Great Nicobar Island and Little Andaman Island.** That, for the rest of the Coastal States, CZMP/ICRZP as per CRZ Notification, 2011 and IPZ Notification, 2011 are presently applicable.

9. It is humbly submitted that in compliance of the above, this Ministry has been taking all necessary measures to expedite the CZMP updation as per CRZ Notification, 2019. Further, it may also be noted that status of preparation of CZMPs as per CRZ Notification, 2019 for rest of the coastal states has progressed significantly in almost all coastal states / UTs and the same is being actively monitored by this Ministry. As per the information available with this Ministry, status of the CZMP/ICRZP/IIMP in the country is being submitted herein for kind information of this Hon'ble Tribunal:

Sl. No.	State/UT	Status of CZMP/ICRZP/IIMP as per CRZ / ICRZ Notification 2019
1.	Andhra Pradesh (13 Districts)	<ul style="list-style-type: none"> Draft CZMP maps have been submitted to APCZMA: January, 2023. Multiple meeting with Stakeholder dept. – during – January 2023 to January 2024

A handwritten signature in black ink is written over a pink, curved stamp that contains the text 'GOVT.' in a stylized font.

		<ul style="list-style-type: none"> Stakeholder data incorporated in the draft CZMPs and submitted to APCZMA on 9th April 2024 for publishing in website and for public hearing/consultation.
2.	A & N Islands	<ul style="list-style-type: none"> 2 ICRZP have been completed (Great Nicobar Island and Little Andaman Island) 12 ICRZP under process, of which 8 ICRZP have been Presented before TSC on 01/03/2024 and Additional information sought from ANZMA 16 IIMP have been under preparation, of which 3 IIMP have been presented before TSC on 01/03/2024 and Additional information sought from ANZMA. Public hearings for two IIMP have been published in website.
3.	Daman & Diu (2 Districts)	<ul style="list-style-type: none"> Public hearing to be completed.
4.	Goa (2 districts)	<ul style="list-style-type: none"> Draft CZMP's under preparation by NCESS
5.	Gujarat (16 Districts)	<ul style="list-style-type: none"> Public hearing completed in all coastal districts except Kachchh. The draft plan will be presented before the next TSC.
6.	Karnataka (3 Districts)	<ul style="list-style-type: none"> CZMP as per CRZ Notification 2019 completed and approved.



7.	Kerala (10 Districts)	<ul style="list-style-type: none"> • Draft CZMPs presented before 17th TSC held on 01/03/2024. • Based on Public hearing suggestion and comments, TSC sought report from NCSCM, KCZMA and NCESS. • The CZMP is likely to be submitted to NCZMA for approval shortly.
8.	Lakshadweep (14 Islands)	<ul style="list-style-type: none"> • Draft IIMP maps of three Islands have been submitted to UTLA. Stakeholder data is awaited.
9.	Maharashtra (7 Districts)	<ul style="list-style-type: none"> • CZMP as per CRZ Notification 2019 completed and approved.
10.	Odisha (7 Districts)	<ul style="list-style-type: none"> • CZMP as per CRZ Notification 2019 completed and approved.
11.	Puducherry (4 Districts)	<ul style="list-style-type: none"> • Draft CZMPs submitted in September, 2022. • Fisheries related infrastructure incorporated in the draft CZMPs • Tamil version submitted in February 2024 to be published in website and for public hearing/consultation

12.	Tamil Nadu (14 Districts)	<ul style="list-style-type: none"> • Draft CZMPs published in website in October 2022 • Tamil version submitted: July 2023 as per Madras High court direction As per NGT direction, meeting with ACS and Fisheries commissioner –decided to incorporate detailed information about fisheries related infrastructure in the draft CZMPs: task completed. • NCSCM to submit final revised draft maps in English and Tamil language on 30th April 2024 to published in website and for public hearing/consultation.
13.	West Bengal (3 Districts)	• Draft CZMP's under preparation by IESWM

10. In view of the above, it is respectfully submitted that the respondent Ministry has issued CRZ Notification, 2019 following all due procedure as laid down in law and with the objective of meeting the aspirations of coastal communities besides ensuring welfare of poor and vulnerable populations that would result in greater economic growth while conserving the coastal eco-systems, thereby creating greater livelihood opportunities and better quality of life of coastal communities.

11. That, based on representations received from the various coastal state Governments, Union Territory administrations and other stakeholders in the need to undertake a comprehensive revision of the earlier notification of 2011, Shailesh Nayak Committee had examined the various issues and concerns of Coastal States/UTs and other stakeholders before recommending appropriate changes in the CRZ Notification, 2011. The recommendations were further



examined in consultation with Members of Parliament of Coastal States and Union Territories besides other concerned Ministries of Government of India and a draft notification viz. CRZ Notification, 2018 in supersession of CRZ Notification, 2011 was issued in April, 2018 for inviting comments from public at large. A number of suggestions and comments (appx. 3830) were received by the Central Government. The comments/ suggestions have been examined and considered. Furthermore, Inter-Ministerial consultations were also held and inputs from all such consultations have been taken into account while framing the final Notification. Thus, based on overall imperative of sustainable development of coastal areas and need for conserving the coastal environment and upon vetting by the Ministry of Law and Justice, the Union Cabinet has approved the new Coastal Regulation Zone Notification on 31/12/2018 and finally issued *vide* G.S.R 37(E), dated 18/01/2019.

12. That, as enumerated above, CRZ/ ICRZ Notification 2019 is already applicable in three major coastal states namely Maharashtra, Odisha and Karnataka and in two islands namely Great Nicobar Island and Little Andaman Island. Further, remaining coastal states/ UTs have also made significant progress towards finalization of CZMP as per CRZ/ICRZ Notification 2019 as may be seen in the table at para 9.

13. In view of above submissions, this answering respondent, therefore humbly prays that the instant Original Application may kindly be dismissed and the Hon'ble Court may pass such order as may deem fit in the interest of justice for filing such unnecessary, malafide and frivolous applications and wasting the precious time of this Hon'ble Court.

14. It is respectfully also submitted that the answering respondent without prejudice reserves his right to file an additional affidavit at a later stage, if so necessary.

DEPONENT

(ई. थिरुनायुक्करसु)

(E. Thirunayukarasu)

वैज्ञानिक
पर्यावरण, यम
Ministry of Environment, Forest and Climate Change
क्षेत्रीय कार्यालय
Regional Office

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परिवर्तन मंत्रालय
Climate Change
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K.S.

VERIFICATION

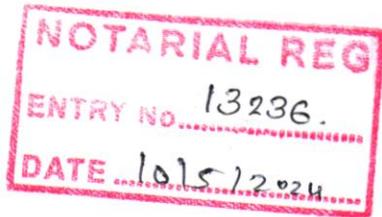
I, the above named Deponent, do hereby verify that the contents of the above affidavit are true and correct to my knowledge as per the records of the answering respondents. No part of it is false and nothing material has been concealed there from.

DEPONENT

(ई. थिरुनावुक्करसु)
(E. Thirunavukkarasu)

वैज्ञानिक 'ई' / Scientist 'E'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, नागपुर-४४०००९
Regional Office, Nagpur-440001



SWORN BEFORE ME ON THIS 10
DAY OF May 20 24 AT NAGPUR BY
SHRI / SMT./ Ku. E. Thirunavukkarasu
R/o NAGPUR WHO HAS BEEN IDENTIFIED BY
SHRI / SMT. Arundhati Ray
ADVOCATE, NAGPUR.

NOTARY
GOVT. OF INDIA
Nagpur (M.S.) INDIA



F.No.12/1/2019-IA.III (E-122245)
Government of India
Ministry of Environment, Forest and Climate Change
IA.III Section (CRZ)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi-110003

Dated: 26th October, 2021

OFFICE MEMORANDUM

Subject: Amendment in guidelines for Updation of Coastal Zone Management Plan (CZMPs) prepared as per CRZ Notification, 2011 to align it with CRZ Notification, 2019 - regarding.

This is in continuation to this Ministry's Office Memorandum of even no., dated 26/06/2019, wherein the guidelines for updation of Coastal Zone Management Plan's (CZMPs) prepared as per CRZ Notification, 2011 to align it with CRZ Notification, 2019, was issued.

2. Based on recommendations of National Coastal Zone Management Authority (NCZMA) in its 43rd meeting held on 16/08/2021, the paragraph 5 of Annexure 1 shall include Eco-Sensitive Zone (ESZ) amongst other Ecologically sensitive areas to be demarcated in the CZMP, as per CRZ Notification, 2019 and read as under:

5. ECOLOGICALLY SENSITIVE AREAS / COASTAL LANDUSE

- 5.1. *Mangroves*
- 5.2. *Coral Reefs*
- 5.3. *Reserve Forests*
- 5.4. *Sand Dunes*
- 5.5. *Salt marsh*
- 5.6. *Nesting Ground of Birds*
- 5.7. *Archaeologically important and Heritage Sites*
- 5.8. *Seagrass*
- 5.9. *Mud flats*
- 5.10. *Turtle Nesting Grounds*
- 5.11. *Inter-Tidal Zone*

5.12. *Salt pan / Aquaculture ponds*

5.13 *Eco-Sensitive Zone (ESZ)*

3. This issues with approval of the Competent Authority.



(Dr. H. Kharkwal)
Additional Director (CRZ)

To,

1. The Secretary (Environment & Forests) of Coastal States (Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Odisha) & Administrators of Puducherry & Daman & Diu.
2. The Member Secretary of Coastal States (Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Odisha) & Administrators of Puducherry & Daman & Diu.
3. The Director, National Centre for Sustainable Coastal Management (NCSCM), Chennai, Tamil Nadu.
4. The Director, Space Application Centre, Ahmedabad
5. The Director, Centre for Earth Sciences Studies, Thiruvananthapuram,
6. The Director, Institute for Remote Sensing, Anna University, Chennai, Tamil Nadu.
7. The Director, Institute for Wetland Management and Ecological Designs, Kolkata
8. The Director, National Institute of Oceanography (NIO), Panjim, Goa
9. The Director, National Institute of Ocean Technology (NIOT), Chennai, Tamil Nadu.
10. The Director, Naval Hydrographer's Office, Uttarakhand.

Copy for information to:

- a. PS to Minister for Environment, Forest and Climate Change.
- b. PS to MoS (EF&CC)
- c. PPS to Secretary (EF&CC)
- d. PPS to AS (RA)
- e. PPS to JS(SKB)
- f. Website of MoEFCC
- g. Guard file.



(Dr. H. Kharkwal)
Additional Director (CRZ)

Press Information Bureau
Government of India
Prime Minister's Office

30-June-2008 14:45 IST

PM releases National Action Plan on Climate Change

Prime Minister Dr. Manmohan Singh today released India's National Action Plan on Climate Change, in a brief ceremony in New Delhi today.

The National Action Plan has been prepared under the guidance and direction of Prime Minister's Council on Climate Change.

Members of Prime Minister's Council on Climate Change, senior members of the Union Cabinet, representatives of civil society and senior officials of Government, were present on the occasion.

Prime Minister made a brief speech on the occasion. He said that the release of the National Action Plan reflected the importance the Government attaches to mobilizing our national energies to meet the challenge of climate change.

The National Action Plan focuses attention of 8 priorities National Missions. These are:

1. Solar Energy
2. Enhanced Energy Efficiency
3. Sustainable Habitat
4. Conserving Water
5. Sustaining the Himalayan Ecosystem
6. A "Green India"
7. Sustainable agriculture
8. Strategic Knowledge Platform for Climate Change

The National Mission of Solar Energy, occupies a pre-eminent place, whose success, Prime Minister said, has the potential of transforming the face of India.

Prime Minister emphasized the global dimension of the challenge of climate change, which demands a global and cooperative effort on the basis of the principle of equity. India, he said, was ready to play its role as a

responsible member of the international community and to make its own contribution. He added that India believed that every citizen of this planet should have an equal share of the planetary atmospheric space and therefore, long-term convergence of per capita GHG emissions was the only equitable basis for a global agreement to tackle climate change. In this context, the Prime Minister reaffirmed India's pledge that as it pursued sustainable development, its per capita GHG emissions would not exceed the per capita GHG emissions of developed countries, despite our developmental imperatives.

Prime Minister clarified that the National Action Plan would evolve and change in the light of changing circumstances and therefore invited broader interaction with civil society as a means to further improve the various elements of the Plan.

In his concluding remarks the Prime Minister recalled Mahatma Gandhi's sage advice : "The earth has enough resources to meet the needs of people, but will never have enough to serve their greed".

AD/SH/LV

F.No. 12-1/2019-IA III
Government of India
Ministry of Environment, Forest and Climate Change
(IA. III Division)

Indira Paryavaran Bhawan,
 Jorbagh Road, New Delhi - 3

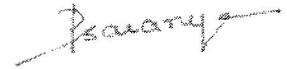
Dated: 26th June, 2019

OFFICE MEMORANDAM

Sub: Guidelines for Updation of Coastal Zone Management Plan (CZMP) prepared as per CRZ Notification, 2011 to align it with CRZ Notification, 2019 - reg.

The CRZ Notification, 2011, has been superseded by the CRZ Notification issued vide Notification No. G.S.R. 37(E), dated the 18th January, 2019 (herein referred to as the CRZ Notification, 2019). In accordance with para 6 of the CRZ Notification, 2019, the coastal State Governments and Union territory Administrations are required to revise or update the Coastal Zone Management Plans (CZMPs) of their respective state or UT, as per the provisions contained in the CRZ Notification, 2019. In this regard, I am directed to enclose herewith the guidelines for facilitating the state government/UT administrations in updation of the CZMPs.

2. This issues with the approval of Competent authority.



(Dr. Saranya P)
 Deputy Director (CRZ)

To,

- i. The Secretary (Environment & Forests) of Coastal States (Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Odisha) & Administrators of Puducherry & Daman & Diu.
- ii. The Member Secretary of Coastal States (Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Odisha) & Administrators of Puducherry & Daman & Diu.
- iii. The Director, National Centre for Sustainable Coastal Management (NCSCM), Chennai
- iv. The Director, Space Application Centre, Ahmedabad
- v. The Director, Centre for Earth Sciences Studies, Thiruvananthapuram,
- vi. The Director, Institute for Remote Sensing, Anna University, Chennai
- vii. The Director, Institute for Wetland Management and Ecological Designs, Kolkatta
- viii. The Director, National Institute of Oceanography (NIO), Panjim, Goa
- ix. The Director, National Institute of Ocean Technology (NIOT), Chennai
- x. The Director, Naval Hydrographer's Office, Dehradun

GUIDELINES FOR UPDATION OF COASTAL ZONE MANAGEMENT PLAN (CZMP) PREPARED AS PER CRZ NOTIFICATION, 2011 TO ALIGN IT WITH CRZ NOTIFICATION, 2019

1. BACKGROUND

The Government of India had declared certain coastal stretches of the country as Coastal Regulation Zone (CRZ) vide Notification No. S.O.19 (E), dated the 6th January, 2011 (referred to as the CRZ Notification, 2011). As per para 5 of the aforesaid CRZ Notification, the coastal State Governments and Union territory (UT) administrations were entrusted with the preparation of Coastal Zone Management Plans (CZMPs) for their respective states/ UTs through the agencies authorized by the Ministry of Environment, Forest and Climate Change (MoEFCC). The CZMPs thus prepared have been approved by the Central Government in the Ministry of Environment, Forest and Climate Change and are currently followed for appraisal and subsequent approvals of developmental projects attracting the provisions of CRZ.

The CRZ Notification, 2011, has been superseded by the CRZ Notification issued vide Notification No. G.S.R. 37(E), dated the 18th January, 2019 (herein referred to as the CRZ Notification, 2019). In accordance with para 6 of the CRZ Notification, 2019, the coastal State Governments and Union territory Administrations are entrusted with revision or updation of Coastal Zone Management Plans (CZMPs) of their respective state or UT, as per the provisions contained in the CRZ Notification, 2019. The guidelines given hereunder have therefore been issued for facilitating the state government/UT administrations in updation of the CZMPs.

2. GENERAL GUIDELINES

- a) All coastal States and Union territory administrations shall update their respective CZMPs (which was prepared based on the CRZ Notification 2011), as per the provisions contained in the CRZ Notification, 2019, and after its updation and finalization following due procedures shall submit to the MoEFCC for its final approval at the earliest.
- b) The CZMP shall be updated or revised by any of the authorised agencies identified by the MoEFCC, using the demarcation of the High Tide Line, LTL, ESA, CVCA as carried out by NCSCM, Chennai and Hazard line as demarcated by the Survey of India.

- c) The coastal states and union territories shall prepare draft CZMP on 1:25,000 scale identifying and classifying the CRZ areas within their respective territories in accordance with the guidelines given in **Annexure-IV** to the CRZ notification issued vide Notification No. G.S.R. 37(E), dated the 18th January, 2019 and these guidelines.

3. STEPS FOR PREPARATION OF CZMP

a) **Base data: HTL, LTL, ESAs, Hazard line, CVCA & CZMP**

High Tide Line (HTL), Low Tide Line (LTL), Ecologically Sensitive Areas (ESAs), and Critically Vulnerable Coastal Areas (CVCAs) demarcated by the National Centre for Sustainable Coastal Management (NCSCM), Chennai, and the 'Hazard line' as demarcated by the Survey of India (Sol), shall be used by the states/UTs in preparation/updation the CZMPs, as required under the provisions of the CRZ Notification, 2019. The CZMP database (shapefiles etc.) prepared as per the CRZ Notification, 2011 which have been scrutinized by the Technical Scrutiny Committee, finalized by the National Centre for Sustainable Coastal Management (NCSCM) and approved by the MoEFCC, shall be used as the base for revision or updation of the CZMP, as per the provisions contained in the CRZ Notification, 2019.

b) **Data to be provided by the States/UTs to the authorized agencies**

- i) Database of the CZMPs prepared and approved based on CRZ notification 2011, including HTL, LTL, ESAs, CVCA, Hazard line and coastal landuse, along with hard copies/pdf of approved CZMP and landuse maps.
- ii) Details of village-wise survey numbers pertaining to government land, in the format (bearing Taluk name, Village name, Survey No./Part Survey No. etc.) for deciding/enabling ease in demarcation of buffers around mangrove areas.
- iii) Digitized geo-referenced Census village boundary maps in shapefile format as per 2011 census base and the corresponding 2011 census (population) data of villages in digital/soft copy/xls format for demarcation of CRZ-IIIA and CRZ-IIIB areas.
- iv) Stakeholder data such as Municipal maps, Notifications for legally designated urban areas etc., for new CRZ-II areas, fishing Zones in the water bodies and fishing village boundaries, breeding and

spawning grounds of fish and the like, for updating the CZMP, as applicable.

- v) Infrastructure facilities such as roads, jetty, port, fish landing centers, etc.
- vi) Existing authorised structures on the seaward side and features like cyclone shelters, rain shelters, helipads and other infrastructure including road network for the purpose of rescue and relief operations during cyclones, storms, tsunamis and the like.

c) **CRZ buffers**

The CRZ limits will be revised or updated as per provisions contained in the CRZ notification, 2019, as follows:

No Development Zone (NDZ)/Buffers of tidally influenced waterbodies (water bodies influenced by tidal effects from sea in the bays, estuaries, rivers, creeks, backwaters, lagoons, ponds that are connected to the sea)	50 meters or width of the creek, whichever is less.
NDZ for CRZ-IIIA areas (sea front)	50 m
NDZ for CRZ-IIIB areas (sea front)	200 m
NDZ for inland islands in the coastal backwaters and islands along the mainland coast	20 m

d) **Processing of Census data**

All census maps and the corresponding census data of 2011 of all rural or urban areas demarcated in the CZMPs prepared as per CRZ Notification 2011, will have to be analyzed for computing the corresponding density of population for each village.

All rural or urban areas with population more than 2161 per sq. km will be classified as CRZ-IIIA and the remaining CRZ-III areas will be classified as CRZ-IIIB. After demarcation of CRZ-IIIA and CRZ-IIIB areas, the Census maps shall be taken out of the CZMP and will be kept in the database separately. Only Cadastral maps with Survey No. information shall be superimposed to the CZMP. CRZ-II areas demarcated in the CZMPs prepared as per CRZ Notification 2011, need to be retained as such, without any change. However, new CRZ-II areas, if any, may be added.

e) **CRZ Classifications**

Updating of CRZ classifications such as CRZ-I, CRZ-II, CRZ-IIIA, CRZ-IIIB and CRZ-IV shall be done as per the guidelines given **Annexure-IV** to the CRZ notification, 2019.

The water areas of CRZ-IV shall be clearly demarcated as to whether the water body is sea, lagoon, backwater, creek, bay, and estuary etc. For such classification of the water bodies, the terminology used by Naval Hydrographic Office shall be relied upon.

The fishing Zones in the water bodies and the fish breeding areas shall be clearly marked.

In CVCAs, the land use maps shall be superimposed on the CZMP clearly demarcating the CRZ-I, II, III, IV.

The existing authorised developments on the seaward side shall be clearly demarcated.

The features like cyclone shelters, rain shelters, helipads and other infrastructure including road network shall be clearly indicated on the CZMP for the purpose of rescue and relief operations during cyclones, storms, tsunami and the like.

f) **CRZ areas falling within municipal limits of Greater Mumbai**

In order to protect and preserve the 'green lung' of the Greater Mumbai area, all open spaces, parks, gardens, playgrounds indicated in development plans within CRZ-II areas, shall be categorised as 'No Development Zone' and the same shall be accordingly demarcated.

g) **Public consultation of draft CZMP updated or revised based on CRZ Notification, 2019**

(i) The draft CZMP so updated or revised shall be published in the websites of the concerned CZMAs of the states/UTs and also given wide publicity soliciting suggestions and objections.

(ii) The draft CZMP shall be submitted by the State Government or Union territory to the concerned Coastal Zone Management Authority for appraisal, including appropriate consultations, and recommendations thereof. Public hearing on the draft CZMP shall be held at district level by the concerned CZMA, as stipulated in para 6 (i) of **Annexure-IV** of the CRZ Notification, 2019.

(iii) Based on the suggestions and objections received, the draft updated CZMPs shall be finalised and submitted by the state Governments/UT administrations for final approval of MoEFCC.

h) **Technical Scrutiny Committee**

The updated CZMP prepared as per CRZ Notification, 2019 shall be submitted for scrutiny by the Technical Scrutiny Committee constituted by the National Centre for Sustainable Coastal Management (NCSCM), Chennai. The Technical Scrutiny Committee shall make its recommendations to the NCZMA for an appropriate decision.

i) **CZMP Report**

A CZMP report will be prepared and in the format given in **Annex-1**, enclosed to these guidelines.

j) **CZMP maps and Coastal landuse maps**

CZMP maps and Coastal landuse maps will be prepared as per the instructions/check-list issued to all the authorized agencies/States/ UTs by the Technical Scrutiny Committee at NCSCM, Chennai, during the scrutiny of CZMPs prepared as per CRZ Notification 2011. The check-list is enclosed to these guidelines as **Annex-2**.

k) **Approval of CZMP:**

The state Governments or Union territory administrations shall submit the draft updated Coastal Zone Management Plan and the draft CZMP, finalized at the State or UT level along with a request for its final approval to MoEFCC. The same shall be referred by MoEFCC for a technical scrutiny by the Committee constituted for the task by NCSCM, Chennai. On receipt of the recommendation of the Technical Scrutiny, it shall be placed for consideration and decision of the NCZMA.

(iii) The approved CZMP shall be thereafter put up on the website of the concerned State or Union Territory Coastal Zone Management Authority and hard copy shall be made available in the offices of the Panchayat and District Collector. It may also be uploaded in the website of the MoEFCC.

l) **Environment management plan of ESAs**

A detailed environment management plan for ecologically sensitive areas shall be formulated within 6 months of the approval of CZMP prepared based on CRZ Notifications 2019 by the states and Union territories, as per guidelines given in **Annexure-1** of CRZ Notification 2019.

m) **Critically Vulnerable Coastal Areas (CVCAs)**

For all the CVCAs mentioned in sub-paragraph 3.1 of the CRZ Notification 2019, Integrated Management Plans (IMPs) shall be prepared, which shall, inter alia, keep in view the conservation and management of mangroves, needs of local communities, such as dispensaries, schools, public rain shelter, community toilets, bridges, roads, jetties, water supply, drainage, sewerage and the impact of sea level rise and other natural disasters and the IMPs will be prepared in line with the guidelines for preparation of Coastal Zone Management Plan.

4. LOCAL LEVEL CZMP

Local level CZM Maps shall be prepared for the use of local bodies and other agencies to facilitate implementation of the Coastal Zone Management Plans. Cadastral (village) maps in 1:3960 or the nearest scale, as available with revenue authorities shall be used as the base maps.

HTL, LTL, other CRZ regulatory lines and the Hazard line shall be demarcated in the cadastral maps and classifications shall be transferred into the local level CZMP.

In the CRZ areas, the fishing villages, common properties of the fishermen communities, fishing jetties, ice plants, fish drying platforms or areas infrastructure facilities of fishing and local communities such as dispensaries, roads, schools, and the like, shall be indicated on the cadastral scale maps. States and Union territories shall prepare detailed plans for long term housing

needs of coastal fisher communities in view of expansion and other needs, provisions of basic services including sanitation, safety and disaster preparedness.

5. TIME LINE FOR UPDATION OR REVISION OF CZMP

The State Governments / UT administration shall take up the updation or revision of CZMPs approved as per CRZ Notification, 2011, to align with the CRZ Notification, 2019 at an early date and not later than six months from the date of issue of this guidelines.

6. REVISION OF COASTAL ZONE MANAGEMENT PLANS

(i) Whenever there is a doubt or a likely disparity noticed in the CZMP, the concerned State or Union territory Coastal Zone Management Authority shall refer the matter to MoEFCC for a modification/rectification of the CZMP along with valid reasons for the same. The MoEFCC shall refer the matter to the National Centre for Sustainable Coastal Management (NCSCM) for verification based on latest satellite imagery and ground truthing for possible modification/rectification in the CZMP.

(ii) The rectified map shall be submitted to Ministry of Environment, Forest and Climate Change for consideration of approval.

Template for CZMP REPORT

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Annexure-I: Brief note annexed to draft CZMP

Annexure-II: Field photographs

Annexure-III: Village and survey number wise CRZ categories

Annexure-IV: Public consultation issues and their resolution

Annexure-V: Data sources (list of urban area, panchayat, fishing villages ward etc.)

CHECK-LIST FOR PREPARATION OF CZMP MAPS AND COASTAL LANDUSE MAPS

1. Two sets of maps shall to be provided viz:
 - (i) CZMP map depicting different CRZ categories; and
 - (ii) Coastal land use maps (i.e. land use map used to define CZMP) categories along with the year in which it was prepared.
2. Maps of Ecologically Sensitive Areas (ESAs) provided by NCSCM are to be integrated with the coastal land use map.
3. The title of the CZMP maps should read as 'Coastal Zone Management Plan (CZMP)'.
4. The coastal land use and CZMP maps shall be prepared according to the "Manual on Demarcation of High Tide Line and Low Tide Line and Preparation of CZMP of the Coast of India".
5. The land use classes up to level II classification such as Habitation/settlement, Agriculture, open areas etc., as given in the 'HTL Manual', will also be depicted in the coastal land use map along with the ESAs.
6. Color codes and symbols standardized by NCSCM, Chennai shall be provided to all authorized agencies for finalizing the CZMPs.
7. Indexing for all the states shall be standardized e.g. South to North, Left to Right etc.
8. Boundary of CRZ category should be continuous for seaside and creek side. It should be single/continuous line to clearly indicate the regulation boundary.
9. If legally designated urban areas other than municipality area are included in CRZ-II category, details in the form of supporting Government notification/act/rules are to be provided in the CZMP report.
10. Classification accuracy and geometric accuracy of the coastal land use maps must be quantitatively ascertained based on standard protocol.
11. Suggestions/recommendations received during the public consultation and action taken should be attached to the report as *annexure*. These suggestions/objections are to be classified into various categories such

- as those pertaining to HTL/ESA/CRZ classification/general complaints etc.
12. Only the boundary of the CVCA resource areas demarcated by NCSCM need to be provided in the CZMP.
 13. The Integrated Management Plan (IMP) will be prepared separately by NCSCM in consonance with the state government and local community concerned in conserving the resource areas. IMPs may be prepared within a time frame of 6 months from the date of approval of CZMP. The IMP shall be submitted for approval of MoEFCC for implementation.
 14. The role of community in resource management in the CVCA shall be within the governing laws of the State/Central Government.
 15. All layers used in the preparation of draft CZMP maps shall be given to NCSCM as soft copy (shape file format) for overlaying Hazard Line and boundaries of CVCA (if applicable).
 16. Sand dunes falling outside CRZ boundary should be shown in the land use map.
 17. CVCA falling outside CRZ boundary should be shown in the land use map.
 18. Edges of CZMP and land use maps of all states/UTs should be adjusted with those of the neighboring states/UTs.
 19. Ecological Sensitive Zones (ESZ) around the Marine National parks notified by the Government should be incorporated in the CZMP.

Item Nos. 3 & 4

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL
SPECIAL BENCH**

(By Video Conferencing)

Original Application No. 04/2013(SZ)

WITH

Appeal No.18/2017(SZ)

C. H. Balamohan

Applicant

Versus

Union of India and Ors.

Respondent(s)

Date of hearing: 11.04.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MS. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER
HON'BLE DR. SATYAGOPAL KORLAPATI, EXPERT MEMBER
HON'BLE PROF. A SENTHIL VEL, EXPERT MEMBER**

O.A. No. 04/2013(SZ)

For Applicant(s): Mr. A. Yogeshwaran, Advocate

For Respondent(s): Mr. G.M. Syed Nurullah Sheriff, Advocate for R1 & R5.
Dr. D. Shanmuganathan, Advocate for R6 to R8.
Mr. V. Balamurugan and Mr. Alex, Advocates for R9, R10, R12,
R20.
M/s. Suvitha, Advocate for R13.
Mrs. Madhuri Donti Reddy, Advocate for R16.
Mrs. V.K. Rema Smrithi, Advocate for R17.

Appeal No. 18/2017(SZ)

For Appellant(s): Mr. A. Yogeshwaran, Advocate

For Respondent(s): Mr. G.M. Syed Nurullah Sheriff, Advocate for R1 & R2.
Dr. D. Shanmuganathan, Advocate for R3.

ORDER

1. This order will deal with O.A. No. 04/2013(SZ) and Appeal No. 18/2017(SZ) as the both matters involve common issue of protection of stretches of coastal line affected by the human induced erosion caused by hard structures.

Introductory

2. O.A. No. 04/2013(SZ) was filed on 17.01.2013 raising the grievance of destruction of Puducherry and Tamil Nadu Coastal Environment due to construction of hard structures causing continuous erosion of the coast. It is submitted that not only the stretch in question but most parts of Indian Coastline - both on the East and West Coasts are under the influence of the Littoral Drift.

3. Appeal No. 18/2017(SZ) has been preferred against CRZ Clearance dated 06.10.2016 granted by the SEIAA, Tamil Nadu for proposed construction of series of 19 Groynes from Ennore to Ernavoorkuppam in Madhavaram Tuluk of Tiruvallur District, Tamil Nadu, by the Public Works Department (WRD). **The clearance has been granted subject to orders of this Tribunal in OA04/2013.** The said appeal was filed on 28.2.2017 and was admitted for consideration on 10.03.2017. To appreciate the issue involve, we may refer to some of the averments in the O.A.

Main contentions of the Applicant/Appellant

4. According to the applicant there is large scale human induced erosion and destruction. The Littoral Drift varies from one coastal compartment (or sediment cell) to another. Within each of these coastal compartments, the undisturbed coastal environment and habitat is usually in a state of equilibrium. For such a state of equilibrium to exist within a coastal compartment, the "sedimentary budget" within a compartment needs to be maintained. The sedimentary budget is something that has been arrived at and is determined by the prevailing natural phenomena along a particular coast. Just like the water level in

a river is maintained and determined by the "water budget" of its catchment area, similarly the "sediment budget" of the "river of sand" along the coast is determined by the related factors within its sediment cell.

5. When the "sedimentary budget" within a coastal compartment is disturbed and upset, i.e. when the natural movement of sand is disturbed and interrupted for example by man-made coastal structures, a cascading effect takes place along the shores of a given sediment cell. When a coastal structure is erected in the path of the freely moving sand along the coast, the structures prevent the natural flow of sand in the same manner as a dam across the path of river interrupts the flow of water. In such an instance one part of the coast gets an excess of sand and the other side on the down-drift is starved of sediment. The side that is starved of sediment starts and keeps eroding as long as fresh input of sand is not provided.

6. Because coastal compartments and sediment cells are large, often larger than artificial boundaries such as politically determined state boundaries, one sediment cell may overlap two neighboring states. This is particularly true along the East coast of India, where for instance stretches of coastline of the States of Tamil Nadu and Puducherry are part of the same coastal compartment and sediment cell. This is particularly relevant in the case of Puducherry as its territory is fragmented and surrounded by the territories of Tamil Nadu. Thus, if the sediment budget within a coastal compartment that is shared by two states is upset, the impact of such interference will be felt across states.

7. The environmental destruction caused by the construction of hard structures on the coastline which negatively affect the coastal

processes, the environment and the communities is a problem that is not confined to either the Union Territory of Puducherry, or to the State of Tamil Nadu. Rather, it is a situation in which the negligence and/or mismanagement of one government causes destruction both within its own jurisdiction and within the neighboring jurisdiction. Because **the damaging effects of these hard structures transcend state and union territory boundaries**, responsibility for preventing such damage rests equally with the Union Government of India, as well as with the governments of the Union Territory of Puducherry and Tamil Nadu.

8. The Puducherry Region of the Union Territory of Puducherry and large parts of the Tamil Nadu coastline, are situated on the east coast of India which has a sandy coastline and is therefore vulnerable to human-induced change and is thus ecologically sensitive and fragile. The coastal geomorphology and related ecosystems play a large and vital role in the economic development of the region, providing a large number of functions and services, from sustaining ecology, traditional fishing communities to attracting visitors to Puducherry's tourism industry. The severe and rapidly worsening coastal erosion is damaging the subsistence based, sustainable and lucrative sectors of the local economy making the affected region increasingly ecologically, socially and economically vulnerable.

9. Over the past two decades, Puducherry has suffered large scale coastal erosion induced by imprudent, ad hoc and unscientific construction of hard structures on the coast which have a constant, negative impact which is felt and aggravated with every single day that goes by. This problem of human-induced coastal erosion has not been addressed by the Government of Puducherry. Instead, the coastal

management measures adopted so far have only transferred and aggravated the problem of erosion down the coast to the neighbouring state of Tamil Nadu which has been facing the same ever-increasing problems of human-induced coastal erosion since over a decade.

10. The problem of large scale and rapid coastal erosion in Puducherry started in and around 1986 with the construction of an artificial harbour in Ariyankuppam estuary, situated 1.5 km to the south of the Puducherry town. The harbour was meant to provide an artificial channel from the open sea into the Ariyankuppam estuary to provide a safe entrance for barges and other sea-going crafts. The Harbour was finally commissioned in 1993.

11. To keep the mouth of the harbour open to the sea, two breakwaters were constructed to the south and north of the harbour mouth, at either side of the Ariyankuppam estuary. As a result, the northward flow of sediment along the coast was blocked at the southern breakwater, starving the coast to the north of the harbour of sand and causing severe erosion of the coast. The construction of breakwaters in the Puducherry harbour thus commenced the process of coastal erosion and, as a consequence, several kilometres of beach in Puducherry Town has been completely lost.

12. The process of massive erosion caused by the harbour construction was not unexpected. To the contrary, it was expressly anticipated by the studies and recommendations by Centre for Water, Power and Resource Studies ("CWPRS") and Consulting Engineering Services Private Limited ("CES"), which advised the Government of Puducherry while the project was still in the planning stage. Those studies accurately predicted that the breakwaters at the harbour

entrance could cause massive erosion to the north of the harbour, as the structure would block the natural, incessant migration of sand. The studies further predicted that sand would accumulate to the south of the breakwater and the harbour entrance would silt up due to littoral drift. The consultants warned that constant maintenance and dredging was required to clear the harbour mouth, to keep it open. The studies recommended that sand dredged from harbour mouth must be used for sand nourishment to the beaches north of the harbor in order to mitigate the negative impacts caused by the blockage of sand by the harbor breakwaters. The consultants further concluded that continuous sand by-passing -whereby sand blocked and accumulating at the southern breakwater would be mechanically transferred across the harbor mouth and allow it to resume its northward flow up the coast - was required to prevent and mitigate erosion of the coastline north of the harbour, where the town of Puducherry Town as well as several fishing hamlets are situated. An elaborate system of mechanical sand by-passing with dredgers to pump sand from the south side of the harbour to the north side, was therefore adopted when the port was constructed in order to mitigate the negative impacts of coastal erosion.

13. The planned process and system for mitigation which consisted of mechanical sand by-passing and beach nourishment was never efficiently operated by the Government of Puducherry as the system was never fully or properly implemented. Since 1993, when the Ariyankuppam harbour was formally commissioned and became fully operational, it is estimated that out of the total amount of maintenance dredging to be undertaken by the Government of Puducherry, less than about 25% of the total required volume of sand has been dredged till now. However, less than that (it is estimated about 50%) was used to

nourish the beaches as the dredged sand was instead wrongfully either used for land reclamation, disposed of into the deep sea or pilfered by illegal sand miners. As a consequence, the massive human-induced erosion predicted by CWPRS and CES occurred precisely as they said it would, completely wiping-out 10 kilometres of beautiful and important sandy beach along the historic promenade of Puducherry town, the fishing hamlets of Kuruchikuppam, Vaithikuppam, Solai Nagar in Puducherry and the fishing hamlets of Soudanikuppam, Nadu Kuppam, Thandirayan Kuppam and Chinnamudaliarchavadi Kuppam in Tamil Nadu. Other coastal communities further to the north are also witnessing the shrinking of their beaches as the human-induced erosion threateningly moves northwards.

14. In 2002, long after the beach in Puducherry town had disappeared, following several representations made by members of the civil society as well as by experts, the Government of Puducherry instituted a program of sand by-passing and artificial beach nourishment, using sediment dredged from the harbour to provide northward flowing sand. Within a short period of time, small areas of beach began to re-form adjacent to the town. However, unfortunately this program was not sustained and the new areas of beach quickly disappeared when artificial beach nourishment ended.

15. The massive erosion process unleashed by construction of the harbour did not stop with the evisceration of the sand beach. Without the presence of the beach and its corresponding off-shore sand bar, the waves which once formed some distance from shore and broke gently on the slope of the beach now crashed directly onto the once-dry land. Goubert Avenue, more commonly known in Puducherry as "Beach

Road", which runs for 1.5 kilometres along the shore where the sandy beach used to stretch, was threatened as the land beneath it was undermined by the ongoing erosion. Because of scouring of sand below the promenade, the road started to crack and crumble and had to be entirely re-laid.

16. With the natural flow of sand blocked at the harbour and the system of sand bypass neglected, the erosion which eliminated the beach now threatened the very heart of Puducherry town, including the very government offices, the Chief Secretariat, in which the decision to build the ill-considered harbour was originally taken. Instead of activating the sand by-passing system to mitigate the erosion and nourish the beaches as originally intended, the government of Puducherry chose to create a rip-rap seawall along Beach road, dumping crores of tonnes of massive rocks, trucked-in from quarries in Tamil Nadu to "defend" the town against further erosion.

17. In August 2001, a Preliminary Report Submitted by NOIT-IIT to the Govt. of Puducherry proposed the construction of groynes along the coast of the Puducherry Town. This proposal was opposed by members of civil society groups as it was deemed to be detrimental to the coastal environment. A second opinion on the proposed project was sought by the Government. This proposal was subsequently shelved and thankfully never saw the light of day.

18. A groyne is an impermeable wall extending perpendicularly from land into the sea. Along the Puducherry coast the objective of a groyne is to capture the northward-moving sand along the southern side of the groyne. Indeed, tiny scalloped beaches have formed along the massive groynes; but these small gains have come at an enormous cost. Just as

the breakwater at the harbour trapped sand to the south and caused massive erosion to the north, the groynes rapidly accelerated the northward process of coastal erosion.

19. Clearly, groynes were faulty as a solution as they would only succeed in moving erosion northwards and were no substitute for beach nourishment. Several groups were opposed to this wasteful and environmentally unsustainable exercise and sought scientific opinion to buttress what was clearly common sense. In October 2001 DELFT TECHNICAL UNIVERSITY in their expert opinion to INTACH, Pondicherry on NIOT's proposal stated that the NIOT's proposal did not prevent structural erosion in the area north of the groyne field nor did it take away the causes of siltation of the harbour entrance. The University further suggested that more studies were needed to be undertaken, an Integrated Coastal Zone Management Plan had to be prepared and alternative solutions such as sand bypassing and beach nourishment to mitigate the coastal problems was to be explored. Although all of this information and suggestions were shared with concerned Government authorities no suitable action was taken.

20. In April 2002, a civic group called Citizens Forum of Pondicherry also raised objections to this proposal. The construction of groynes was opposed as the groynes would merely transfer the erosion northwards and not solve the root cause of the problem, the disruption of the littoral drift by the harbour. They instead suggested that detailed studies should be undertaken which included the redesigning of the harbour entrance. They also objected to the NIOT/IIT's concept of conducting trials in the Ocean at the detriment of the environment. Heeding to all

this criticism, the Government of Pondicherry sought a second opinion from Danish Hydraulics Institute (hereinafter referred to as "DHI").

21. Subsequently on October 2002, a Coastal Erosion Study was conducted by Study Group CF01 of DHI and they concluded as follows:

- Sand by-passing is the best solution.
- Construction of groynes is not a favorable solution.

The Study Group also recommended that:

- Viability of the harbour project was to be investigated.
- Preparation of an ICZMP.
- Dredging and by-pass were to be monitored closely.

DHI proposed to:

- Conduct site visit and review data.
- Assess annual sediment balance.
- Conduct preliminary design of Port entrance.
- Optimize port entrance layout.
- Prepare design for shoreline management scheme.
- Prepare guidelines for dredging and re-nourishment.

22. However, no suitable action was taken. Between 2002 and 2003, the Government of Puducherry constructed 6 kilometres of seawall along the Puducherry coast, at a cost of several crores of rupees. The decision to abandon the planned and existing mitigating measures of sand by-passing and beach nourishment in favour of seawalls were undertaken without conducting any detailed, comprehensive studies and were therefore undertaken on a purely ad hoc, arbitrary and unscientific manner. The construction of seawalls was undertaken in total disregard of the observation and recommendations made by Dr. Z.S. Tarapore and Dr. Vaidyarannan both erstwhile Directors of the CWPRS which were fully familiar with the design of the Puducherry harbor and Ariaynkuppam.

23. On 21 February 2003, Mr. P.P. Vaidyaraman, retired director of CWPRS, who was part of the design team of the Puducherry harbor at Ariyankuppam wrote to the GoP following his visit to Puducherry shortly after sand by-passing and beach nourishment had been undertaken at the Puducherry harbor. Mr. Vaidyaraman was not only extremely pleased with the results of beach nourishment, but also made several suggestions for the continuation of sand by-passing and beach nourishment which he stated should be replicated at several of the other Indian ports as well. However, few of his suggestions were implemented.

24. While the "hard structure" of the seawall has had the limited superficial effect of keeping the erosion from penetrating onto Beach Road, it accelerated two other erosion processes. First, the surf which now crashed against the hard barrier of the seawall carved-out and scoured the sea floor that was once safely beneath the sand beach. This would come to have dire effects on the quality of the drinking water in Puducherry, creating a short path for saline intrusion into the town's aquifers. It would also prevent any future beach from forming along that stretch of coast because the sea floor was now too deep and unstable to retain migrating sand, even if it had been allowed to flow as nature had intended.

25. The second erosion process accelerated by the seawall was to the north of the construction. At the end of the hard structure, the long shore currents form a powerful eddy, scooping-out the "unprotected" land in deep pockets of erosion. Thus began a vicious cycle of erosion and defense, more-erosion and more defenses. As the seawall transferred and spread the problem of erosion northward up the coast,

more and more beach was lost, more village land fell into the sea, and the disaster migrated further-and-further. Puducherry's coastal erosion problem had now become Tamil Nadu's problem as well.

26. In 2003 Tamil Nadu PWD initiated its own "hard structure" protection measures, in response to the erosion to its fishing villages caused by the hard structures built by its southern neighbor. Seawalls were built in Nadukuppam, then in Sothanaikuppam during 2005-2006, as the coastal erosion was forced northward. Today, these seawalls extend all the way to Kottakuppam and Chinnamudalaiyar Chavadi and Tamil Nadu is passing the problem back to Puducherry, as the erosion now reaches the Union Territory enclave at Pillaichavadi and beyond.

27. The fishing villages along the coast to the north of Puducherry town lost more than just beach and village land as the erosional process crept northward. They also lost their industry. As the seawall lengthened, fishermen could no longer launch their traditional skiffs and catamarans. The beaches from which they launched their boats into the sea and landed their catch back on land were gone. It is impossible to launch from the steep seawall, which has waves crashing hard against it. The loss of the beach space has also affected the livelihoods of the fishing communities in several other ways as the beaches are also used to dry fish, repair nets and carry out several other related activities. Fishing communities complained to the Government of Puducherry that without beaches to fish from, their livelihoods were lost.

28. In 2004, Dr. Z.S. Tarapore, retired director of CWPRS, who was part of the design team of the Puducherry harbor at Ariyankuppam wrote to the GoP following his visit to Puducherry and warned the GoP against construction of groynes. He warned that the construction of groynes was a "dangerous proposition" since the groynes would only transfer the problem of erosion further down drift, where there were heavily populated areas. Among other things he suggested to undertake "a massive nourishment programme" to control the problem of erosion to the north of the harbor. During the same time, in his address to the 6th CPDAC (Coastal Protection & Development Advisory Committee of the Central Water Commission), in the year 2004, the problem of erosion was discussed and it suggested that groynes and seawalls were not the answer. The erstwhile Chief Secretary of Puducherry advocated that "cost-effective and environment friendly technologies" should be adopted to address the on-going problem of erosion. During the 10th CPDAC meeting it was once again emphasized that "coastal protection works and the coastal zone management should go together since one had impact on the other. Also, the States should not think only of the sea walls as a protection measure to protect the shoreline but also adopt other new technologies which preserve the beaches and ecology as well."

29. In 2004, the Tsunami struck the East coast of India. The coastal populations of the Puducherry region did not suffer much damage as most of the inhabited areas were located in areas that were in significantly elevated from the level of the sea. However, with an abundance of funds flowing into the Government's coffers, as a knee-jerk reaction and a populist measure, large amounts of money were

spent to enlarge the seawalls along the Puducherry coast instead of spending those funds on the much required and planned beach nourishment that would have restored the beaches and protected the Puducherry town and coastal villages more effectively against any future Tsunamis.

30. In spite of expert views on the dangers of constructing groynes and the necessity of conducting detailed studies off the coast, the PWD drew a fresh proposal to construct groynes along the Pondicherry coastline. In November 2006, a 50 m long groyne was constructed just adjacent and north of the New Pier. From enquiries it was learnt that this groyne was built without any environmental clearance and its construction was abruptly halted upon enquiries.

31. Notwithstanding the severe erosion along the coasts of Puducherry, the Government of Puducherry did not resume the dredging and sand bypass operations that might restore some portion of beach to its coastline. Instead, under pressure from fishing villages to artificially recreate sandy beaches from which to fish, both the Government of Puducherry and the Government of Tamil Nadu began building groynes at intervals along the coast in 2005.

32. In April 2007, the Government of Tamil Nadu constructed two large groynes at Thandirayankuppam. The southern groyne is 100 m long and the northern groyne is 170 m long. These groynes triggered severe erosion of the coastline to the north. About 70 m wide beach was lost in the same year to the north of the groyne. Since the construction of these groynes, about 2.5 acres of beach has been lost severely affecting the villages of Chinnamudaliarchavadikuppam and Bommayarpalayam.

The village of Chinnamudaliarchavadikuppam lost several homes as a result of the human-induced erosion. Several other private and public properties have also been damaged.

33. On 20th July 2007, members of civil society groups met the officials of PWD & Port Secretary, Mr. Anbarasu and discussed the urgency for the Pondicherry Government to resume dredging and sand nourishment activities at Pondicherry Harbour entrance. When queried about the status of the proposed construction of groynes, Mr. Anbarasu stated that there was no definite proposal and he was seriously considering dredging and sand nourishment.

34. In July and August of 2007, elected representatives from the seven fishing villages of Anichankuppam, Chinnamudalyarchavady, Koonimedu, Mudhaliarkuppam, Nadukuppam, Notchikuppam and Pudhukuppam, which are located in the Kottakupam and Marakanam Blocks of the Villupuram District wrote to the Hon'ble Chief Ministers of Puducherry and Tamil Nadu and also submitted resolutions to inform them about their plight caused by the human induced erosion of the coast and also demanded that the beaches in front of their villages be restored so that they may pursue their livelihoods. Being located to the north of Puducherry and seeing the human induced erosion spread towards their beaches they were understandably deeply concerned about the future of their coastal environment and their livelihoods that depended on it. However, no action was taken to fulfill their demands and needs.

35. Following public outcry by several environment groups the construction of other groynes that were also planned was stopped. On

Nov. 3rd 2007 a public consultation meet was held in Auroville between Government officials of Puducherry, Tamil Nadu in the presence of experts (Governmental and Nongovernmental) and civil society groups. The following solutions and measures were unanimously agreed upon and proposed:

Immediate —

- a. Activate sand by-passing system for nourishment and restoration of beach immediately north of Puducherry harbor.
- b. Undertake model studies urgently to arrive at the best method of restoring the eroding beaches of Puducherry and Tamil Nadu. Study the impact of groyne fields with and without artificial nourishment, before embarking on new measures
- c. Remodel the harbour entrance for maximizing natural sand by-passing:
 - i. Initially for the existing fishing harbour
 - ii. Later for proposed deep water commercial harbour

Long Term:

- d. Restoration to include artificial nourishment, as universally accepted
- e. Investigate off-shore sand deposits for nourishment
- f. Identify suitable sand nourishment equipment to operate in wave environment

Administrative:

- g. Coastal Zone Management Authorities (CZMA) of Tamil Nadu and Puducherry to coordinate and take up the issue of coastal erosion jointly

h. Initiate Puducherry component of Integrated Coastal Zone Management Plan (ICZMP), in conjunction with Tamil Nadu's ICZMP.

i. Funds to be provided for modeling and hydrographic survey

36. On 7th December 2007, Mr. C.V. Shankar, IAS, Officer on Special Duty (RR) & Project Director (ETRP & TEAP), GoTN who had attended the consultation meet on 3rd Nov. 2007 wrote to the GoP with regards to proposed construction of groyne filed from Kuruchikuppam to Solai Nagar. He requests that this should be undertaken only after the preparation of a comprehensive plan for the coastline, that is sustainable, livelihood sensitive and eco-friendly.

37. On 26th December 2007, the Pondicherry Government inaugurated Capital Dredging, to be taken up at Harbour Entrance. However, when the capital dredging operations began it was shockingly and disappointingly learnt that the dredged sand was being disposed of in deep waters, off shore outside the littoral zone and not used for beach nourishment. Ironically, during the inauguration of capital dredging operations that was held with much fanfare at the New Pier premises, large banners publicizing Beach Nourishment were displayed in spite of the fact that no beach nourishment was being undertaken.

38. On 27th December 2007, members of civil society held meetings with the Port Director of Pondicherry and expressed disappointment that the sand dredged from the harbour entrance was being dumped into the deep waters instead of being used for beach nourishment. Members of civil society met the officials of Pondicherry port and the

Secretary, PWD on 28th December 2007 on the issue of sand nourishment not being undertaken. The officials promised to look into the issue but however on 1st January 2008 the construction of groyne at Kuruchikuppam was resumed without any environmental clearance.

39. In January 2008, representations were made to the Secretary, MoEF about the on-going problem of human-induced erosion along the Pondicherry-Tamil Nadu coastline. The Secretary wrote to the GoP asking them to discuss matters of erosion with GoTN in order to find a viable solution and save the beaches. In total disregard of the observations, recommendation and conclusions of the Nov. 2007 meet, the Govt. of Puducherry initiated a project of construction of groynes along the coast of Kuruchikuppam and Solai Nagar. With construction of groynes continuing to damage the coastline, Jesuratinam, convenor of Coastal Action Network from Nagapattinam filed a writ petition in the High Court at Chennai (W.P. No.1452 of 2008) seeking a Writ of Mandamus, directing the Government of Puducherry (a) to forbear from constructing groyne fields in the coastal region of Puducherry, (b) to conduct appropriate scientific studies for development of a sustainable and comprehensive coastal management plan for the restoration of the Puducherry/Tamil Nadu coastline, and (c) to frame a suitable scheme to ensure that the natural movement of sand is restored so that the coastal areas of Puducherry and Tamil Nadu are protected from erosion. The Government of Tamil Nadu was also a respondent to that petition.

40. This writ petition was disposed on 13 February 2008, after the learned pleader for Government of Puducherry declared in open court

that the activity of construction of groyne field would not be undertaken without the prior permission from the Ministry of Environment and Forestry, Government of India. On this representation by the Government of Puducherry, the High Court dismissed the petition and made no orders with respect to the incidental and ancillary prayers. However, contrary to the undertaking given in Court, construction has begun without obtaining environmental clearance, causing grave irreversible damage.

41. Following the above writ petition, the MoEF constituted a three member committee to visit the Puducherry site proposed for groyne construction. The Committee visited Puducherry on 11th and 12th June 2008 and subsequently reported that as a long-term measure, the GoP should seriously consider sand by-passing of the required amount of sand as this was likely to mitigate the problem of erosion. The committee also suggested that a study covering both Puducherry and adjacent Tamil Nadu coast should be undertaken by a reputed organization. Neither of these have been implemented so far.

42. At the national level, coastal erosion has also been become an increasingly pressing issue with every coastal state facing some form of coastal erosion or the other.

43. In April 2009 the Asian Development Bank prepared a report for itself and the Government of India for India's sustainable coastal protection and management. In this report, the following significant points are made:

Change of philosophy:

"The change to sustainable and soft engineering measures for protection needs to be supported by an effective institutional framework including the Government at different levels, communities and also the private sector. To achieve the necessary levels of support requires a shift in Government policy with a clear mandate for the concerned organizations. A key technical issue is the diagnosis and identification of appropriate solutions for coastal protection works. The projects presently being implemented in the states are based almost entirely on the continued expansion and rehabilitation of rock protection works. This type of development is and will continue to have very serious environmental and social implications. There is a need to completely reshape the approach and philosophy to planning, design and implementation of coastal erosion works. Soft solutions for erosion control are now well developed and are already beginning to be implemented in India. There is need to help and guide a well-planned and programmed transition process as well as ensure the planning and designs for the proposed investment program meet the highest standard of environmentally and socially appropriate solutions. There is also a need to identify and address the causes of erosion, frequently these are manmade and the most appropriate solution is to address the cause rather than the effect. This requires an integrated and coordinated approach to the planning and development of all coastal infrastructure and shoreline uses."

Sector assessment:

"The coastal protection strategy in India is synonymous with a prime objective to protect the land; the concept of protecting the beach and the environment are relatively new concepts; coastal protection is not perceived within the wider context of the economic development of the coastline. The most frequently applied methods for coastal protection have been through the use of hard structures such as seawalls or groynes. Despite many failures and environmental damage seawalls and groynes have continued to be constructed which in many cases has simply shifted the problem to neighboring coastal areas or left the real problem to be solved by future generations. As the pressure on the coastal zone due to human-induced activities as well as relative sea level rise keeps expanding, there is an urgent need to find sustainable solutions for coastal protection."

"There is a general awareness of the impacts of hard structures. Rock wall comes easily and soft solutions are largely untried and the technologies are not well understood. The continued use of hard technologies for coastal protection are being questioned by decision makers and there is now a widespread interest and realization of a need to change to softer and appropriate solutions. The move to softer solutions although an easy and acceptable solution in principle but in practice requires significant behavioral changes by all those involved. The transition from hard to soft structures will require an integrated program of awareness, training, capacity building and other support initiatives."

"Presently measures to manage coastal erosion have generally been designed as a local emergency measure rather than sustainable and economically beneficial perspective. The most frequently applied protection methods are hard structures such as seawalls or groynes. Such interventions provide only land protection, and do not address the root cause of the problem; in many cases the protection structures actually accelerate erosion resulting in major losses of the beach."

Institutional arrangements:

"Central Water Commission (CWC), the technical arm of MoWR is the apex agency for shoreline protection / coastal erosion works in the country. CWC implements coastal protection works through two Directorates viz. the Coastal Erosion Directorate (CED) and the Beach Erosion Directorate (BED). The activities of the two directorates are not well coordinated and lateral communication between the two peer bodies is virtually non-existent. The apparent lack of an integrated approach to coastal erosion problems stems from this structural imbalance."

Policy:

"A major weakness in the current sector orientated sector development is the difficulty of addressing the processes and impacts of one sector on another. A prime cause of erosion is the interaction of coastal infrastructure on the natural coastal processes. To help this horizontal coordination is proposed to establish the CWC and the State Executing Agencies (SEA) as the lead group at National and State levels to coordinate coastal infrastructure activities. At National level the leading

organization should be the CWC. The CWC remit is presently restricted to erosion control but there is a key requirement for the coastal erosion directorate to take on a wider coordination role of all coastal infrastructure works including erosion control, ports and harbors, dredging etc. At the State Level it is proposed to establish a Coastal Infrastructure Management Unit (CIMU) within the State Executing Agencies. This unit would be given a mandate to coordinate all coastal infrastructure programs.

"There is requirement for a policy document to support the process of shoreline management planning. The policy document for shoreline management planning should include:

- (i) Charging the Coastal District Authorities to prepare Shoreline Management Plans (in coordination with the State Executing Agencies and agencies) over an agreed period. The shoreline plans would be advisory and non-statutory. The plans would be participative involving the stakeholders and local level stakeholders in the primary planning, as well as lateral involvement of different government departments / sector agencies.
- (ii) Increasing the mandates of the SEA and the CWC to take on a lead coordination role in the overall coastal management specifically to coordinate and guide the development and management of all coastal infrastructure.
- (iii) Ensuring that all shoreline developments and interventions are properly studied and subject rigorous technical analysis including numerical modeling. Projects should be supported by environmental assessments."

44. In June 2009 an expert committee of the MoEF published the report "Final Frontier - Agenda to protect the ecosystem and habitat of India's coast for conservation and livelihood security." In this report the committee noted that currently, the shoreline of the country is undergoing a major change because of a large number of port and harbor projects. These projects involve large quantities of dredging, shore protection works, breakwaters, and reclamation. Experts are unanimous that each structure would impact the shoreline-particularly the beach formation. Already, many of these infrastructure projects have caused significant shoreline changes-like in Ennore, Puducherry, Alibag, Digha and Dahej. It is also observed that the shoreline is being impacted adversely by mining projects and by interventions like the building of shore-protection structures like groynes. The Committee was of the view that these developments have all led to serious threats to the coast, as especially beaches face severe erosion and shorelines are visibly changing. Given that the Central and state governments propose to construct several ports and harbours all along the shore in the coming years, these projects could have irreversible adverse impacts on the coast. The Committee recommended the following:

“The government must immediately study the cumulative impacts of the individual projects on the coastline, pending which there should be a moratorium on expansion of existing ports and initiation of new projects.”

45. Subsequently, in 2009 the MoEF assigned to the Ministry of Earth Sciences (MoES) to conduct a study for identifying the coastal stretches with regard to human-induced erosion/accretion caused by construction of shore protection measures and breakwaters of ports. Based on the discussions held with MoES, the study was initiated in

two phases namely - (a) phase-I to submit a report based on existing data/information by 15 th October, 2009; (b) phase - II of the study involves micro level analysis that would be carried out for the entire country for the purpose of examining shoreline changes due to existing projects and identify suitable sites for development.

46. In October 2009, ICMAM and INCOIS, MoES, submitted a joint report to the MoEF in which they stated that:

"Coastal structures constructed for port operations and coastal protections works interfere with the littoral transport are found the most common cause of coastal erosion."

"A groyne just shifts the erosion problem to the downstream area...: The more efficient the groyne field is in protecting the shoreline within the groyne field, the more lee side erosion will be experienced downstream."

"When a breakwater is built on the shoreline it interferes with the littoral drift budget and the results are sedimentation and shoreline impact. Like a groyne, the breakwater acts as a blockage of the littoral transport, whereby it causes trapping of sand on the upstream side in the form of an accumulating sand file, and the possible bypass causes sedimentation in the entrance. The sedimentation requires maintenance dredging and deposition of the dredged sand. The result is a deficit in the littoral drift budget which causes lee side erosion along the adjacent shoreline."

"The major interventions which lead to morphological impact are listed as:

Coastal structures of any kind, which by their occupation directly impact the transport processes and thereby the coastal morphology. Such structures are typically the Ports and marinas, active coastal protection structures (groynes, breakwaters and all other structures occupying part of the foreshore and/or the shoreface), passive coastal protection structures (revetments, seawalls etc. which fix the coastline), reclamations and dikes, inlet jetties at tidal inlets and sea works at river mouths, embankments for bridges /runways, intake / outlet structures crossing the littoral zone."

The report also stated that about 23% or as much as 1248 km of shoreline along the Indian main land is affected by various degree of erosion varying from minor, moderate to severe.

47. In May 2010, the Department of Science, Technology and Environment (DSTE) and the Puducherry Coastal Zone Management Authority (PCZMA) of the Government of Puducherry held a consultation meeting on "Restoration and Protection of Puducherry Coastline" which was attended by various Government Departments, experts from the National Institute of Ocean Technology (NIOT), Anna University, members of the Auroville Foundation and of civil society. As reported in the Minutes of the Meeting "There was a consensus among the participants on the need to protect and nourish the coast of Puducherry and the adjoining areas by adopting site specific coastal protection and restoration techniques after carrying out scientific studies and in consultation with all stakeholders including fishermen community." However, no concrete measures have been implemented to date.

48. A May 2010 document of the CWPRS states that of the various methods used for protection of the coast such as seawalls, revetments, bunds, groynes, offshore breakwaters, etc., the nourishment beach is the best method that should be used for shore protection. However, due to other considerations beach nourishment is still seldom used. Later in the same year, the Indian Journal of Geo-Marine Sciences publishes a paper on coastal erosion and mitigation methods. The author of that study concludes "The recent trends in coastal erosion mitigation is shifting towards soft, innovative, and pro-active methods, since the hard methods have their own repercussions on coastal land and beaches such as down-drift erosion, high cost, poor aesthetics etc. Hard structures such as seawalls and revetments, stop erosion of coastal lands, but refocus the erosion onto the beach. A number of soft methods are available now for erosion mitigation and are being used popularly all over the world. They are very eco-friendly, cheap and construction-friendly too. They may be necessarily adopted on a larger scale in the future erosion mitigation projects, and choice of the particular solution depending upon the local hydrodynamics and site conditions."

49. In October 2010, the PWD, GoP had commenced a Sea Wall project along the coast of Chinnakalpet Village, Puducherry without obtaining prior clearance under the Coastal Regulation Zone Notification, 1991. The site was inspected by members of the Puducherry Coastal Zone Management Authority and direction was issued on 13.10.2010 to the Chief Engineer, PWD under Section 5 of Environment Protection Act, 1986 to stop the sea wall construction immediately and submit necessary application to PCZMA for obtaining the Coastal Regulation

Zone Clearance. PWD has complied and stopped the work. No further work has taken place since then.

50. In the month of November 2010 an official of the MoEF from the Southern Regional Office at Bangalore assessed the state of the coast of Puducherry in relation to the development of fishing harbor at Murthykuppam as it was being opposed by civil society groups. In this report it was observed that "For the old fishing harbor, it was informed that even though, on some earlier occasions, some of the concerned authorities have attempted to address the problem of coastal erosion, the measures taken for the old harbour remains inadequate and not comprehensive since the attempts made were too small and were on piecemeal basis, thus the efforts are not successful in controlling the erosion problems. In the new fishing harbor also a similar situation is arising. Now it is high time for the Government of Puducherry to prepare and launch a detailed implementation plan after due consultations with experts and by integrating all the concerned departments & stake holders for properly managing the coastline and to solve the issues arising out of developments which are taking place in the coast line of Puducherry and adjoining Tamil Nadu."

51. In the month of December 2010, the Project Implementation Agency for the Emergency Tsunami Reconstruction Project (PIA, ETRP) of the GoP issued a Tender for "Maintenance Dredging Works at Ariyankuppam River and the Sea Mouth for Puducherry Fishing Harbour" as part of the reconstruction and modernization of fishing harbor at Puducherry. The related maintenance dredging operations began in 2011 and are still continuing to date. However, while the dredging contractor is required to dispose the dredged material in the

ocean, the dredged material was instead dumped on the land and within the harbor limits. The dredged sand, estimated to be amounting to about 1,50,000 cubic meters is still lying on the land instead of being returned to the littoral drift. This subtraction of coastal sediment from the sedimentary budget of the Puducherry-Tamil Nadu coastal compartment and sediment cell is resulting in erosion of the coastline. Several representations to put the sand back into the sea to nourish the beaches have been made but no action has been taken till date.

52. In January 2011 the Puducherry PWD issued an Expression of Interest (EOI) for erosion control and reclamation of Puducherry beach with "soft solutions" such as geo tubes, clearly stating that all conventional "hard" measures such as "boulders, tetrapods, etc.," were excluded from the chosen solutions, as deemed harmful for the coastal environment. Additionally, it is stated that the proposed solution should have a short-term and long term perspective plan to ensure better coastal environment. Moreover, the proposed solutions should involve the authorities of neighbouring state and stake holders. Most importantly the consultant should "ensure that there is no adverse impact to the coastline due to the implementation of the project." This point is emphasized in the EOI repeating that "there is need to ensure that this does not affect the adjoining features of the coast line both in the state of Tamil Nadu and Puducherry." Finally, during the post-construction stage, the project proponent is supposed to achieve the objectives of coastal protection and reclamation in a "holistic manner." By undertaking such a project, the Government of Puducherry should be able to address its coastal erosion problems while ensuring that the

neighbouring state and areas of Tamil Nadu not only do not get affected but also benefit from it.

53. On 18th August 2011 the Hon'ble Minister for Public Works Department, Govt. of Tamil Nadu writes to the Hon'ble Chief Minister of the Govt. of Puducherry to apprise him that the lack of sand by-passing and its effect on the littoral drift at the Ariyankuppam Harbour in Puducherry has caused severe erosion of the neighbouring Tamil Nadu coastline, as a result of which in the year 2006, 200 m of beach was eroded, several homes were destroyed and the life of a child was lost. The Hon'ble Minister draws the attention to an earlier letter from the Govt. of Tamil Nadu in which the GoP is requested not to continue construction of groynes without proper technical studies as it is likely to further affect the Tamil Nadu shoreline. He also informs that the proposed Deep Water Port would have a catastrophic effect on the shoreline of Villupuram District. He also requests the GoP to start sand by-passing and to desist going ahead with the proposed Deep-Water Port without obtaining the prior consent of the GoTN so that Tamil Nadu coastline is not further affected. On 29th November 2011, a second letter is sent to remind the GoP to start sand by-passing at the harbor and to stop further interruption of Littoral Drift that would take by construction of the proposed Deep Water Port which would further affect the Tamil Nadu coast and go against his Govt's interests.

54. On 29th Dec. 2011, the Secretary, Port Department, GoP held a stakeholder's meeting on restoration of Puducherry coastline as reported in the Minutes of the Meeting circulated on 23rd Feb 2012. During that the Secretary suggested that "all should work for a

sustainable solution to the problem of erosion." The Chief Engineer, PWD-cum Director of Ports-responded that "the PWD was called by the MoEF and had suggested that Geotubes be put up along the Puducherry coast towards restoring the coastline." During the meeting "all agreed that the rejuvenation of the lost beaches is of vital importance since it would not only help the fishermen but also facilitate tourism." To conclude, the Secretary assured that "a long term sustainable solution to the restoration of the coastline of Puducherry [was] for the benefit of one and all."

55. On 2nd February 2012 the Government of Puducherry constituted the Evaluation Committee for Assessing the consultant for the coastal protection work in Puducherry using Geotextile tubes. This committee is yet to meet.

56. In March 2012 the MoEF wrote to the Government of Tamil Nadu to enquire about the construction of groynes along the Chinnamudalyar Chavadi Kuppam coast based on a complaint against the proposed groynes that was made by the NGO Pondy CAN. No action was taken.

57. In its September 2012 report, the National Institute of Ocean Technology (NIOT) stated the following with regard to the groynes constructed in Puducherry and Tamil Nadu: "It is recognised that groynes should be used only to maintain existing conditions, rather than enhancing beach volume or eliminating erosion... But this should be used only after exhausting all other available options for restoration." The report also stated:

"There is a need for a well-defined plan that seeks to treat the shoreline and the issue of erosion in a more integrated, sustainable and strategic manner."

"It is recommended to have a total and common shoreline management plan for the entire Puducherry and the adjacent Tamil Nadu coast so that short-term and long-term strategies can be drawn considering the coast in total. The short-term strategies required at specific sites can be designed and integrated in long-term strategies, if a shoreline management plan is prepared."

"As Puducherry is known for its tourism/recreation, it is advisable to restore the natural beach by implementing beach nourishment... The above option will not only help in gaining a natural beach but also help in controlling the erosion of the northern coast. The detailed design of beach nourishment scheme can be worked out based on discussions. Also, eco-friendly techniques and "soft engineering measures" to stabilize the coast could be implemented along with beach nourishment for retaining the sand and to restore the ecological functions and services that are provided by sandy beach ecosystems as well as enhance livelihood opportunities for the fishing communities and increase value to the coast." "A long term and permanent solution can be found if both the Tamil Nadu and Puducherry Governments jointly work towards a common, long-term and sustainable shore restoration strategy. Short-term solutions may need to be implemented, but these have to take into account the long-term solutions and should be "no-regret" solutions." "The general principle of "working with nature" would be a better

approach for cost-effective and sustainable coastal protection measures. Puducherry needs to consider modern protection practices which achieve a more effective and sustainable means of coastal protection while also addressing local amenity and economic development aspects. It is most important to ensure that the natural movement and flow of sediment along the shoreline is maintained."

"The beach restoration will primarily benefit the coastal dwellers living along the Puducherry and nearby Tamil Nadu coast including fishing households, the owners, operators and employees of fishing boats, hotels and other tourism related businesses and their employees. But mostly it will benefit all the residents of this peaceful coastline whose young children have never even seen its beautiful beaches."

58. The report "The Challenged Coast of India" published in October 2012 also points out with regard to the performance of the groynes that were built along the Soudanikuppam-Thandiriayankuppam coast that for every square meter of beach that has been artificially gained with the use of groynes, about 4 square meters of beach space is damaged and lost on the down drift side of the groynes. Therefore, it is unequivocally demonstrated that groynes are causing more damage to the coast and that they are exacerbating the problem of erosion.

59. Neither the Government of Puducherry, nor the Government of Tamil Nadu examined any available options for beach restoration. Mechanical sand bypass was not implemented. More importantly, there is no record that the Government of Puducherry ever considered the simplest, most effective way to 'restore the beaches, end the massive

erosion of village land into the sea, restore the livelihoods of the local fishing communities, and reverse the trend of increasing saline infiltration into the local aquifers: to remove the damaging harbour at Ariyankuppam and allow the natural flow of sand to resume. When one compares the insignificant economic benefit conferred by the harbour with the enormous economic, social, and environmental cost of the ravaged coastline for 18 kilometres to the north (and moving ever-northward as hard structures proliferate), it is astonishing that the Government of Puducherry never considered this obvious alternative.

60. A comprehensive plan for coastal protection has not yet been considered in spite of the fact that both the Governments of Puducherry and Tamil Nadu are fully aware that the erosion is spreading northwards. Instead of taking proactive measures to mitigate the erosion, the erosion is instead allowed to go on, increase and further degrade the coastal environment. Both the governments jump into action only when it is too late and the erosion of the coast has become a manmade disaster in which the homes and livelihoods of the coastal communities have been destroyed. It is only in such belated circumstances that the concerned Government authorities resort to the construction of seawalls as emergency measures. Under these disastrous circumstances, the concerned authorities justify the construction of seawalls as their only option available. Such tardy actions, ad hoc-ism and poor planning and negligence only results in the destruction of a greater extent of the coastal environment.

61. The destruction of sandy beaches represents a very significant economic loss to Puducherry's tourism industry and to the traditional

fishing industry all along the damaged coast. It is estimated that thousands of traditional fishermen have been unable to pursue their livelihoods since the beaches were lost and seawalls have come up; and thousands more are now forced to launch their boats from places outside their own villages. An estimated 300 acres of land mass has been taken by the sea, including numerous houses and other buildings in coastal villages. The governments of Puducherry and Tamil Nadu have spent hundreds of crores of rupees dumping boulders to create riprap seawalls and groynes. In addition to the environmental and aesthetic loss to the immediate coastline, this construction activity entails collateral environmental damage to the mountains from which the boulders are quarried and the energy used to transport them from mountain to seaside. The hard structures on the coastline have radically transformed the morphology and morphodynamics of the coast and intertidal marine zone. This has far-reaching consequences for the entire ecosystem.

62. The endangered Olive Ridley sea turtles which are listed under Schedule I of the Indian Wildlife Protection Act (1972) nest along the Puducherry-Tamil Nadu coastline. Olive Ridleys are known to return to their natal beaches to lay their eggs. But when man-made structures have been built in the place of their nesting beaches, as is the case in Puducherry and Tamil Nadu, these structures prevent sea turtles from continuing their innate life cycles. Coastal structures therefore directly threaten and further endanger sea turtles by reducing suitable nesting habitat and displacing turtles into less-than-optimal nesting areas. The destruction of the natural beach space and habitat by human induced erosion followed by the armouring of the coast with seawalls

and groynes makes it impossible for sea turtles to make their nests on the beaches. The ad hoc and unscientific construction of seawalls and groynes along the coast is therefore directly endangering the existence of sea turtles.

63. The armouring of the coast with seawalls and groynes also results in the destruction of intertidal habitat that is required by marine flora and fauna such as planktons, crustaceans, bi-valves, mollusks, other invertebrates and even fishes. These flora and fauna also form part of the marine food chain which supports fish stocks. The destruction of inter-tidal habitat therefore impacts large numbers of marine species and ecosystems.

64. Without the beach providing the crucial sandy buffer between the sea and the land, erosion of the seabed at the coastal margin has resulted in salt water infiltration into the local aquifers. The Central Ground Water Board has reported that the ground water development in the Puducherry region is rather very high and no further groundwater development is to be encouraged. On the other hand, there is an urgent need for regulation of over-exploitation, protection and augmentation of ground water resources to recharge the depleted aquifer systems. An assessment of the vulnerability of seawater intrusion in Puducherry coastal region is indicating that both the northern and southern coasts of the Puducherry region are vulnerable to seawater intrusion. As the groundwater resources of the Puducherry region are already stressed, the increase of seawater intrusion due to human induced coastal erosion has to be avoided at all costs.

65. The increased salinity in Puducherry's fresh water has resulted in hundreds of hectares of farm land becoming fallow. In addition to ruining the taste of the local drinking water, increased salinity is well-known to cause kidney disease. Several of the shallow wells along the coast on which the local communities depend for their freshwater requirements have already turned saline. The loss of freshwater resources is causing severe hardship to the local communities as they have to find alternative sources of freshwater.

66. It is also important to note that at the national level the coastline also represent the boundary of the nation and its territories. The indiscriminate, uncontrolled, and unnatural alteration of the coastline is resulting in the uncontrolled alteration of the national boundary, both on land as well as offshore, of the international maritime border and that of the Exclusive Economic Zone (EEZ). This is something that has political and economic implications which are of national concern.

67. The seawalls and groynes are being built without any carrying capacity studies. The coastal environment of the Puducherry-Tamil Nadu region is already heavily and to a large extent impacted by the ongoing human induced erosion of the coast caused by the Puducherry harbor. Further armouring of the coast with seawalls and groynes will only result in reducing the carrying capacity of the coastal environment beyond the point of self-sustainability.

68. The coastal environment is a highly dynamic and therefore complex environment to manage. Experience has shown that the less one interferes with coastal processes, the lower is the likelihood of having coastal management problems. Across the world, increasingly

the scientific community is of the opinion that particularly on the coast it is preferable to "work with Nature" rather to try to "fight against Nature." This approach is also akin to the approach of the Precautionary Principle which advocates that if the coastline is eroding, particularly due to human induced causes, it is preferable to address the root causes of the problem and try to return to the original, natural, stable state of the coastline, rather than to attempt to re-engineer the coastal environment which results in perpetual alteration of the coastal environment with all its accompanying negative impacts.

69. Despite the recognition by the Union and State Governments, as well as that of related Government agencies such as the CWPRS and the NIOT, private and professional consultancy firms, local communities, civil society groups that "soft" engineering measures such as beach nourishment, which are environmentally and socially friendly and increasingly adopted world-wide, should be adopted tackle coastal erosion, especially to mitigate and reverse human induced coastal erosion, there is however a lack of well-defined scientific and technically sound processes and systems for sand nourishment of eroding beaches which the Government and their respective agencies can follow or implement. As a result of the lack of such well-defined processes and systems, Governments and their agencies fall back upon past experience, even though it is obsolete and go about "business as usual." In this regard, it is also important to note that the "business as usual" favours vested interests, such as the consultants who get to design more and more coastal structures as they cause more and more erosion, the quarry owners, the transporters and the contractors who keep on benefitting

as long as coastal structures need to be built even though it is at the cost of the coastal environment.

70. Seeing the unwillingness of concerned agencies to restore and nourish the beaches, very often the local communities that have at first lost their livelihoods when their beaches have eroded, eventually get desperate when nothing is done to control the erosion particularly when they start losing their habitations. As a last and desperate measure to save their homes, these communities start to demand that their homes be immediately protected in whichever way possible, even with the use of hard structures such as seawalls and even if it is at the cost of the coastal environment. The measures, particularly those that are environmentally destructive, that are demanded in a state of desperation by the local communities and followed out of popular demand are not necessarily the best for their livelihoods, the environment, the society at large and the future generations, especially in the long term.

71. Since the construction of the harbor, seawalls and groynes commenced in Puducherry and Tamil Nadu, numerous civic groups, including Coastal Action Network, have complained to the Government of Puducherry and Government of Tamil Nadu and warned of the worsening environmental and economic disaster. Both governments have ignored these warnings and continued to build hard structures, in the Cuddalore, Puducherry and Villupuram Districts, disrupting the natural flow of coastal sediment, damaging their own coast and their neighbor's, in complete disregard of the economic, social, and environmental consequences of this construction.

72. The Government of Tamil Nadu currently proposes to build a series of 12 more groynes from Chinnamudalaiyar Chavadi to Bommiyarpalayam, as well as additional seawalls and groynes to the south of Puducherry, as far south as Cuddalore. Some of the work has already commenced. The Government of Tamil Nadu has not sought or been given prior permission and approval by the Ministry of Environment and Forests, Government of India to construct these groynes.

73. On or about 18 November 2012, the Government of Tamil Nadu began dumping rocks on the coast at Chinnamudalaiyar Chavadi, thereby commencing construction of a planned 180m groyne. This activity will cause further damage to the coastline, and to the lives and livelihoods of those who live along the coastline, if it is allowed to proceed. The Government has, without considering the hazards of undertaking such activity has commenced and is continuing with the construction of the groyne, the fact that the detriment caused to the coastal environment is not limited only to that particular sector has not, even been considered. No proper environmental impact assessment has been done by the concerned authorities, in violation of governing laws and violating rights guaranteed under Article 21 of the Indian Constitution. The economic consequences of the damage caused by the construction of the groyne will be disastrous.

74. On 27th December 2012 the Puducherry Coastal Zone Management Authority (PCZMA) wrote to the MoEF requesting it to impress upon the Government of Tamil Nadu to refrain from undertaking ad hoc coastal protection measures such as seawalls and groynes without consulting and taking the consent of the Government

of Puducherry and required CRZ clearances. The PCZMA also expressed its apprehension that the proposed and on-going coastal protection measures erected in adjacent Tamil Nadu would cause erosion of the Puducherry coastline. Moreover, the PCZMA also expressed the need to follow the recommendations of the stated NIOT report which suggests that a common shoreline management plan for the entire Puducherry and adjacent Tamil Nadu coastline should be prepared so that short-term and long-term strategies can be drawn considering the coast in total.

75. According to the CRZ Notification 2011, Section 3, (iv), activities that disturb the natural course of seawater such as for erosion control are prohibited if constructed without an Environmental Impact Assessment study. Section 4.2, (i), (c) of the same notification also states that the procedure for clearance of such activities should be undertaken after comprehensive EIA with cumulative studies for projects in the stretches classified as low and medium eroding by MoEF based on scientific studies and in consultation with the State Governments and Union territory Administration. The seawalls and groynes being built by the GoTN at Chinnamudalaiyar Chavadi Kuppam and in Villupuram District and Devanampattinam in Cuddalore District are being undertaken without an EIA, neither with a comprehensive EIS with cumulative studies and without consultation with the State Governments and Union territory Administration and are therefore in violation of CRZ Notification 2011.

76. According to the Environmental Impact Assessment Notification 2006, the construction of seawalls and groynes being built by the GoTN at Chinnamudalaiyar Chavadi Kuppam and in Villupuram District and Devanampattinam in Cuddalore District are classified as "Category A"

projects as they fall within 10 km of the inter-state boundary and would therefore require an EIA. The natural flow of sediment and beach sand along the coast is an essential phenomenon and process which supports natural habitats, flora and fauna, human populations and their fundamental right to life and livelihood. Coastal sediment is a public good that forms the very foundation of the sandy coastal environment, without which none of the sandy coastal environments can be sustained. The human induced loss of sediment from the coast and the resulting erosion and destruction of coastal habitats therefore directly results in the violation of the fundamental right to life and livelihood of all that which is dependent on coastal sediment. Just as water, food, air, light, etc., are an essential part of the life and livelihood of every citizen of this country, similarly coastal sediment is equally an essential public good which is a part of the life and livelihood of all that which depends on the coastal environment. The human induced loss of coastal sediment within and even across state boundaries therefore results in the violation of the fundamental right to life and livelihood of all that which depends on the coastal environment. Numerous representations on the above issues described above, particularly such as the human induced coastal erosion, mitigation and restoration through sand nourishment, restoration of the sandy beach ecosystems and the livelihoods of the local communities, etc., spanning a period of more than a decade have been made by several citizen and civil society groups. However, not only is the human induced erosion of the coast increasing unabated, but it is even being aggravated by adhoc, unscientific and unsustainable coastal management measures which are arbitrary and illegal. The Respondents have not undertaken any scientific studies with regard to the exacerbation of erosion due to the

groynes already constructed, and erosion is rapidly progressing with no intervention to prevent the same on the part of the statutory authorities.

77. On 29th Sep 2012, a representation was submitted to the District Collector, Cuddalore, the 2nd applicant submitted representation to several authorities including the respondents herein. On 06th Jan 2012, a representation was submitted to the Government of Tamil Nadu, requesting them to refrain from construction of groynes. On 20th Nov 2012 and 12th Dec 2012, further representations were made by the applicants to the authorities, requesting them to take appropriate action. However, no reply has been received from the authorities and the damage caused to the environment due to the indiscriminate construction of hard structures along the coast continues to this day.

Stand of Puducherry Coastal Zone Management Authority (PCZMA) and MoEF&CC

78. Replies have been filed by contesting respondents. It is not necessary to refer to all the replies. It will suffice to refer to the affidavit filed by Puducherry Coastal Zone Management Authority (PCZMA) on 06.10.2021 and the reply filed by the MoEF&CC. PCZMA refers to comprehensive Shoreline Management Plan (SMP) for Puducherry in May, 2015 by the National Institute of Ocean Technology (NIOT), Ministry of Earth Sciences, after monitoring the coastal processes responsible for the shoreline changes from 2012. The SMP was submitted to the MoEF&CC. NIOT designed a hybrid solution for the first time in the country with two reefs and sand nourishment for restoring the eroding beach along Puducherry town. The proposed hybrid solution involved the following:-

- i. Construction of one Nearshore Wedge Reef opposite to the Chief Secretariat on the north end of Puducherry town foreshore, with the crest at Chart Datum.
 - ii. Construction of one Offshore Reef placed at the south end, at 300 m north of the pier, with the crest at 1 m above Chart Datum.
 - iii. Sand nourishment using 4,50,000 m³ of sand between northern and southern reef along the Coastline of Pondichery Town and Gandhi Statue
79. The above project has been adopted in Puducherry for which CRZ Clearance has been granted.
80. The executive summary in the report of the NIOT is as follows:-

“Many beaches along East coast of India are subjected to erosion, which threatens habitat, property, public infrastructure, and the tourist industry. Loss of sand can be attributed natural changes (sea level rise, storms, and more recently persistent low pressures due to climate change) and man-made activities (harbors, jetties, seawalls, groins, dredging of tidal inlets and damming of rivers). Pondicherry coast is not exceptional and after construction of Pondicherry harbour, coast north of harbour is subjected to sea erosion. Initially, sand bypassing was carried out by harbour authorities to prevent down drift erosion and to maintain channel free from siltation. Later, discontinuing of sand bypassing due to various technical reasons, lead to erosion on Pondicherry city. UT Pondicherry and Tamil Nadu State Government resorted to short term measures to protect the coast from erosion. Seawall of length 6 Km was constructed by UT Pondicherry, which covers city of Pondicherry and the coastal stretch (2 km) from Sodhanaikuppam to Thanthriyankuppam was protected groin field combined with seawall by Tamil Nadu government. The erosion problem shifted further north, Chinnamudalaiyar Chavadi is experiencing increased erosion and many buildings were lost to sea. Highly eroding fishing hamlet, north of Chinnamudalaiyar Chavadi, and Chinnakalapettai village in UT Pondicherry were also protected by seawall. As on date, 8 km length of the coast was protected by seawall and groin field along Pondicherry coast by UT Pondicherry and Tamil Nadu Government. The above solutions could protect the coast under threat but the authorities and stake holders need an integrated long-term solution for protection of coast and restoration of natural beach.

Since, the available information on Pondicherry coast is not sufficient for working out suitable strategies; NIOT was consulted by both UT Pondicherry and Tamil Nadu government to work out long

term/ short term strategies for management of coast from erosion and impact of cyclones. NIOI has initiated studies to evolve strategies for protection of Pondicherry coast under the project "Demonstration of Shore Protection Measures through Pilot project", with financial support from Ministry of Earth Sciences. NIOI has taken p task of developing strategies for protection of Pondicherry coast with objectives: 1) Assessment of status of existing protection measures and its performance 2) To Understanding the processes responsible for shoreline changes through monitoring waves, tides, currents, sediment characteristics and coastal morphology 3) Analysis of long/short term trends of shoreline along Pondicherry coast and 4) Development of shore protection measures through numerical models. The first three activities were completed and documented in the present report. The final report with strategies for protection of coast will be arrived at based on the discussion with the governments of Tamil Nadu and UT Pondicherry and stake holders.

The study aims at understanding various dynamical aspects of coast (water level variations, currents & circulation, tides, waves, bathymetric variations, sediment transport, shoreline changes etc.) to develop hind cast, now cast and forecast models on shoreline changes in priority areas for identification of vulnerable areas of erosion/ accretion to arrive at remedial measures for protection of coastline from natural and human perturbations. The strategy proposed in the present study aims at obtaining a comprehensive picture on shoreline changes along Pondicherry coast and to take remedial measures for shoreline management along the stretch.

The study area with coastline length of 18 km was divided into four distinct zones, namely 1) Pondicherry harbour and adjoining areas, 2 km 2) Pondicherry city, protected by seawall, 6 km 3) Groin field, 2 km and 4) Open coast, 8 km. The shoreline changes in these four zones were analyzed using remote sensing data and field measurements. The result indicate that the average rate of erosion and accretion is 4m/yr and 5m/yr respectively and the coast needs immediate attention for its protection from natural causes or man-made activities. The estimated rate of net drift would be in the order of 0.28 -0.30 million cum, which needs to be confirmed by detailed shoreline monitoring.

Coastal processes responsible for shoreline changes were monitored during 2012, where data on winds, waves, tides, currents, sediments, bathymetry etc. were collected between Pondicherry Port and Kalapettai village, covering a coastline of 18 km. Seasonal variations on water levels, wave climate, currents and circulation sediment transport, shoreline changes etc. were studied. The measurements made indicated that the tide propagates from south to north. Currents measured upto a depth of 20 m were found to be seasonal, northerly during SW monsoon and southerly during NE monsoon. The average currents during SW and NE monsoon would be 0.3m/s and 0.5m/s. The near shore currents generated by waves follow pattern of coastal Currents In Tamil Nadu coast, which is added

advantage in developing shore protection measures. Wave climate indicate that 70% of the waves approach the coast from SE direction and the remaining 30% from NE direction.

*Pondicherry, known for tourism/recreation, has lost its natural beach due to construction of seawall. **It is advisable to restore natural beach by implementing beach nourishment. Initial estimates indicate that sand to extent of 3.0 million cum need to be placed north of harbour for length of 600 m near the Gandhi statue. The above option not only helps in gaining natural beach but also helps in controlling the erosion of northern coast. The detailed design of beach nourishment scheme can be worked based on the discussions. Also, eco-friendly techniques and "soft engineering measures" could be implemented along with beach nourishment for retaining of sand and also to restore ecological functions of the coast.***

Short-term solutions may need to be implemented, but these solutions have to take into account the long-term solutions and should be "no-regret" solutions.

A long-term and permanent solution can be found if both the Tamil Nadu and Pondicherry governments jointly work towards a common, long-term and sustainable shore restoration strategy.”

81. Summary and recommendations in the report are as follows:-

“Summary and Recommendations

The coast along Pondicherry and the adjacent areas of the Villupuram district has been experiencing severe erosion for the past 20 years. Natural causes interception of littoral drift by the harbour at Ariyankuppam village, Pondicherry constructed in 1990 and the subsequent construction of coastal defence structures such as seawalls and groins caused erosion in this and groins regions. Pondicherry and Tamil Nadu governments made several attempts to protect the coast under threat using options like seawalls and groins. Though these protection measures have offered some relief to the coast under threat, adjacent parts of coast areas are eroding, more unstable and are constantly under threat.

There is a need for a well-defined plan that seeks to treat the shoreline and the issue of erosion in a more integrated, sustainable and strategic manner. This can be achieved by a Shoreline Management Plan (SMP), which considers the issues at a reasonable scale and focuses on restoring the natural sandy beaches. Policy makers, engineers and stakeholders seek a long term solution to restore the sandy beaches of this entire affected region. The basic questions which need to be answered and understood before attempting any such coastal restoration scheme are following:

1. *Present status of coast (geomorphic setting and functional performance of already implemented protection measures)*
2. *Coastal processes along this coast in relation to proposed coastal restoration schemes.*
3. *Priorities of policy makers and stakeholders*
4. *Requirements of stakeholders*
5. *Economical, environmental and social sustainability of proposed restoration measures.*

Considering the above, the overall objective of the coastal restoration project should be to address the coastal restoration needs through the implementation of economically viable restoration works using environmental and socially appropriate solutions. This report describes the present status of the coast and the performance of existing coastal protection schemes. The data on sea bathymetry, land topography, hydrodynamics (tides, waves, currents and sediment characteristics) and shoreline changes was collected for analyzing the coastal processes. A joint meeting with Tamil Nadu and Pondicherry governments is required to draw strategies for coastal restoration measures where various technical alternatives can be analysed in relation to the priorities of the government keeping in view that the solution adopted should be sustainable, long term and permanent without affecting the coastline located further north.

The analysis of long-term shoreline change data indicate that the average rate of Shoreline recession and progression over a period of 30 years is in order of 4 m/yr and 5 7yr respectively. However, localized shoreline change rates. recession specifically, of 50 1n in a season were observed. However, the rate of shoreline change and/or erosion is dependent on gradient of sediment transport along the coast, which is dependent on Configuration of the coast, near shore current and availability of the sediments.

The 18 km length of coastline of Pondicherry was divided into four zones for analysis. The first zone (Zone A) covering a length of 3.5 km represents the zone of direct influence of the Pondichery harbour. The sand has accumulated up to the tip of the south breakwater with maximum accretion of 180 m and the sediment started bypassing to the north. The northern side of the harbour is protected by a seawall and sediment deposition is noticed, during the NE monsoon due to the southerly drift. The maximum erosion is about 40 m at distance of 600 m from north breakwater from 1991 to 2000. The second zone (Zone B- 4 km), which is part of Pondicherry township is protected by a seawall. Securing at the foot of the seawall is noticed during active monsoon. The third zone (Zone C- 2.5 km) is protected by a series of disjointed groins. These groins were constructed during 2005-2007 and. accretion to an extent of 90 m is noticed at northern longest groin located at Thathiriyankuppam. The accretion at all groin compartments indicate availability of sediments along the Pondicherry coast during both monsoons.

The CWPRS (1978) has reported that the net drift was estimated to be about 500,000 cu.m. at the time of design of Pondicherry Harbour but the present estimated rate of net drift by us would be in the order of 2,00,000 - 2,80,000 cu m, which needs to be confirmed by detailed shoreline monitoring. The coast north of longest groin at Chinnamudalaiyar Chavadi village has experienced increased erosion and shoreline recession during 2008 to an extent of 70 m. South of this coast regained some lost material during 2012 due to southerly drift and bypassing of sediments from the groin with a net accretion of 20 m. The Zone D with a length of 8 km is not protected by major scheme and maximum erosion observed 1991-2010 is around 25m. A sea wall of length 165 m was constructed at village Chinnakalapettai to protect the coast from erosion.

The following are major observations for arriving at coastal restoration strategies for both the Pondicherry and adjacent Tamil Nadu coast.

- *Pondicherry has been known as a beautiful beach town. The beaches here, particularly along the famous beach road were used for all kinds of activities by a large cross-section of people. Children chased crabs and looked for interesting shells. The famous Masi Magam festival of Pondicherry relied on the big beach where the chariots of all the gods from all the temples near and far would come. With the beach almost gone and the rocky sea wall, all these little everyday pleasures of each and every resident of Pondicherry and all those who throng to its shores, have been snatched away.*
- *The basic objective of shore restoration projects moderate the long-term average erosion rate and shoreline change from man-made causes, which can be achieved only if the natural dynamics of the coast is well understood.*
- *The medium term analysis of shoreline change data from 1991 -2012, indicate that this region needs immediate attention.*
- *Protection schemes till date have been implemented in isolation both in Pondicherry and Tamil Nadu, a common phenomenon even in developed countries. This has happened because of various constraints like scientific/engineering understanding of nature, economics of the scheme to be implemented, institutional issues, lack of interstate coordination and acceptance by stakeholders. It is recommended that short-term and long-term strategies can be drawn. considering the coast in total by Pondicherry and Tamil Nadu Government. The short-term strategies required at specific sites can be designed and*

integrated in long-term strategies, if a shoreline management plan is prepared.

- *Pondicherry harbour is causing a deficit in sediment supply to the northern coast. Sand bypassing carried out by harbour authorities for certain period could maintain the beach north of the harbour. Later, discontinuing the sand bypassing resulted in loss of beaches in the northern coast. The recent analysis of satellite data suggests that parts of the littoral sediments are bypassed naturally to northern coast. While designing the shore restoration scheme for Pondicherry coast, the configuration of harbour and its relation to natural bypassing of sand at harbour should be studied.*
- *Pondicherry wave climate is influenced by both the SE and NE waves With occasional cyclonic storms crossing the coast. The maximum surge level observed above tide is 0.7m with a tidal range of 1.2 m. The waves approaches from SE direction from April September with mean direction 135 deg, while during NE monsoon. the direction is 90 deg. The coastal currents are seasonal, directed to north during SW monsoon and south during NE monsoon. The average currents during SW and NE monsoon would be 0.3m/s and 0.5 m/s. The near shore currents generated by waves follow similar pattern like coastal currents in Tamil Nadu coast, which is an added advantage in developing Common shore restoration measures. A detailed study conducted at Vellar estuary and Ennore shows shoreline change governed by wave climate and tidal influence is insignificant. Low pressure systems like events of 2007 can cause significant damage to coast and some of its changes could be permanent. The coastal protection scheme seawall built along the Pondicherry town for length of 6 km need to be assed carefully to avoid further damage during cyclone or low pressure periods.*
- *Pondicherry is known for its tourism/recreation, it is advisable to restore the natural beach by implementing beach nourishment. At Ennore, sand dredged from harbour to an extent of 3.5 million cum was placed. on, north of harbour to prevent down drift erosion. The performance of beach nourishment was assessed based on long-term data at Ennore which shows nourishment has supplied sand to northern coast for period of 5 years and coastline was stable even after the construction of harbour. Initial estimates indicate that sand to the extent: of 3.0 million cum needs to be placed north of the harbor for length of 600m near the Gandhi statue. The above option will not only help in gaining a natural beach but also help in controlling the erosion of the northern coast. The detailed design of beach nourishment scheme can be worked out based on discussions. Also, eco-friendly techniques and "soft*

engineering measures" to stabilize the coast could be implemented along with beach nourishment for retaining the sand and to restore the ecological functions and services that are provided by sandy beach ecosystems as well as enhance livelihood opportunities for the fishing communities and increase value to the coast.

- *A long term and permanent solution can be found if both the Tamil Nadu and Pondicherry Governments jointly work towards a common; long-term and sustainable shore restoration strategy.*
- *Short-term solutions may need to be implemented, but these have to take into account the long-term solutions and should be "no-regret" solutions.*
- *Worldwide there is now increasing examples of replacement of hard structures like seawalls with softer options Such as beach nouishment, Sand bypassing, dune planting and offshore submerged reefs. Thus, the general principle of "working with nature" Would be a better approach for cost-effective and sustainable coastal protection measures. Pondicherry needs to consider modern protection practices which achieve more effective and sustainable means of coastal protection while also addressing local amenity and economic development aspects. It is most important to ensure that the natural movement and flow of sediment along the shoreline is maintained.*
- *All Shore protection schemes should be monitored scientifically under technical guidance of expert institutes by Tamil Nadu and Pondicherry governments for improvement in its performance. The crest of berm data collected by Tamil Nadu PWD do not cover any location along Pondicherry coast. The closest locations considered for analyzing the data along this coast are Devanampattinam and Oyyalikuppam at south and north of Pondicherry respectively.*
- *Given the social and economical importance of the Pondicherry beaches, the coastal restoration option should consider the protection of land, buildings, groundwater, ecology, livelihoods and public and private infrastructure against future loss and damage caused by erosion and storms.*
- *The beach restoration will primarily benefit the coastal dwellers living along the Pondicherry and nearby Tamil Nadu coast including fishing households, the owners, operators and employees of fishing boats, hotels and other tourism related businesses and their employees. But mostly it will benefit all the residents of this peaceful coastline whose young children have never even seen its beautiful beaches. No One expected that waves due to monsoon or cyclone take away the natural beach."*

Reply of MoEF&CC

82. Reply of the MoEF&CC dated 02.02.2021 deals with the status of updation/revision of CZMPs as follows:-

“2. That in exercise of the powers conferred by the sub-section (1) and Clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of the sub-rule 5 of the Environment (Protection) Rules, 1986, Ministry of Environment and Forest had notified the Coastal Regulation Zone Notification, 1991 on 19th February, 1991, which, inter-alia, provided classification of Coastal Regulation Zone (hereinafter referred to as CRZ) areas and norms for regulating developmental activities therein. This Notification was subsequently amended from time to time.

3. That it is submitted that in supersession of the **CRZ Notification, 1991, the Coastal Regulation Zone Notification, 2011 was notified on 6 January, 2011 for regulation of developmental activities along the coastal stretches and to ensure the livelihood security to the fisher communities and other local communities, living in the coastal areas, to conserve and protect coastal stretches.**

4. The validity of the Coastal Zone Management Plans (hereinafter referred to as CZMPs) approved under CRZ Notification, 1991 was extended from time to time, the last such extension being upto 31.07.2018, pending preparation and subsequent approval of fresh CZMPs under the CRZ Notification, 2011. All the developmental activities in the CRZ areas of coastal States were required to be regulated as per the above mentioned notifications and within the framework of approved CZMPs.

5. It is humbly submitted that the CZMPs of all coastal States except State of Goa has been approved under the provisions of the CRZ Notification, 2011.

6. That it is submitted that in supersession of the CRZ Notification, 2011, the Coastal Regulation Zone Notification, 2019 was notified on 18th January, 2019 for regulation of developmental activities along the coastal stretches and to ensure the livelihood security to the fisher communities and other local communities, living in the coastal areas, to conserve and protect coastal stretches, specifically focused on conservation and management plans of Ecologically Sensitive Areas (ESAs) which did not feature in the CRZ Notification, 2011.

7. It is humbly submitted that the High Tide Line (HTL) has been mapped out and standardized for the entire coast of the country unlike the HTL earlier allowed to be demarcated by one of the seven authorized agencies, that too only for identified stretches/sites, and

thereby bringing in standardization and authenticity and removing arbitrariness.

8. It is submitted that the Hazard Line for the entire coast of the country has also been mapped and is required to be incorporated in CZMPs of the coastal States or Union territories.

9. It is humbly submitted that the CRZ Notification, 2019 shall, however, come in force only after the respective CZMP framed to the CRZ Notification, 2011 have been revised/updated by the States/UTs, as per the provisions of the new CRZ Notification and approved by the Ministry of Environment, Forest & Climate Change. Para 6 (i) of CRZ Notification, 2019 inter alia states as under:

"All coastal States and Union territory administrations shall revise or update their respective coastal zone management plan (CZMP) framed under CRZ Notification, 2011 number S.O 19(E), dated 6th January, 2011, as per provisions of this notification and submit to the Ministry of Environment, Forest and Climate Change for approval at the earliest and all the project activities attracting the provisions of this notification shall be required to be appraised as per the updated CZMP under this notification and until and unless the CZMPs is so revised or updated, provisions of this notification shall not apply and the CZMP as per provisions of CRZ Notification, 2011 shall continue to be followed for appraisal and CRZ clearance to such projects."

Before finalizing the CZMP concerned State/ Union Territories/ Coastal Zone Management Authorities are required to adopt due procedure in preparation of CZMPs as stipulated in Para 6 (ii) of CRZ Notification, 2019 which includes public consultation. Para 6 (iii) of said notification inter alia states as under:

"The coastal States and Union territories shall prepare draft CZMP in 1:25,000 scale map identifying and classifying the CRZ areas within the respective territories in accordance with the guidelines given in Annexure-IV to this notification, which involve public consultation."

A true copy of CRZ Notification, 2019 is annexed herewith and marked as ANNEXURE-R/1.

10. It is humbly submitted that the National Centre for Sustainable Coastal Management (hereinafter referred to as NCSCM) made a presentation on the status of the updation/revision of CZMPs prepared based on provisions of CRZ Notification, 2019, in the 40 meeting of National Coastal Zone Management Authority (NCZMA) held on 28.08.2020, as under:

S.No.	State/UT	Status of Approved CZMP2011	Status of Draft CZMP 2019	Agency preparing CZMP-2019	Time Required to Complete
1.	Maharashtra	Approved	COMPLETED <u>Public hearing completed</u> in all districts other than Palghar and Sindhudurg districts	NCSCM	COMPLETED
2.	Odisha	Approved	COMPLETED <u>Public hearing completed</u>	ORSAC/SAC	COMPLETED
3.	Andhra Pradesh	Approved	80% work Completed including Buffering of CRZ boundaries	NCSCM	4 MONTHS-DEC 2020
4.	Karnataka	Approved	50% work Completed including Buffering of CRZ boundaries	NCSCM	4 MONTHS-DEC 2020
5.	Puducherry	Approved	30% work Completed including Buffering of CRZ boundaries	NCSCM	3 MONTHS-NOV 2020
6.	Daman&Diu	Approved	50% work Completed including Buffering of CRZ boundaries	NCSCM	3 MONTHS-NOV 2020
7.	Tamil Nadu	Approved	20% work completed	NCSCM	5 MONTHS-JAN 2021
8.	Gujarat	Approved	20% work completed	NCSCM	6 MONTHS-FEB 2021
9.	Kerala	Approved	In progress Being monitored by Kerala High Court	NCSCM	Status to be obtained from NCESS
10.	West Bengal	Approved	Pending. Status not known	IESWM	Status to be obtained from IESWM
11.	Goa	Draft published in website for public hearing. Revision based on amendments, in	Pending	Not Known	Amendments to CRZ Notification 2011 notified on 1 st May 2020

		<i>progress (NCSCM)</i>			
12.	<i>Andaman & Nicobar Islands</i>	<i>ICRZ plans:9 Islands IIM Plans:5 Islands Approved</i>	<i>ICRZ Plans of Great Nicobar & Little Andaman Islands completed and submitted to ANCZMA for public hearing</i>	<i>NCSCM</i>	<i>6 MONTHS-FEB 2021</i>
13.	<i>Lakshadweep Islands</i>	<i>Approved</i>	<i>Revision of IIMPs of Suheli, Kadamat & Minicoy Islands in progress</i>	<i>NCSCM</i>	<i>6 MONTHS-FEB 2021</i>

11. It is humbly submitted that the answering Ministry is yet to receive the draft CZMPs updated/ revised as per the provisions of the CRZ Notification, 2019 from all the coastal State Governments for further consideration and approval.

12. It is further humbly submitted that the CRZ Regulations are to be implemented and monitored including violations thereof by the concerned State Coastal Zone Management Authority in accordance with the proved CZMPs of the respective region of the coastal state.”

Consideration of the Issue, finding and Directions

83. We have given due consideration to the issue of protection of the beaches from human induced erosion caused by hard structures. It is a fact that these hard structures may prevent erosion at the said stretch temporarily but the adverse impact of such measures are felt upstream or downstream where erosion starts. Thereby such hard measures only transfer the problem of shoreline change until and unless a holistic study is undertaken keeping in view that sediment cells and appropriate scientific measures taking into consideration both soft and hard. The problem exhaustively highlighted by the applicant, noted above raises substantial question of environment. We are satisfied that the same needs to be addressed by all coastal States/UTs for protection of beaches from human induced erosion caused by hard structures. We find that

Puducherry model of SMP based on report of NIOT submitted in March 2015 addresses the issue comprehensively and can be adopted subject to any suitable change based on further study in terms of the recommendations in the said report. As suggested in the report, there is need to replace hard structures like seawalls, Groynes etc. with softer options such as beach nourishment, sand bypassing, dune planting, offshore submerged reefs, etc. Thus, the general principle of “working with nature” would be a better approach for cost-effective and sustainable coastal protection measures. There is no objection to the said model by any of the appearing parties. Further, the Tribunal also notes that depiction of high, Medium and low erosion stretches along the coast line is mandatory in the CZMPs. The CRZ Notification, 2019 regulates foreshore developmental activities based on these parameters as well. Like ports and harbours are prohibited in high erosion stretches. We also note that inspite of the CRZ Notification being issued in Jan, 2019, the CZMPs have not been finalized and approved for 11 State/UT. This is gross violation of Hon’ble Supreme Court judgment in *Indian Council For Enviro Legal ... vs Union of India & Ors.*, (1996) 5 SSC 281. Accordingly, we direct Chief Secretaries of the Coastal State/UT to finalise the CZMP and get them approved by MoEF within 2 months. The approved CZMP shall contain the parameters as listed in the CRZ 2019 Notification including High, Medium and Low erosion stretches for such erosion prone areas. SMP shall be prepared as illustrated by NIOT for such erosion prone areas. We further direct preparation/updation of their SMPs for such identified eroding stretches shown in the CZMPs within six months. Pending preparation/updation of such SMPs by the Coastal States/UTs, no further hard structures for erosion control be raised or constructed.

The application is disposed of.

A copy of this order be forwarded to all the Coastal States/UTs and MoEF&CC for compliance by e-mail.

Appeal No. 18/2017 (SZ)

84. As noted earlier challenge in the appeal is to the proposed construction of series of 19 Groynes from Ennore to Ernavoorkuppam in Madhavaram Tuluk of Tiruvallur District, Tamil Nadu by the Public Works Department (WRD). The main ground challenge of the CRZ Clearance is that construction of groynes in coastal area has adverse impact by obstructing littoral drift. The impugned clearance ignores this aspect. The impugned CRZ clearance itself mentions that the same is subject to further orders in O.A. 04/2013 which was pending on the date when CRZ Clearance was granted.

85. While dealing with the O.A. No. 4/2013 (SZ), we have approved the report of the NIOT recommending preparation of SMP which should be environmentally compatible, in the manner suggested and discussed above. We have also directed all the Coastal States/UTs in the Country to prepare their respective SMPs accordingly. The impugned CRZ Clearance is not sustainable in view of above discussion. The same is accordingly set aside without prejudice to fresh clearance being granted in accordance with the approved SMP.

The appeal is allowed in above terms.

Adarsh Kumar Goel, CP

K. Ramakrishnan, JM

Sudhir Agarwal, JM

Pushpa Sathyanarayana, JM

Dr. Satyagopal Korlapati, EM

Prof. A. Senthil Vel, EM

April 11, 2022
O.A. No. 04/2013(SZ)
With Appeal No.18/2017(SZ)
A

Item Nos.12 & 13

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 249/2023

News item on India's Sinking Islands appeared in the Hindu 19.03.2023.

WITH

Original Application No. 795/2023

News Item titled "Third of India's coastline vulnerable to erosion - here are the worst-hit states" appearing in Indian Express dated 06.12.2023.

Date of hearing: 13.03.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondent: Dr. Swait Jindal Garg, Mr. Sowmya China, Mr. Abhimanyu Kumar & Ms. Nidhi Kumar, Advs. for MoEF & CC
Ms. Madhumita Bhattacharjee, Adv. for the State of West Bengal
Mr. Gigi. C. George, Adv. for Ministry of Earth Sciences and A&N Islands
Mr. Jogy Scaria, Adv. for KSPCB
Mr. Nishe Rajen Shonker, Adv. for the State of Kerala
Mr. Maulik Nanavati, Adv. for Gujarat CZMA (Through VC)
Mr. G. Prabhu, Adv. for Kerala CZMA (Through VC)
Ms. Madhuri Donti Reddy, Adv. for Andhra Pradesh CZMA (Through VC)
Mr. Abhimanyu Garg, Adv. for UT of Puducherry (Through VC)

ORDER

1. In the O.A. No. 249/2023, the issue of danger of sea level rise and submergence of low lying island was raised and while considering that issue, the question relating to revision and upgradation of CZMP-ICRZP-IIMP as per the CRZ-ICRZ Notification 2019 arose in respect of the concerned coastal States and Union Territories. The Tribunal in the proceedings dated 08.01.2024 had noted that the CZMPs as per 2019 Notification were improved only for the State of Odisha, Karnataka and Maharashtra and ICRZP as per ICRZ 2000 Notification was approved only for Greater Nicobar Island and Little Andaman Island.

2. Now, a status report has been filed by MoEF&CC disclosing the status of compliance by different Coastal States/Union Territories as under:-

S. N.	Coastal State's / UT's	Coastal Districts/ Island	Agency preparing CZMP/ICRZP-2019	At what stage of preparation the CZMP is pending	Expected date of completion as communicated by SCZMA
1.	Andhra Pradesh	1. Srikakulam	NCSCM -	<ul style="list-style-type: none"> • Preparation of CZMP as per CRZ Notification, 2019 was awarded to M/s. NCSCM, Chennai vide Lr. dt. 31/01/2020 by the EFS&T Dept., Govt of A.P. • APPCB paid an amount of ₹1,98,66,480/ vide Lr. dt. 03/09/2020 for the above work. • APCZMA has conducted meetings with NCSCM & Stakeholder Departments on 13/09/2022, 11/05/2023, 08/06/2023, 16/08/2023, 17/08/2023 and 13/12/2023. The views and data submitted by the Stakeholder Depts., were forwarded to the NCSCM. • The draft CZMPs are at final stage. After receipt of draft CZMPs, Public Hearing Notifications will be given and further course of action will be taken to prepare final CZMPs for onward submission to the MoEF&CC, Gol, New Delhi for final approval. • The APCZMA had requested the Secretary, Ministry of Earth Sciences / (MoES) vide Lr. Dt. 01.11.2023 to prepare Shoreline Management Plan (SMP) for the Coast of Andhra Pradesh. • APCZMA has conducted meeting 	May 2024
		2. Vizianagaram			
		3. Vishakhapatnam			
		4. Anakapalli			
		5. Kakinada			

2.	Andaman & Nicobar (UT)	6. Dr. B.R. Ambedkar Konaseema		with NCCR & Stakeholders Department on 16/08/2023, 17/08/2023, 01/12/2023 & 12/12/2023. The views and date submitted by the Stakeholder Depts., were forwarded to the NCCR. The preparation of draft SMP is at final stage.	
		7. West Godavari			
		8. Eluru			
		9. Krishna			
		10. Bapatla			
		11. Prakasam			
		12. SPSR Nellore			
		13. Tirupathi			
		1. Great Nicobar	NCSCM	Approved on 01/06/2021	-
		2. Little Andaman		Approved on 12/09/202	-
		3. Flat Bay		Comments of Administration on the comments of TSC was submitted to NCSSM on 27/12/2022. Final draft IIMP from NCSCM is awaited.	On receipt of final draft from NCSCM, the ANZMA shall forward the same to the Ministry for approval within 01 month.
		4. Smith		The comments of the administration on the comments of the Technical Scrutiny Committee have been submitted to the NCSCM on 16/01/2024 for finalization of IIMP. Final draft IIMP from NCSCM is awaited.	
		5. Kamorta Island		The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 26/12/2022. The Administration is awaiting the placement of draft IIMPCRZ before the TSC.	On receipt of final draft from NCSCM, the ANZMA shall forward the same to the Ministry for approval within 01 month.

		<p>6. <i>Swaraj Dweep (Havelock)</i></p>	<p>The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 07/03/2023. The Administration is awaiting the placement of draft ICRZ before the TSC.</p>	
		<p>7. <i>Rutland</i></p>	<p>The comments of administration on claims/objections / suggestions of general public and stakeholder have been submitted to NCSCM for placing the same before the technical scrutiny committee on 07/03/2023. The Administration is awaiting the placement of draft ICRZ before the TSC.</p>	
		<p>8. <i>Long island</i></p>	<p>The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 23/11/2023. The Administration is awaiting the placement of draft ICRZ before the TSC.</p>	<p>On receipt of final draft from NCSCM, the ANZMA shall forward the same to the Ministry for approval within 01 month.</p>
		<p>9. <i>Baratang</i></p>	<p>The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 23/11/2023. The Administration is awaiting the placement of draft ICRZ before the TSC.</p>	

		10. <i>Middle Andaman</i>		<i>The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 23/11/2023. The Administration is awaiting the placement of draft ICRZ before the TSC</i>	
		11. <i>North Andaman</i>		<i>The comments of administration on claims/objections / suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 23/11/2023. The Administration is awaiting the placement of draft ICRZ before the TSC</i>	
		12. <i>Car Nicobar</i>		<i>The comments of administration on claims/objections/ suggestions of stakeholders have been submitted to NCSCM for placing the same before the TSC on 23/11/2023. The Administration is awaiting the placement of draft ICRZ before the TSC</i>	
		13. <i>Shaheed Dweep (Neil)</i>		<i>The preparation of draft comments of the Administration on the comments / claims / objection suggestion of the stakeholders and general public is finalized.</i>	<i>The comments of the Administration on the comments/suggestions/claims/objections of stakeholder shall be submitted to the NCSCM shortly.</i>
		14. <i>South Andaman</i>		<i>The draft comments of the Administration on the comments /claims/ suggestions / objections of the stakeholder have been submitted to the Competent authority for approval and will be forwarded to NCSCM shortly.</i>	<i>On receipt of approval, the comments of the Administration shall be submitted to the NCSCM for placing the same before the TSC.</i>

		15. Ayes		The comments of the A&N Administration on the IIMP of Avis Island have not yet been finalized due to SLP No.25445/2019 filed in the Hon'ble Supreme Court. The Administration is in the process of seeking relief from the Apex court to allow the finalization of the IIMP.	On receipt of relief from the Hon'ble Court, the comments of the Administration shall be submitted to the NCSCM for placing the same before TSC within 01 month.
		16. North Passage, Stewart, East Narcondum and Curlew Island, Interview & Tillong Chong Island.		The draft CZMPs are awaited.	On the receipt of draft, further course of action, as per EIA Notification, 2006 shall be carried out, and Administration comments on public hearings and allied issues will be sent to NCSCM within 3 months for placement before the TSC.
		17. Teressa, Strait, Nancowrie, Pillomillow, Little Nicobar Katchal Island & Chowra		The public/stakeholder consultation and the collection of field data by NCSCM are awaited to prepare the draft IIMP plan.	On the receipt of draft, further course of action, as per EIA Notification, 2006 shall be carried out, and Administration comments on public hearings and allied issues will be sent to NCSCM within 3 months for placement before the TSC.
		18. Netaji Subash Chandra Bose Dweep		The draft IIMP is awaited from NCSCM.	On the receipt of draft, further course of action, as per EIA Notification, 2006 shall be carried out, and Administration comments on public hearings and allied issues will be sent to NCSCM within 3 months for placement before the TSC.
3.	Daman & Diu		NCSCM	Under process	
4.	Goa	1. North Goa	NCESS	Under process	May, 2024

		2. South Goa		Under process	
5	Gujrat	1. Ahmedabad	NCSCM	Public hearings have been completed in the month of January- February, 2024 in 13 coastal districts. Public hearing has been scheduled for remaining 03 districts- Bhavnagar, Amreli & Kutch on 05/03/2024, 01/03/2024 & 03/03/2024 respectively	Public hearing will be completed by first week of March, 2024 for all the coastal districts. Suggestions/ recommendation of public consultation process will be submitted for all the coastal districts by 15/03/ 2024. NCSCM will finalize CZMP for submission to GCZMA for which NCSCM will be consulted
		2. Bharuch			
		3. Gir Somnath			
		4. Surat Naysari			
		5. Junagarh			
		6. Valsad			
		7. Amreli			
		8. Porbandar			
		9. Devbhumi			
		10.Dwarka			
		11.Anand			
		12.Vadodara			
		13.Bhavnagar			
		14.Jamnagar			
		15.Kutch			
		16.Morbi			
6.	Karnataka	1. Uttara Kannada	NCSCM	Approved on 02/09/2022.	
		2. Udupj			
		3. Dakshina Kannada			
7.	Kerala	1. Kasargod	NCESS	Draft CZMP 2019 pertaining to Kerala	To be placed before the TSC in the next

		2. Kannur 3. Kozhikode 4. Malappuram 5. Thrissur 6. Ernakulam 7. Kottayam		has been forwarded to National Centre for Sustainable Coastal Management for placing before the Technical Scrutiny Committee.	meeting i.e. March, 2024
		8. Alappuzha 9. Kollam 10. Thiruvananthapuram			
8.	Lakshadweep (UT)	1. Bangaram 2. Suheli 3. Cheriam 4. Tinnakara 5. Minicoy 6. Kadmat 7. Kavaratti 8. Agatti 9. Androth 10. Amini 11. Kalpeni 12. Chetlat 13. Kiltan 14. Bitra	NCSCM	Draft report of IIMPs of Suheli, Kadamat and Minicoy is completed and the preparation of IIMPs of other Islands is under progress.	Public Hearing to be completed by March, 2024
9.	Maharashtra	1. Mumbai City 2. Mumbai Sub-Urban 3. Raigad 4. Ratnagiri 5. Sindhudurg	NCSCM	Approved on 29/09/2021 Approved on 25/08/2023.	

		6. Thane		
		7. Palghar		
10.	Odisha	1. Balasore	ORSAC/SAC	Approved on 01/06/2021.
		2. Puri		
		3. Bhadrak		
		4. Ganjam		
		5. Jagatsinghapur		
		6. Kendrapara		
		7. Khorda		
11.	Puducherry (UT)	1. Puducherry	NCSCM	Public Hearings for the Draft CZMP of Mahe and Yanam regions were completed on 24/03/2023 and 12/04/2023 respectively. The Public Hearings For Puducherry and Karaikal regions are scheduled on 20/03/2024 and 22/03/2024.
		2. Karaikal		
		3. Yanam		
		4. Mahe		
12.	Tamil Nadu	1. Tiruvallur	NCSCM	The NCSCM has requested all Coastal District administrations to depute two representatives from the Fisheries and Revenue department. The representatives is being presented at NCSCM and making corrections in the draft CZMP from 18/01/2024 to 12/03/2024. The work is under progress.
		2. Chennai		
		3. Chengalpattu		
		4. Villupuram		
		5. Cuddalore		
		6. Mayiladuthurai		
		7. Nagapattinam		
		8. Thiruvarur		
		9. Thanjavur		
		10. Pudukottai		
		11. Ramanathapuram		
		12. Thoothukudi		
				By October, 2024, the CZMP will be submitted to the TSC.

		13. <i>Tirunvelveli</i>			
		14. <i>Kanyakumari</i>			
13.	West Bengal	<i>Purba Medinipur</i>	<i>IESWM</i>	<ul style="list-style-type: none"> <i>Draft is complete Clarification is sought from NCSCM regarding integration of shoreline data.</i> 	<i>Clarifications from NCSCM.</i>
		<i>North 24 Parganas</i>		<ul style="list-style-type: none"> <i>Draft is complete Clarification is sought from NCSCM regarding integration of shoreline data.</i> 	<i>Clarifications from NCSCM.</i>
		<i>South 24Parganas</i>		<ul style="list-style-type: none"> <i>Work is under progress.</i> 	<i>It will be completed by June 2024</i>

3. From the above chart, we gather that for many of the Coastal States/Union Territories even the outer time limit for formulating the CZMP-ICRZP as per the 2019 Notification have not been disclosed and the prompt and expeditious steps have not been taken. For some of the States, the outer time limit of March or May, 2024 have been disclosed. It is utmost essential and pre-requisite to have CZMPs-ICRZPs in place prior to granting permissions to undertake developmental works/projects.

4. In these circumstances, we direct the Chief Secretaries/LGs of Coastal States/Union Territories under consideration to file the affidavit before the Tribunal within six weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF disclosing the outer time limit within which the CZMP-ICRZP as per the 2019 Notification will be finally formulated/revised and submitted to the MoEF&CC, failing which the concerned Chief Secretary will appear virtually on the next date of hearing and explain the reason for non-submission of such an affidavit.

5. List on 24.05.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

March 13, 2024
Original Application No. 749/2023
SN

Item No. 08

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 249/2023

In re: News item published in Newspaper The Hindu dated 19.03.2023
titled **“India’s Sinking Island”**

Date of hearing: 08.01.2024

**CORAM: HON’BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON’BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON’BLE DR. A. SENTHIL VEL, EXPERT MEMBER**Respondent: Mr. Gigi. C. George, Adv. for Ministry of Earth Sciences
Dr. Swati Jindal Garg, Mr. Soumya China, Mr. Kunal Kakumanu, Ms.
Nidhi Kumar, Mr. Abhimanyu Kumar & Ms. Anjali Kaushik, Advs. for
MoEF & CC
Mr. Maulik Nanavati, Adv. for R - 1 (Through VC)
Mr. Abhimanu Garg, Adv. for R - 12 (Through VC)**ORDER**

1. The issue involved in this Original Application relates to the dangers of sea level rise and submergence of low lying islands. The Tribunal in the previous proceeding had considered the Notification dated 18.01.2019 issued by the MoEF&CC providing for formulation of Integrated Island Management Plans (IIMPs) by the respective States/Union Territories for the concerned islands. The Tribunal had also directed impleadment of State Coastal Zone Management Authorities and Union Territory Coastal Zone Management Authorities. Accordingly, notices were directed to be issued. The memo of parties prepared by the office in terms of the direction of the Tribunal reveals that, as many as, 16 respondents have been impleaded.

2. The reply on behalf of the respondent no. 14, Secretary, Ministry of Environment, Forest and Climate Changes has been filed which reveals that the CZMPs as per 2019 Notification have been approved only for the

State of Odisha, Karnataka and Maharashtra and ICRZP as per ICRZ 2019 Notification has been approved only for Great Nicobar Island and Little Andaman Island. The reply further reveals that the National Coastal Zonal Management Authority (NCZMA) in its 46th meeting dated 01.08.2023 had directed that all Coastal States/Union Territories, whose CZMPs/ICRZP are yet to be finalized as per 2019 Notification, must complete the same within two months by 31.10.2023. It has been pointed out by the learned Counsel for respondent no. 14 that apart from the three States and two islands of Union Territories noted above, no other State or Union Territory has formulated the plan till now. The stand of the respondent no. 14 is that by the Notification dated 30.09.2022, the Central Government has delegated its power under Section 23 of the Environment (Protection) Act, 1986 to issue direction under Section 5 of the Act to the State Coastal Zone Management Authorities and Union Territory Coastal Zone Management Authorities within their respective jurisdictions with the conditions and limitations which have been provided in the said Notification. Since, inspite of the direction of NCZMA, the CZMP/ICRZP have not formulated the plan. Hence respondent no. 14 is required to ensure that the plan is prepared by each Coastal Management Authority and Union Territory Coastal Management Authority expeditiously within a time bound period.

3. Learned Counsel for respondent no. 14 has prayed for time to obtain instructions in this regard and place the stand of respondent no. 14 by way of the report at least one week before the next date of hearing.

4. All the States and Union Territory Coastal Zone Authorities, who have been impleaded as respondents in this OA and issued notice in terms of the previous order, are directed to file their response, at least one week before the next date of hearing.

5. List on 06.03.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

January 08, 2024
Original Application No. 249/2023
SN.