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

Original Application No. 74 of 2014

Appeal No. 14 of 2014

Appeal No. 71 of 2014

Appeal No. 88 of 2014

Original Application No. 74 of 2014

In the matter of:

1. Wilfred J.,
S/O John Netto,
Valiyathopu, Thekkekara,
Kochuthura, Puthiyathura P.O.,
Trivandrum, Kerala-695226
2. Marydasan V.,
S/O Varghese F.,
Ebin House, Adimalathura,
Chowara P.O., Trivandrum, Kerala-695501.

..... Applicants

Versus

1. Ministry of Environment and Forests,
Through the Principal Secretary,
Paryavaran Bhawan,
CGO Complex, Lodhi Road, New Delhi-110003
2. State of Kerala,
Kerala Coastal Zone Management Authority,
Through its Secretary,
Sasthra Bhavan, Pattom Palace P.O.,
Thiruvananthapuram-695 004.
3. Vizhinjam International Seaport Ltd.
(A Govt. of Kerala Undertaking)
Through-Managing Director & CEO,
Vipanchika Tower,
1st Floor, Near Govt. Guest House, Tycaud P.O.,
Thiruvananthapuram, Kerala-695014.
4. National Coastal Zone Management Authority,
Through its Chairman,

C/o Ministry of Environment & Forests,
Paryavaran Bhawan, CGO Complex,
Lodhi Road, New Delhi-110003.

....Respondents

Counsel for Applicants :

Mr. Raj Panjwani, Sr. Adv. With Mr. Aagney Sail, Adv.

Counsel for Respondents :

* *Ms Pinky Anand Additional Solicitor General and*
Mr. Krishna Kumar Singh Adv. and Ms. Somya Rathore for
MoEF Respondent No. 1 and 4.

Mr. Krishnan Venugopal, Sr. Adv. with Mr. G. Prakash. Mr.
Jishnu M.L. and Mr. Gaurav Ray, Advs. Respondent No. 2

Mr. Vikas Singh, Sr. Adv. with Ms. Amrita Narayan, Ms.
Pragaya Ohri and Ms. Kanika Chugh, Advs. for VISL,
Respondent No. 3

Appeal No. 14 of 2014

In the matter of:

1. Wilfred J.,
S/O John Netto,
Valiyathopu, Thekkekara,
Kochuthura, Puthiyathura P.O.,
Trivandrum, Kerala-695226
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(A Govt. of Kerala Undertaking)

* *Corrected vide order dt 5/9/16*
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Through-Managing Director & CEO,
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4. National Coastal Zone Management Authority,
Through its Chairman,
C/o Ministry of Environment & Forests,
Paryavaran Bhawan, CGO Complex,
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....Respondents

Counsel for Appellants:

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Counsel for Respondents :

- #₂ *Ms Pinky Anand Additional Solicitor General and*
Mr. Krishna Kumar Singh Adv. and Ms. Somya Rathore for
MoEF Respondent No. 1 and 4.
Mr. Krishnan Venugopal, Sr. Adv. with Mr. G. Prakash. Mr.
Jishnu M.L. and Mr. Gaurav Ray, Adv. Respondent No. 2
Mr. Vikas Singh, Sr. Adv. with Ms. Amrita Narayan, Ms.
Pragaya Ohri and Ms. Kanika Chugh, Adv. for VISL,
Respondent No. 3

Appeal No. 71 of 2014

In the matter of:

1. A. Joseph Vijayan
Maithri, 41 Asan Nagar,
Thiruvananthapuram-695008
2. P. Christopher
T.C. 69/847, Pallivilakam Purayidam, Poonthura
Thiruvananthapuram-695 026
3. P. Michael,
T.C. 69/415, Karadikkudilil
Poonthura, Thiruvananthapuram-695026

.....Appellants

Versus

1. The Union of India
Through the Secretary
Ministry of Environment and Forests
CGO Complex, New Delhi
2. The State of Kerala
Through its Principal Secretary
Ports Department, Govt. Secretariat

Thiruvananthapuram-695 001

3. Kerala State Pollution Control Board
Through its Member Secretary,
Pattom P.O., Thiruvananthapuram-695 004
4. Vizhinjam International Seaport Limited
Managing Director and Chief Executive Officer
1st Floor, Vipanchika Tower,
Near Govt. Guest House
Thycaud P.O.,
Thiruvananthapuram-695 014, Kerala

..... Respondents

Counsel for Appellants:

Mr. Ritwick Dutta, Mr. Rahul Choudhary and Ms. Meera Gopal, Advs.

Counsel for Respondents :

- #3 Ms. Pinky Anand, Additional Solicitor General and*
Mr. Krishna Kumar Singh Adv. and Ms. Somya Rathore for MoEF Respondent No. 1.
Mr. Krishnan Venugopal, Sr. Adv. with Mr. G. Prakash. Mr. Jishnu M.L. and Mr. Gaurav Ray, Advs. Respondent No. 2
Reegan.S. Bel for Mr. Jogy Scaria and Ms. Beena Victor, Advs. for Respondent No. 3
Mr. Vikas Singh, Sr. Adv. with Ms. Amrita Narayan, Ms. Pragaya Ohri and Ms. Kanika Chugh, Advs. for VISL, Respondent No. 4

Appeal No. 88 of 2014

In the matter of:

1. Anto Elias,
Thyvilakam House, Neerajam
Valiaveli PO
Thiruvananthapuram-695 021

..... Appellant

Versus

1. The Union of India
Through the Secretary
Ministry of Environment and Forests
CGO Complex, New Delhi
2. The State of Kerala
Through its Principal Secretary
Ports Department,

Thiruvananthapuram-695 001

3. Kerala State Pollution Control Board
Through its Member Secretary,
Pattom P.O., Thiruvananthapuram-695 004
4. Vizhinjam International Seaport Limited
Managing Director and Chief Executive Officer
1st Floor, Vipanchika Tower,
Near Govt. Guest House
Thycaud P.O.,
Thiruvananthapuram-695 014, Kerala

..... Respondents

Counsel for Appellants:

#4 *Mr. Raj Panjwani Sr. Adv. with Mr. Manish Sangwan Adv.*
Mr. Ritwick Dutta, Mr. Rahul Choudhary and Ms. Meera
Gopal, Advs.

Counsel for Respondents :

#5 *Ms. Pinky Anand, Additional Solicitor General and*
Mr. Krishna Kumar Singh Adv. and Ms. Somya Rathore for
MoEF Respondent No. 1.
Mr. Krishnan Venugopal, Sr. Adv. with Mr. G. Prakash. Mr.
Jishnu M.L. and Mr. Gaurav Ray, Advs. Respondent No. 2
Mr. Vikas Singh, Sr. Adv. with Ms. Amrita Narayan, Ms.
Pragaya Ohri and Ms. Kanika Chugh, Advs. for VISL,
Respondent No. 3
Reegan.S. Bel for Mr. Jogy Scaria and Ms. Beena Victor, Advs.
For Kerala State Pollution Control Board Respondent No. 4

JUDGMENT

PRESENT:

Hon'ble Mr. Justice Swatanter Kumar (Chairperson)
Hon'ble Mr. Justice M.S. Nambiar (Judicial Member)
Hon'ble Mr. Justice Raghuvendra S. Rathore (Judicial Member)
Hon'ble Mr. Bikram Singh Sajwan (Expert Member)

Reserved on: 11th August, 2016

Pronounced on: 02nd September, 2016

1. Whether the judgment is allowed to be published on the net? *Yes.*
2. Whether the judgment is allowed to be published in the
NGT Reporter? *Yes.*

RAGHUVENDRA S. RATHORE J. (JUDICIAL MEMBER)

As all these matters are having identical facts; between the same parties; relating to the very same project and challenge has been made to EC/ CRZ granted by respondent no. 1, so they are being decided by this common judgment.

2. To begin with it may be mentioned that after completion of pleadings these matters were kept for hearing. A Bench of five Members had finally heard the cases and the judgment was reserved on 11.08.2016. Before the judgment could be pronounced, one of the Hon'ble Member Prof. A.R. Yousuf (Expert Member) had demitted office on 27th August, 2016. Therefore, the case was again listed for direction before the Tribunal. The Learned Counsels for the respective parties appeared on 29.08.2016 and following order was passed:

“In order to avoid any objection being taken by any of the parties either with regard to constitution of the Bench or the Members of the Bench. We put to the Learned counsel appearing for the parties to take instructions on the matter.

All the Learned counsel appearing for the parties unanimously and without exception stated that the remaining 4 Members may pronounce the judgment and none of the parties to would raise to would raise any objection either with regard to the constitution of the Bench or the number of the Members of the Bench, deciding the matter.

The case therefore is again reserved for judgment.”

3. The material facts of the cases are as under:

**Original Application No. 74 of 2014
Wilfred J. & Anr. Vs. MoEF & Ors.**

This Original Application has been filed under Section 14 of the National Green Tribunal Act, 2010 by the persons who are said to be interested in protection of environment and ecology, especially pertaining to the coastal areas of Mulloor. They have filed this application on behalf of residents of Mulloor area as well as on their own behalf, as being affected. They have sought the following reliefs:

- A. *Direct that the coastal 'areas of outstanding natural beauty' and 'areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time' along the coastline of India be protected as CRZ-I areas or otherwise, notwithstanding their non-inclusion in the CRZ Notification, 2011.*
- B. *Direct that coastal areas, throughout the country, including the Vizhinjam coast, which have been declared as areas of outstanding natural beauty or declared as 'areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time' under the CRZ Notification, 1991, be preserved and no activity which would damage such areas be undertaken.*
- C. *To pass any such order as this Hon'ble Tribunal may find fit and proper in the facts and circumstances of the case.*

4. **Appeal No. 14 of 2014
Wilfred J. & Anr. Vs. MoEF & Ors.**

This appeal, under Section 16 of the National Green Tribunal Act, has been filed by the Appellants challenging the order F. No. 11-122/0211-IA-111 dated 3rd January, 2014, passed by Ministry of Environment and Forest, Government of India, granting Environmental and CRZ clearance for development of Vizhinjam International Deepwater Multipurpose Seaport, at Vizhinjam in Thiruvananthapuram District of State of Kerala. The appellants have made the following prayers:

- A. *Set aside the order F. No. 11-122/0211-IA-111, of the Government of India, Ministry of Environment and Forests dated 3rd January, 2014 granting Environmental and CRZ clearance for development of Vizhinjam International Deepwater Multipurpose Seaport at Vizhinjam in Thiruvananthapuram District of Kerala.*
- B. *To pass any such order as this Hon'ble Tribunal may find fit and proper in the facts and circumstances of the case.*

5. Appeal No. 71 of 2014

A. Joseph Vijayan Vs. Union of India & Ors.

This appeal, under Section 16 of the National Green Tribunal Act, has been filed by residents of District Thiruvananthapuram who are said to be social workers and fishermen living in Poonthura in the District of Thiruvananthapuram. The appeal has been filed against the Environmental and CRZ clearance order issued by Ministry of Environment and Forest on 3rd January, 2014. The appellant have made the following prayers:

- A. *Quash the environmental clearance granted by the MoEF No. F No. 11-122-IA-III dated 3rd January, 2014.*

B. Pass any such order as this Hon'ble Tribunal may consider fit and proper in the facts and circumstances of the case.

**6. Appeal No. 88 of 2014
Anto Elias Vs. Union of India & Ors.**

The appellant is said to be a fisherman engaged in small scale fishing, in the area of Thiruvananthapuram District, for his livelihood. He has filed this appeal against the Environmental and CRZ clearance order issued by Ministry of Environment and Forest on 3rd January, 2014.

He has made following prayers:

A. Quash the order of the Ministry of Environment and Forests dated 03/01/2014 for the development of Vizhinjam International Mutipurpose Seaport at Vizhinjam in Thiruvananthapuram District, Kerala.

B. Pass any such order as this Hon'ble Tribunal may feel fit and proper in the facts and circumstances of the case.

7. On appearance of the respondents, after receiving the notices, preliminary objections were raised by them with regard to-

1. Limitation in filing the appeal No. 14 of 2014, after a delay of 58 days. Other objections were taken by the respondents in Original Application No. 74 of 2014 as well as in Appeal No. 14 of 2014, which are as under:

A. The NGT being a creation of a statute is not vested with the powers of judicial review so as to examine the constitutional validity/vires or legality of a legislation- whether subordinate or delegated (in the present case, the CRZ Notification, 2011). Exercise of such jurisdiction would tantamount to enlarging its own jurisdiction by the Tribunal.

B. The Principal Bench of National Green Tribunal does not have any territorial jurisdiction to entertain and decide these cases as the cause of

action has arisen at Kerala and the coastal zone that is the subject matter of the Petition is in Kerala.

C. The Chairperson of the National Green Tribunal, unlike some of the other statutes, is not vested with the power to transfer cases to its Principal or Regional Benches from other Benches.

D. The Original Application No. 74 of 2014 is a device to indirectly and effectively seek insertion of certain words into the CRZ Notification, 2011, which is impermissible.

8. After thoroughly considering the facts of the case and the detailed submissions made by the counsels for respective parties that this Tribunal had, on 17.07.2014, decided the issue of limitation, involving a delay of 58 days, in favour of the appellant by passing an order of condoning the delay. In so far as the other objections raised by the respondents are concerned the Tribunal had held as follows:

A. NGT has complete and comprehensive trappings of a court and within the framework of the provisions of the NGT Act and the principles afore-stated, the NGT can exercise the limited power of judicial review to examine the constitutional validity/vires of the subordinate/delegated legislation. In the present case the CRZ Notification of 2011, that has been issued under provisions of the Environment Protection Act, 1986. However, such examination cannot extend to the provisions of the statute of the NGT Act and the Rules framed thereunder, being the statute that created this Tribunal. The NGT Act does not expressly or by necessary implication exclude the powers of the higher judiciary under Articles 226 and/or 32 of the Constitution of India. Further, while exercising the 'limited power of judicial review', the Tribunal would perform the functions which are supplemental to the higher judiciary and not supplant them.

B. In the facts and circumstances of the case in hand, part of cause of action has arisen at New Delhi and within the area that falls under territorial

jurisdiction of the Principal Bench of NGT. Thus, this bench has the territorial jurisdiction to entertain and decide the present cases.

C. On the cumulative reading and true construction of Section 4 (4) of the NGT Act and Rules 3 to 6 and Rule 11 of Rules of 2011, the Chairperson of NGT has the power and authority to transfer cases from one ordinary place of sitting to other place of sitting or even to place other than that. The Chairperson of NGT has the power to decide the distribution of business of the Tribunal among the members of the Tribunal, including adopting of circuit procedure in accordance with the Rules. An applicant shall ordinarily file an application or appeal at ordinary place of sitting of a Bench within whose jurisdiction the cause of action, wholly or in part, has arisen; in terms of Rule 11 which has an inbuilt element of exception.

D. Original Application No. 74 of 2014 cannot be dismissed as not maintainable on the ground that it attempts to do indirectly which cannot be done directly and which is impermissible.

9. Thereafter the respondents filed an SLP before the Hon'ble Supreme Court challenging the aforesaid order passed by the Tribunal. Initially, on 21st of January, 2015, the Hon'ble Supreme Court had passed an interim order in the term that all further proceedings, qua the appellants, are stayed in the Appeals and Original Application, till further orders.

However, later on the Hon'ble Supreme Court had on 03.02.2016, passed the following orders:

“Having heard learned counsel for the parties at some length, we are inclined to modify the said order so as to permit the Tribunal to proceed with the hearing of the Appeals and the Original Application for an expeditious disposal of the same. Learned counsel for the parties also agree that the appeals and the original application could be finally heard and that neither party shall pray for any interim direction in the said matters nor seek any adjournment

which may unnecessarily procrastinate the entire controversy.

In the circumstances, therefore, we modify our Order dated 21.01.2015 and permit the National Green Tribunal, Principal Bench at Delhi to proceed with the hearing of the appeals and Original Application and make an endeavour to dispose of the same as far as possible within a period of six weeks from the date a copy of this order is placed before it. We make it clear that hearing of the Appeals and O.A. on merits pending before the Tribunal shall be without prejudice to the contentions open to the parties in these appeals which shall await the final hearing and disposal of the matter by the Tribunal. These appeals shall accordingly stand over for being listed after the disposal of the matters by the Tribunal. Liberty is given to the parties to mention the matter once the Tribunal passes final orders in the case before it.”

Subsequently, these matters were placed before the Tribunal on 18th February, 2016, in furtherance of the aforesaid order passed by the Hon'ble Supreme Court. The Tribunal had then directed that the matters be listed for hearing on day to day basis, with effect from 17th March, 2016. The respondents were given opportunity to file additional documents if any and thereafter rejoinder and additional documents by the applicants/appellants. After completion of the pleadings, the cases were heard by the Tribunal on top most priority and the arguments of the parties were concluded on 11th August, 2016.

Relevant Facts

10. The Government of Kerala appointed Vizhinjam International Sea Port Limited (VISL) as the nodal agency to develop an International container transshipment

terminal at Vizhinjam in Thiruvananthapuram District, State of Kerala. The Vizhinjam International Sea Port Limited formulated a project for development of Vizhinjam International deepwater multi-purpose sea port at Vizhinjam. This project involves construction of quays, terminal area and port building. It is expected to be completed in three phases. The first phase is proposed to be built on 66 hectares of land which is to be reclaimed from the sea. The material required for the said phase is proposed to be procured from dredging activities in the sea. Building of the said phase requires 7 million metric tonnes of stone, aggregates, sand and soil for construction of a breakwater stretching which would be about 3.180 kms into the sea. The material is said to be sourced from blasting quarries in Trivandrum and neighbouring district of Kanyakumari in Tamil Nadu State, possibly falling in Western Ghats region. The project proponent submitted an application on 28th August, 2010, in the prescribed format, for obtaining the Environmental Clearance. On the basis of the Application submitted, the Terms of Reference (ToR) were prepared and considered by the Expert Appraisal Committee (EAC) in its 95th Meeting held on 18th – 20th January, 2011, in 100th Meeting held on 11th – 12th May, 2011 and 101st Meeting held on 21st May, 2011 and recommended a project-specific (Non-Site Specific) TOR with the direction that after the site

selection, based on site selection criteria, it shall issue additional site specific TOR. The TOR (Site Specific) were issued by the Ministry of Environment and Forests vide its letter dated 10th June, 2011.

11. The Government of Kerala had therefore, undertaken the site selection exercise and came to the conclusion that the area of south of Vizhinjam fishing Harbour is best suited for the project. The said decision was communicated to the officers of the Ministry of Environment and Forests on 14th June, 2011. Subsequently, the Expert Appraisal Committee, in its 102nd Meeting held on 23rd and 24th June, 2011, agreed on the Vizhinjam site and finalized the additional TOR. The Ministry of Environment and Forests also finalized the same for the project vide letter dated 1st July, 2011.
12. On the basis of TOR issued by the MoEF the project proponent started preparation of comprehensive Environmental Impact Assessment. A draft comprehensive report of Environmental Impact Assessment was submitted by Consultants to the Project Proponent on 25th May, 2013. In furtherance thereof a public hearing was conducted on 29th June, 2013. A final Environmental Impact Assessment (EIA) report was submitted to Expert Appraisal Committee for securing Environmental Clearance. It is the case of Applicants/Appellants that individuals and organizations filed objections to lacuna in

Environmental Impact Assessment Report, raising doubt about the viability of the project. Such objections were sent to the Expert Appraisal Committee by Email. Finally, Expert Appraisal Committee considered the Environmental Impact Assessment report in its 120th meeting held on 19th – 21st September, 2013 and 128th meeting on 20th – 23rd November, 2013. In the said meeting Expert Appraisal Committee recommended the project for Environmental Clearance. The clearance was then granted by Ministry of Environment and Forests for Stage I of the Vizhinjam Project, vide its letter dated 3rd January, 2014.

13. The National Coastal Zone Management Authority (NCZMA) had recommended, in its 21st meeting and 22nd meeting held on 19th April, 2011 and 13th May, 2011 respectively, that the Ministry of Environment and Forests may not look to encourage the reclassification of CRZ areas, which were approved in September, 1996, as they were in danger of regularization of violations through such reclassifications, hence, the CZMP as approved in 1996 may be frozen and the coastal States should initiate the exercise of preparation of CZMP as per the Coastal Regulation Zone Notification, 2011. It may also be mentioned here that the said sea port is also proposed as an all weather multi purpose deepwater green field port. The project also involved ancillary activities such as container yard, cargo handling yard, Navigational aids,

weigh bridges and various other facilities. The project is envisaged in three phases and the present approval has been granted for phase one.

14. The site of the proposed project, in its immediate vicinity, is inhabited by small scale fishermen who depend on Coastal and offshore water of the District and fishing for their livelihood. They also make use of existing fishery harbour at Vizhinjam for safe venturing into the sea during the rough monsoon weather for more than three months every year, after its construction about 40 years ago. During these monsoon months it is otherwise very difficult to go for fishing from the respective places. Fishing is the traditional occupation of the fishermen, with fishing and navigation skills passed on through generations. The fishes also form rich protein source to population in coastal areas as well as hinterland.

15. The fishermen and the families have their houses on Coastal land as it is a prerequisite to continue with their occupation. The coastal land in Poonthura as well as main land in the neighbourhood are faced with erosion and loss of land as well as dwellings. Hundreds of houses had been destroyed for the last 30 to 40 years due to erosion in Poonthra along with other coastal areas and the State had spent crores of rupees for constructing sea walls to counter erosion, but all in vain. Thousands of people were rehabilitated in the lands available towards the east of the

sea, over the period, due to this problem of erosion and subsequent change in the coastal line of Poonthra and other coastal villages because of human intervention.

16. The case of the applicants, in the Original Application, is that they seek to protect and safeguard coastal areas of outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/ Union territory level from time to time, the categories which were deleted from the classification of CRZ-I areas in Para 7(i) CRZ-I of the Coastal Zone Regulation Notification, 2011. Further, it is submitted by the applicant that as per Para 6(1) (i) of the Coastal Zone Regulation Notification, 1991, coastal areas of outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time, were categorized/classified as CRZ-1 areas.

The applicant have sought to raise the question relating to environment with respect to deletion of the phrase/criteria areas of outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as

may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time, from the classification of the CRZ-I area which, according to them, is violative of Articles 14 and 21 of the Constitution and also against the principles of Sustainable Development, precautionary principle and public trust doctrine.

17. Further, the case of the applicant is, as per the CZR Notification, 1991, the State Governments and Union Territories were directed to prepare Coastal Zone Management Plans (CZM Plans) with High Tide Line, 500 metres regulation line, other boundaries and different categories of coastal areas for the approval of MoEF. The CZM Plan of Kerala was prepared in December, 1995 by the Government of Kerala which identified Vizhinjam as,

“...Thiruvanthapuram District

Pozhiyoor-Pulinkudi

In this southernmost section (bordering Tamil Nadu) there is a coastline of 13 km. Pozhiyoor-Chowara (Adimalathura) coast backed by cliff having the Neyyar river with its backwaters in the south and Chowara Thodu on the North. Both the systems have inlets (pozhis) and they play a major role in the formation of the beaches. The beach width (LTL to HTL) varies from 50 to 150 meters, and the total beach area is 0.776 sq km. Pulinkudi has a rocky coast and Chowara has laterite cliff of about

2km length, behind the substantially accreted Adimalathura coast.

18. The entire area comes under category III (CRZ-III) except for a stretch adjoining the laterite cliff zone (0.063 sq km), which is earmarked as CRZ I, considering the outstanding natural beauty of the area and its susceptibility to slumping. The entire rocky promontory at Pulinkudi is also an area of outstanding natural beauty. However, its aerial extent is not determined for want of appropriate yard stick. The area coming under regulation close to the sea and at the backwaters (up to the point of tidal influx) is given in Table 9.

Vizhinjam-Beemapalli

19. This complex coast consisting of rocky areas (Mulloor, in the south and Vizhinjam-Kovalam sector), laterite cliffs (between Mulloor and Vizhinjam), pocket beaches (at Vizhinjam-Kovalam), barrier beaches (Panathura) and an open coast (Poonthura-Beemapalli) has a total length of about 9.5 kms. Karamana river, which debouches at Panathura-Pachallur area, has a 3 km backwater system and a dynamic inlet. Vizhinjam has a fishing harbor with a wave energy plant and Kovalam is an international tourist destination. The Vizhinjam-Kovalam section is of outstanding natural beauty (CRZ-I), but the area is not demarcated. The laterite cliff area which also comes under this category is subject to slumping at High Water and this

can be accelerated by a rise in sea level. Hence, a 50m zone is identified as CRZ-I. Rest of the area, (Mulloor to Pachalloor) since it comes under the rural sector, is CRZ-III. North of Pachallur is the Thirvananthapuram Corporation area, which is CRZ-II. The Parvathi Puthen Ar canal and the Karamana river upto about 1.5 Km from HTL is subject to tidal influx and hence their flanks has to be regulated.

20. It is also the case of the Applicants/ Appellants that the issue was raised in opposition to the project at the public hearing and otherwise, the project site was located in Coastal Regulation Zone-I area, owing to its areas of outstanding natural beauty as per the Coastal Zone Management Plan, Kerala, prepared in December 1995. Even this issue was not addressed by the EAC. The National Coastal Zone Management Authority (NCZMA) had recommended on 19th April, 2011 and 30th May, 2011 respectively, that MoEF may not like to encourage the reclassification of CRZ areas, which were approved in September, 1996 as they were in danger of regularization of violations through such reclassifications. Hence the CZMP as approved in 1996 may be frozen and the coastal States should initiate the exercise of preparation of CZMP as per the Coastal Regulation Zone Notification, 2011. Vide CRZ Notification of 1991, the State Governments and Union Territories were directed to prepare the CZMP with

High Tide Line, 500 metres regulation line, other boundaries and different categories of coastal areas for the approval of MoEF. The State of Kerala prepared the said plan which identified Vizhinjam as follows:

“This complex coast consisting of rocky areas (Mullor, in the south and Vizhinjam-Kovalam sector), laterite cliffs (between Mullor and Vizhinjam), pocket beaches (at vizhinjam-Kovalam), barrier beaches (Panathura) and an open coast (Poonthura-Beemapalli) has a total length of about 905 km. Karamana river, which debouches at Panathura-Pachallur area, has a 3km backwater system and a dynamic inlet. Vizhinjam has a fishing harbour with a wave energy plant and Kovalam is an international tourist destination. The Vizhinjam-Kovalam sector is of outstanding natural beauty (CRZ-I) but the area is not demarcated. The laterite cliff area which also comes under this category is subject to slumping at High Water and this can be accelerated by a rise in sea level. Hence, a 50m zone is identified as CRZ-I. Rest of the area (Mullor to Pachlloor) since comes under the rural sector is CRZ-III. North of Pachallur is the Trivandrum Corporation area, which is CRZ-II. The Parvathi Puthen Ar canal and the Karamana river up to about 1.5 km from HTL is subject to tidal influx and hence their flanks has to be regulated.”

21. The appellants have submitted that MoEF had, without considering the deleterious effects of the proposed seaport on the rich, diverse and pristine marine environment of the coastal waters due to reclamation and construction of all artificial structures in the sea, has granted Environmental and CRZ Clearance to Vizhinjam International Sea Port Ltd. Its impact on the fragile coastal land due to shoreline changes as a result of construction of artificial support structures for the port

like breakwaters was also overlooked by the MoEF. It did not also consider the perils of the fishermen and thousands of people living in the coastal lands of the region which they will have to undergo if a seaport of the magnitude envisaged in the EIA comes up, while granting the clearance. The consequences of this seaport will have to be faced not only by the present generation of the people living there, but also the future one. The EIA submitted by the Project Proponent is inadequate, incorrect, unscientific and a misleading document.

The appellants have highlighted specific points of illegality, procedural impropriety as well as the deficient nature of studies, by pointing out from each step in the EIA Process.

22. The Applicants/Appellants have sought to bring facts on record for raising issues with respect to scoping. The project proponent had submitted the Form A for conducting EIA for the Development of International Container Transshipment Terminal to the MoEF in April 2011. It was specified in it that the port will be located in reclaimed land and area to be developed in the sea would be 26 ha in phase I. The Offshore structures to be constructed were Breakwaters, Container and Multipurpose cargo terminals. It has also been stated that in Phase I, quarry volume to the tune of 6.5 million MT will be required as construction material. In the project

details, the planned port facilities were berth length of 650 meters and an approach channel length of 1,850 meters. There was no mention of any Defense Installations nor Facilities planned nor any mention of the total cost of the project.

23. By referring to the minutes of the 95th, 100th, 101st and 102nd meeting of EAC in the Ministry of Environment and Forests applicants/appellants has tried to show the serious concern raised by the Committee regarding the proposal such as to carry out a comprehensive study keeping in view the global scenario on container traffic, apportionment of traffic-region wise to avoid haphazard and piecemeal growth of container terminal all along the coast. If this is not checked the consequences will be disastrous.

24. Thiruvananthapuram District falls in high erosion zone, as per the study of ICMAM of the Ministry of Earth Sciences. The location selected for the project is the one that is close to fishing harbour. The present proposal may affect the smooth operation of the fishing harbour in the long run, due to blocking of entrance by the movement of littoral drift which is towards south in the west coast. There would be negative impact on the fishing grounds during and after construction. The development may thus cause adverse impact on the fishing activity, in and around the fishing harbour. According to the Applicants/Appellants

such concern shown by EAC should have been the reason for denial of scoping clearance for the proposed project. The EAC should have recommended that the application for prior Environmental clearance may be rejected. Despite of this EAC finalized the additional TOR on the ground of considering public interest. Therefore, it is submitted by applicants/appellants that EAC took decision to issue TOR not on the basis of objective reality or environmental parameters and without considering the relevant factors. It is stated that EAC in its, 102nd meeting mysteriously agreed on Vizhinjam site and finalized site specific TOR for further study. Such decision of EAC was arbitrary and without application of mind. It is submitted that the project proponent acquired the land and constructed the approach road without prior Environmental clearance and therefore, it is clear that the site of Vizhinjam was decided earlier and the alternative locations submitted for consideration was an eyewash and the justifications given in respect of other sites was an empty formality.

It is also submitted that the project proponent as well as the EAC were aware, while finalizing the site specific ToR, that there is a high erosion zone in the vicinity or within the study area of the proposed Seaport. It is stated that though the ToR finalized by MoEF for EIA included many important possible impacts to be studied, it

failed to consider some major aspects, for instance, the impact is said to be only on the Southern side of the fishery harbour (erosion/accretion) and not on Northern side. The ToR failed in specifying appropriate impact area to be studied after considering the magnitude of construction activity of the project. The length of breakwater proposed to be constructed at open sea for the project has a length of 3.8 kms. parallel to the coast line which would have impact of high magnitude on the nearby coast. Therefore, the impact area to be studied should have been 10 times the length of the breakwater. The existing fishing harbour at Vizhinjam has two breakwaters of 500 meters in length, in the open sea. Elder people and fishermen living in the surrounding coastal area, by their experience, say that the impact of shoreline change was felt upto 20 kms. on both sides of the harbour.

25. It is also the case of the Applicants/Appellants that the executive summary of EIA which was meant for the general public was inadequate and prepared in violation of the rules made by MoEF. It was to be a summary of full EIA Report condensed to ten pages at the maximum and to be prepared in accordance with the terms of reference. Summary (Malayalam Language) submitted by the project proponent for public consultation was much larger (48 pages) and English version (44 pages), was not prepared in accordance with ToR of the study. There was a clear

violation in the procedure followed by the Project Proponent and was not in accordance with the rules. It is said that as Kerala State Pollution Control Board had given only 30 days period to make submission regarding EIA, much effort was made by the people of the coastal area to study and understand the comprehensive EIA. It was almost impossible for the appellants as well as other members of public to know the specific finding or answer to questions raised through the additional ToR given by MoEF.

26. The Applicants/Appellants are said to have given in writing their concern and objections as well as incorrectness in the comprehensive EIA, to the Pollution Control Board. Many other individuals and organizations including fishermen had also made submissions. While making objections and disagreement to the finding contained in EIA, Applicants/ Appellants were also in agreement to some of the findings and conclusions made in the EIA, such as in the chapter dealing with shoreline changes. This chapter mostly substantiated the version of coastal people that large scale erosion and accretion takes place in the study area of the proposed port. The project proponent had then submitted a revised comprehensive EIA to the MoEF, purportedly on the basis of the submissions received during public hearing process.

27. The revised EIA, it is submitted by the counsel for applicants/appellants, had also suffered from many defects, improprieties, changes with new study inputs as for instance ToR Compliance Table was changed drastically, the section of shoreline changes was deleted, new sections including finding of studies conducted/prepared after the public hearing was incorporated, the genuine submissions of the public on vital issues were not incorporated but condemned by the project proponent as blind opposition to the project.

28. It is the case of the Applicants/Appellants that there were significant changes in the final EIA Report. The changes were made in order to comply with the ToR required at the post hearing stage. This was brought to the notice of the EAC. The EAC failed to consider the critical issues raised at the time of public hearing. The submission of the State Government and the Project proponent were accepted without any verification of individual minutes of the EAC. The supporters of the project were allowed an audience by the EAC but not to those who were objecting to it. The entire emphasis was to show that the opposition was essentially by the resort owners which were in violation of CRZ Notification.

29. It has also been submitted by the applicants/appellants that from the website record of Project proponent it is clear that they had submitted parawise detailed answers to the

queries raised by the Ministry only on 23rd November, 2013, the day of the meeting. As per the notice the project proponent was to make submission by 16th November, 2013, which they had failed. Accordingly, as EAC had not received the documents in time, it should not have considered it on the same day i.e. 23rd November, 2013. They should have rather postponed its consideration. Instead of postponing the matter to read and study the document containing 122 pages it was decided to discuss the matter instantly on the same day. The EAC even decided to recommend the granting of EC in the same meeting on 23rd November, 2013, which clearly reflects that there was no application of mind to the relevant considerations.

30. According to the Applicants/Appellants the minutes of EAC meeting (128th) reveals that though a range of issues are mentioned but only the project proponent's version was presented and not that of the Expert Appraisal Committee. The version of the Project proponent was accepted as gospel truth. It was concluded that project proponent has assessed all the likely impacts of the project and arrived at a suitable EMP. Thus the EAC recommended environmental clearance for the project. Such an exercise cannot be termed as detailed scrutiny under EIA Notification, 2006 because there is nothing to show that EAC gave its own views about the explanation

given by the project proponent as being sufficient. The EAC had ignored the detailed submission by the project affected persons and other concerned persons who made representation to EAC.

31. The respondents have contested the Application/Appeals by way of filing the counter affidavit with strong objections. It is submitted by the respondents that the applicant has not come with clean hands before the Tribunal and has only filed the application for the oblique purpose. Further, it is submitted that Applicant is a mere busy body without any interest or concern for the environment or the fishermen community of Vizhinjam, except for personal gain or private profit or other considerations and ,therefore, this Tribunal should not allow its process to be abused by such Applicants. It is also to be noted that the applicants are fishermen and are not registered member of the Fish Worker Welfare Board. This is further substantiated by the fact that Mr. Marydasan (earlier Applicant No. 2) withdrew his name from instant proceedings on the ground that he had no knowledge of the Application and had never authorized anyone for these proceedings on his behalf. It is submitted that the applicant is acting at the behest of a few vested interests by way of instant proceedings. He is trying to impede Respondent No. 3 from developing the project.

32. Further, it is submitted that the present application is, in a devious and sinister manner, indirectly and effectively seeking insertion of certain words into the CRZ Notification, 2011, which have been specifically excluded by the Ministry of Environment and Forest in exercise of powers vested under the provisions of the Environment (Protection) Act, 1986, which is impermissible in law. In essence the application is seeking an effective amendment of the CRZ Notification, 2011 by praying for re-insertion in it of the expression coastal area of outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authority at the State/Union Territory Level from time to time, which were found in the erstwhile CRZ Notification, 1991.

33. The period of limitation for challenging the CRZ Notification expired on 4th September, 2011 and this Tribunal does not have the power to extend such limitations any further. There is no continuing cause of action. This Tribunal has no jurisdiction to issue notice in the instant Application questioning the validity of the CRZ Notification, 2011, especially since the said challenge has been made after the expiry of the extended period of limitation under Section 14 of the NGT Act, in addition to the other grounds relating jurisdiction of this Tribunal

raised hereinabove. In view of the Provisions of Section 14 and the fact that more than three years have passed since the issuance of the CRZ Notification, 2011, the Tribunal should dismiss the Application at the outset.

34. It has also been submitted that decision to exclude the categories or the area of the outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory Level from time to time from the CRZ Notification, 2011 was not an arbitrary or unreasoned one. The decision to remove the said categories was taken pursuant to the recommendations of the Expert Committee constituted under the Chairmanship of Prof. M.S. Swaminathan firstly, in 2005 to review and make recommendations with regard to implementation of the CRZ Notification, 1991 and secondly, in 2009 to recommend future steps on the draft Coastal Management Zone (CMZ) Notification, 2008, which observed in relation to, inter-alia, areas of outstanding natural beauty as under

Swaminathan Report, 2005

“3.4.23 The categorization of CRZ area is based on the eco sensitivity of the coastal zone and the extend of development. But it is seen from the list under CRZ 1, it includes several of the eco sensitive areas and areas which are very subjective and cannot be defined for example, ‘areas of outstanding natural beauty’, ‘areas rich in genetic diversity’. **Such subjective and broad based terminologies have lead to problems in**

demarcating CRZ 1 areas by the State Governments in their CZMP maps. The committee is of the opinion that there needs to be a clearly defined terminology along with a boundary for the purpose of administration of such identified areas.”

Final Frontier Report, 2009

“7.7 The CRZ Notification, 1991 declares areas like national parks/marine parks , sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, **areas of outstanding natural beauty**/historically/heritage areas, areas rich in genetic diversity, **areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central government or concerned authorities at the State/Union Territory level from time to time**, and the area between the Low Tide Line and the High Tide Line in CRZ-I as ecologically sensitive. **Over the years, this open-ended definition has led to ambiguity and subjective interpretation”**

35. The discussion with respect to the category in question commenced in 2005 and a consistent view with respect to the subjectivity and ambiguity of the categories in question was taken by the expert committees constituted by Ministry of Environment and Forests. In the light of the recommendations of the Swaminathan Committee Report on 16.07.2009 and the outcome of the consultation process carried out by Centre for Environment Education, it was proposed to take steps for strengthening the CRZ Notification, 1991 by way of, *inter-alia*, amending/deleting/inserting certain provisions in it. It was on the basis of these recommendations that Respondent No. 1, published the Pre-Draft Coastal Regulation Zone Notification, 2010. Subsequently,

Respondent No.1 , in exercise of powers conferred under Section 3 of the EP Act, issued the CRZ Notification, 2011 (6.1.2011) in supersession of CRZ Notification, 1991.

36. It has also stated that environmental impact of the project has been critically and exhaustively analyzed by the Expert Appraisal Committee during the scoping and appraisal process prior to grant of Environmental and CRZ Clearance dated 3rd January, 2014. Further, the project was also exhaustively analysed and considered by the Kerala Coastal Zone Management Authority for grant of CRZ Clearance and it was only after the said authority was duly convinced and satisfied by the studies conducted by the Respondent No. 3 regarding the minimal negative and maximum positive impact of the Project on Vizhinjam, State of Kerala and the rest of the Country. During the process of grant of Environmental and CRZ Clearance the following exhaustive studies were carried out by Respondent No. 3 for the propose of preparing the comprehensive Environmental Impact Assessment Report which was considered by the EAC:-

- i. Geophysical Survey conducted by Furgo Geotech Pvt. Ltd.;
- ii. Rapid Environmental Social Impact Assessment Report prepared by L & T Ramboll Consulting Engineers Ltd.;

- iii. Resettlement & Rehabilitation Action Plan (RAP)- Road/Rail Connectivity & Ancillary Sites prepared by L&T Ramboll Consulting Engineers Limited.;
- iv. Detailed Project Report Prepared by AECOM;
- v. Ship Navigation Study Report Prepared by British Maritime Technology-;
- vi. Techno-economic Feasibility Report prepared by L&T Ramboll Consulting Engineers Limited
- vii. Mathematical Modelling Study prepared by L&T Ramboll Consulting Engineers Limited.;
- viii. Estimation of Economic Internal Rate of Return of the Vizhinjam Port Project Prepared by Delloittle;
- ix. Marine Survey/Oceanographic Measurements Prepared by EGS Survey Private Limited;
- x. HTL/LTL and Coastal Regulation Zone Status Report in terms of the CRZ Notification , 2011 prepared by CESS (**hereinafter “HTL/LTL Report’)**
- xi. Social Impact Assessment for Vizhinjam International Seaport limited Road/Rail Connectivity & Ancillary Sites prepared by L&T Ramboll Consulting Engineers Limited
- xii. Assessment of Long Term Shoreline Changes in and around proposed Vizhinjam Port prepared by

INCOIS/ L&T Ramboll Consulting Engineers Limited;

xiii. Preliminary Project Plan Report prepared by International Finance Corporation and Royal Haskoning;

xiv. Coastal Regulation Zone Report Prepared by Centre for Earth Science Studies;

xv. Integrated Part Master Plan prepared by AECOM;

xvi. Strategic Options Report prepared by International Finance Corporation; and

xvii. Market Study Report Prepared by Drewry Consultancy.

36. It is submitted that Respondent No. 3 took into consideration all national and international practices while preparing the comprehensive EIA Report and carried out a record number of environment and other studies to ascertain the environmental impact of the Project and is arguably the most exhaustive studied project during pre-construction phase with comprehensive participation of all the stakeholders. It is submitted that due process was followed and all-inclusive approach was undertaken, wherein large scale stakeholder consultations were undertaken. It is submitted that the representations for the Project by a large margin, exhibit the wide spread support of the Project.

37. The Respondent have also submitted some essential features of the project which are stated to be of far-reaching importance to the Nation which are:-

- i. Transshipment Potential: As on date, bulk of the cargo meant for India is handled by the ports in Colombo, Singapore, Hambantota, Dubai and Salalah due to lack of deepwater ports in India at strategic locations (proximate to the international shipping route) capable of handling large vessels. The Port, unlike any other port in India, is at close proximity .i.e. 10 nm to the International Shipping Route. The deviation cost for a 10000 TEU ship from the International Shipping Route is 180% more in case of Colombo Port and at a par with the Hambantota Port when compared to the Project Port. Having a port capable of handling large vessels would substantially reduce the import/export logistics costs, which is required to be paid for transporting the shipments from international ports to India and would be the first major step in making India self-sufficient in handling its own cargo.
- ii. Economy: The Project would be a boost to the economy, not only from the perspective of transshipment potential but would also offer an opportunity to tap cruise tourism potential. It would

significantly improve the tourism profile of Vizhinjam as well as the State of Kerala. Such economic boost would help in creating large number of jobs and improve the standard of living of the inhabitants of the neighbouring areas, including the fisherman community of Vizhinjam.

- iii. National Security: In the wake of enhanced presence of the Chinese in the Indian Ocean and the perceived threat to India, there exists a critical need to increase the presence of our defense forces in the Indian Ocean. The Navy and the Coast Guard have evinced interest in it and are evaluating the use of the Project for their requirements. This Projects and site will enhance the strategic naval presence in the Indian Ocean from a national & coastal security perspective, amidst the increased presence of foreign powers in the Indian Ocean. The Project envisages a dedicated Navy berth to handle amphibious vessels and troops armoured vehicles as part of the Project. The Navy is evaluating this option and has the right to exercise this option as and when it chooses. In addition, a dedicated berth for the Coast Guard is also envisaged as part of the Project. The Coast Guard is also evaluating this option and has the right to exercise this option as and when it chooses. This would, in addition to

increase India's presence in the Indian Ocean, ensure adequate security to the vessels on the international shipping route near the Indian Coast. The impact of the berths has already been studied during the EIA. The Draft Concession Agreement for the Development and operation of the port has included an exclusive clause for use of the port by the defense forces.

iv. Fishing activities: The port would substantially improve and enhance fishing and its related activities for the local regional population. The Project envisages construction of an additional 500 M fishing berth, which would help in dealing with the congestion in the existing fishing harbour. Physical infrastructure, such as a seafood processing unit, has also been envisaged for overall upliftment of the fishermen in the region. It is pertinent to mention that most fishermen residing in and around Vizhinjam are happy with the package and plans that have been formulated by Respondent No. 3 and have come forward to show their support for the project.

38. While replying to the contents of the application the respondents have reiterated that they deny the fact that the applicant is personally or otherwise aggrieved. Further it is submitted that applicant has failed to substantiate his

averments and show as to how he is personally affected by the exclusion of the categories in question. It is further submitted that the applicant is not a fisherman and that no fishermen reside in Mulloor area. The instant application, according to the Respondent, has been filed at the behest of the owners of illegal resorts established in violation of the CRZ Notification, 2011, and the same is substantiated by the fact that the Applicant has not approached the Tribunal or any other court seeking direction against the 37 illegal Resorts but has filed case against the project of national importance. The respondent have also reiterated that area of outstanding natural beauty and areas likely to be inundated due to rise in sea level consequent upon global warming and such areas may be declared by the Central Government or the concerning authorizes at the State/Union Territory levels from time to time were classified as CRZ-I area under the CRZ Notification, 1991 and the same were excluded from CRZ Notification 2011. It has been submitted that categories excluded owing to subjective and unscientific nature of the said category and on the recommendation of the various expert committees set up by MoEF to review and strengthen the CRZ Notification, 1991.

It has been denied that the Applicant is raising a substantial question relating to the environment and it is submitted that the application does not raise any issues

that require the attention of this Tribunal. Since the CRZ Notification, 2011 is delegated/subordinate legislation under the EP Act this Tribunal is vested with the authority to ensure that the said notification is implemented effectively and properly and also to decide on any violation thereof. However, the NGT Act, does not empower the Tribunal to question the validity or vires of such Notification which are in the nature of subordinate legislation. It has been submitted that the project is governed by the CRZ Notification, 2011. It does not include categories and areas of outstanding beauty. CRZ Notification, 1991, stands superseded by the CRZ Notification, 2011.

39. The respondent have submitted that the veracity of the applicant is further substantiated by the fact that the Applicant No. 2 has withdrawn his name from instant proceedings on the ground that he had no knowledge of the Original Application and have never authorized anyone, on his behalf, for the same. Secondly, the Applicant's address in Original Application and the Appeal is different from the address recorded in the Applicant's wife's voting card and Adhar card, produced as documents before the Tribunal in reply to M.A. No. 629 of 2014 and as such, the Respondents have serious doubts as regards the identity of the applicant no. 1 (now the sole applicant). Therefore, the respondent have submitted that the

applicant should not be allowed to abuse the judicial process of this Tribunal to meet his oblique motives and the application be dismissed.

40. The Respondents have submitted that even though KCZMP classifies Vizhinjam-Kovalam sector as an area of outstanding natural beauty, the same has no legal consequence in terms of the existing laws of the land. The CRZ Notifications, 1991, stands superseded by the CRZ Notification, 2011 which does not include the categories of areas of outstanding natural beauty and areas likely to be inundated due to rise in sea level. Such exclusion was done in light of the recommendations of the Swaminathan Committee Report dated 16.07.2009 titled as “Final Frontier” and outcome of the consultation process carried out by Centre for Environment Education which clearly stated that the said notification was subjective and vague in nature and therefore, their demarcation was practically impossible. Further, it is submitted that even though the KCZMP has been frozen by the MoEF till December, 2015, the same will be applicable only to the extent that it is not to be in contravention of the CRZ Notification, 2011. The KCZMA has published a draft CZMP 2014 which was prepared by National Centre for Earth Science Studies, in accordance with the provisions of CRZ Notification, 2011 and the process of public consultation is already over in

Thiruvananthapuraman as well as few other areas of Kerala State.

41. The respondent has submitted that Form I was submitted after the issuance of the CRZ Notification, 2011 and all the meetings of EAC (95th, 100th, 101st & 102nd) wherein Form I and TOR were considered for approval subsequent to the issuance of CRZ Notification, 2011. However, EAC during the meeting on 31st May, 2011 recommended the project specific ToR pursuant to being satisfied by the responses submitted by Respondent No. 3 and withheld the finalization of the site specific ToR till further detailed re-examination of all identified sites in accordance with the site selection criteria set out in clause (i) of the Project Specific TOR which was issued by MoEF on 10th June, 2011. Thereafter, Respondent No. 3 submitted, on 14th June, 2011 a comparative evaluation matrix for site evaluation to MoEF in terms of the directions given by EAC and the same was reviewed by EAC on 23-24th June, 2011. EAC selected Vizhinjam as the site for the project and recommended the site Specific TOR which was issued by MoEF on the 1st July, 2011.

42. The respondents have denied that opposition voiced by the Stakeholders and general public, during the public hearing regarding various lacunae in the EIA Report and the viability of the project was ignored by the EAC or that the EAC refused to grant them a hearing. It has been

submitted by the respondents that public hearing was conducted in accordance with the procedure set out in EIA Notification, 2011 and more than 800 people participated in it. The entire proceedings was video graphed by KSPCB. The concern raised by stakeholders and general public have been exhaustively addressed in the final EIA Report. The objections received by EAC were forwarded to Respondent No. 3 and the same were duly considered and addressed by the project proponent. The EAC during its 126th and 128th meeting allowed Shri John Jacob Puthur, Shri Cyriac Kodath (owner of an illegal resort) and Shri Joseph Vijayan in first appellant in Appeal no. 71/2014 to submit the representation and on the basis thereof and deferred consideration of the proposal till appropriate and detailed responses were submitted by respondent.

EAC noted that EIA Report has been in the public domain since 29th May, 2013, and entertaining representations of repetitive nature in an unending manner will delay the whole process of project appraisal and hence informed the above mentioned stakeholders that further representations will not be entertained. The respondent furnished the response to the representation received on 17th October, 2013, which were analysed by EAC in its 127th Meeting and further directions were given to the project proponent to submit subject-wise response to the issues by consolidating the individual response

already documented in the EIA Report. The Respondent No. 3 collected additional representations from Shri John Jacob Puthur and Shri Cyriac Kodath, submitted by them to the EAC and submitted its response to it in 128th Meeting. The EAC reviewed the subject-wise response and handed over a few more representations received by it from several stakeholders. The Respondent No. 3 reviewed the same and noted that the representations were of repetitive nature. However, responses were submitted to the EAC.

EAC recorded detailed reasons for recommending of the project for the grant of EC in its 128th Meeting. The Respondents have denied that objection raised by the Applicant that the project site is CRZ-I area owing to its outstanding natural beauty, in accordance to the Coastal Zone Management Plan of Kerala prepared in December, 1995 was never addressed by the EAC before granting Environmental Clearance. The said objection was considered by EAC in 128th meeting held on 20th -23rd November, 2013 where in it was concluded that the Project does not fall in CRZ-I-A area. Further since the present law of the land, that is CRZ notification, 2011, does not include the category “areas of outstanding natural beauty”, there is no need for EAC to look into the issue any further.

43. The Ministry of Environment and Forest, Respondent No. 1 has contested the application by way of filing a counter

affidavit through its Joint Director. It has been submitted that the Coastal Regulation Zone Notification 2011 was the outcome of a review of a Expert Committee headed by Prof. M.S. Swaminathan and extensive consultation with various stakeholders. CRZ Notification, 1991 was reviewed by the said Committee and on the basis of its recommendations Ministry of Environment and Climate Change issued a Draft Coastal Management Zone Notification on 22nd July, 2008 under Section 3(1) and 3(2)(v) of the Environment (Protection) Act, 1986. The Ministry invited suggestion and objection from the public by its notification dated 22.07.2008. In response thereof, the Ministry received a large number of suggestions and objections which were examined by the Expert Committee headed by Prof. M.S. Swaminathan. After detailed examination of the comments received on the aforesaid draft notification of 2008 and after consultations with the stakeholders, submitted the report titled “Final Frontier” on 16.07.2009. The report had recommended to let the draft notification 2008 lapse and to strengthen the CRZ Notification, 1991. The Ministry accepted the said recommendations and had let the draft CMZ Notification, 2008 lapse.

It has also been submitted that it was on the recommendation of the Expert Committee, for strengthening the Notification of 1991 that a Draft Island

Protection Zone, Notification 2010, for the Islands of Andaman & Nicobar and Lakshadweep, was issued on 25th February, 2010. It is stated that the Ministry under-took extensive consultations with the fishermen communities, local communities and NGOs, from August 2009 to March 2010 in ten coastal States/Union Territories. Such consultations were organized through the Centre for Environment Education which submitted its report on 25th March, 2010. Taking into account the outcome of the consultation process and the recommendations made by the Expert Committee report dated 16.07.2009, the respondent Ministry, published a pre-draft Coastal Regulation Zone Notification, 2010 on the website on 30th April 2010, whereby comments from the State Government of Coastal States/UT were invited.

44. It is also stated by the respondents that on 6th July, 2010, discussion on pre-draft Notification with the State Governments of Coastal States/UT Administrations was held and as a result of it a Draft Coastal Regulation Zone Notification for the Main Land was issued on 15.09.2010, for inviting objections and suggestions within 60 days. After receiving objections and suggestions of various stakeholders on the above two draft notifications, the same were examined in the Ministry and finally the Coastal Regulation Zone Notification, 2011 and Island Protection Zone Notification, 2011 were issued on 6th January, 2011,

in supersession of the Coastal Regulation Zone Notification, 1991. It is also submitted that CRZ Notification, 2011 was issued by the Ministry under Section 3(1) and 3(2)(v) of the Environment(Protection) Act, 1986 and also under Rule 5(3)(d) of the Environment (Protection) Rules, 1986, for regulation of development activities along the coastal stretches and to ensure livelihood and security to the fishermen communities and other local communities, living in the coastal areas as also to conserve and protect coastal stretches. The said notification declared coastal stretches of 500 m from High Tide Line (HTL), the stretch between Low Tide Line (LTL) & HTL and water portion up-to 12 nautical miles from the Low Tide Line as Coastal Regulation Zone (CRZ). It also declares 100 m or width of the creek and backwater and distance upto which tidal effects of the sea are experienced in rivers, creeks and backwaters as Coastal Regulation Zone.

45. It is stated by the respondent that the Environment and CRZ Clearance to M/s Vizhinjam Internatinal Seaport Ltd (VISL) was granted after following all due procedure required under the Environment Impact Assessment Notification, 2006 and Coastal Regulation Zone Notification, 2011. The Proposal of VISL was considered in 95th meeting of EAC held on 18th-20th January, 2011. The Committee observed that the proposal was still at the

conceptual stage and that the proponent must submit a concretized, firm and implementable proposal for further consideration in respect of issue of Terms of Reference (ToRs). In response thereof the Project Proponent submitted Form 1 and proposed ToRs, Technical Feasibility Report, market study, Preliminary Project Plan, Strategic Option Study and CRZ Report. They were examined by EAC in its 100th meeting held on 11th-12th May, 2011. The EAC considered the location of existing fishing harbour adjacent to the site and likely impacts on it due to the project and suggested, examining the suitability of other locations away from the present locations and reverting back.

46. The EAC also suggested to consider the effect of commissioning of Vallarpadam International Container Transshipment Terminal at Kochi which is designed and equipped for handling 14.5 meter draft vessels with potential for further deepening. Secondly, to revise the Techno-economic Feasibility Study keeping in view the global scenario on container traffic and develop a Cargo Distribution Model for the apportionment of traffic to various competing Indian ports/neighborhood ports to avoid haphazard/piecemeal growth of container terminals all along the coast, resulting in not only environmental degradation, slowly but steadily, but also unhealthy competition.

47. The details submitted by VISL were examined by the EAC in its 101st meeting held on 31st May, 2011, which finalized a ToR with a condition that “the proponent shall re-examine in detail all the identified sites with equal weightage/criteria on 0 to 100 scale including the financial implications for dredging/filling of the area and impact on surrounding development including fishing harbour, fishing habitation with scientific studies with a check list for selection or rejection and asked to submit a map of all the short listed sites on the latest satellite imagery”.
48. The details submitted by VISL were examined by the EAC in its 102nd meeting held on 23rd-24th June, 2011. VISL presented details of site selection exercise undertaken in 2004 through L&T Ramboll Consultants. As per the details, the Northern side of Vizhinjam has high erosion and hence three sites were examined on the Southern site. The weightages are given on various parameters, namely, location, depth, design requirements/shoreline change, Environment Impact etc. The Site B-located at 2.5 Km South-East of the river Karichal in front of Pulluvila Village, has thick population; the Site C-located in front of backwaters around the mouth of river Neyyar, has low lying marshy areas and more filling is required, and also a river meets the sea, and hence, it will lead to shifting of the river. Considering various aspects including location, depth, design requirements, shoreline changes,

Environmental Impact etc. the site at Vizhinjam has been selected as the best site for the port.

49. The EAC agreed on Vizhinjam site and finalized the additional site specific ToR for further study and accordingly, the ToR was granted to the project. Consequently, a Comprehensive Environment Impact Assessment (CEIA) study was prepared by Project Proponent including long term shore line change and modelling studies through M/s L&T Ramboll Consulting Engineers Ltd. The draft EIA report was published and a public hearing was conducted through the Kerala State Pollution Control Board on 29th June, 2013 at the project site. State Pollution Control Board forwarded the proceedings of the public hearing to the respondent Ministry on 6th July, 2013. Subsequently, VISL submitted the final EIA report, presented the ToRs compliance and response to the points raised during public hearing, on 29th August, 2013, to the respondent Ministry.

50. It is also submitted that the Kerala State Coastal Zone Management Authority recommended the project for clearance under the CRZ Notification, 2011 vide their letter dated 24th August, 2013 based on the EIA and CRZ reports from the Centre for Earth Science Studies (CESS), Thiruvananthapuram. The recommendation of Kerala CZMA was in accordance to CRZ Notification, 2011. It is stated that the CZMP of the State was prepared as per

1991 Notification, areas of outstanding beauty were classified as CRZ-1, it may not be considered as CRZ-1 since it is not under the purview of the CRZ Notification, 2011. It is further stated that in such cases, both the regulations under 2011 and classification under CZMP 1996 are to be read/considered together. CZMP has to be read in consonance with the CRZ Notification, 2011 and not otherwise. Since CZMP's are prepared by every State under CRZ Notification and in case of any conflict between the two, it is CRZ Notification, 2011 which will be considered and relied upon over the State CZMP.

51. It is stated that number of representations for and against the project were received wherein the main issues raised included false data in Form 1; regarding presence of endangered species not provided; site is in CRZ-I area, shoreline study focus on impacts after 1980 but needs to assess the changes in 1969-73 also, fishery and tourism related impacts not addressed/ mitigated in final CEIA, difficulties in crossing the ship channel by fishermen to go for fishing in deep sea, dredging might cause extensive damage and pollution, no specific parameters in ToR on tourism and hence impact on tourist was not studied, EIA study area was taken as 10 kms against 15 kms, unscientific site selection, violation of CRZ/ToR compliance and Pollution and socially relevant impacts. It is stated that Additional Chief Secretary of Kerala provided

comments on the various representations vide letter dated 17th October 2013. The Project Proponent provided and presented before the EAC the information/clarification reference on each of the issues raised.

52. The Expert Appraisal Committee, according to the respondent Ministry noted that the Project Proponent has assessed all likely impacts due to the project comprehensively and arrived at suitable EMP. They had also responded properly to all the issues raised in public hearing as well as in various representations against the project. It is stated that Expert Appraisal Committee and CZMA had after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to the observations, recommended the grant of EC and CRZ Clearance to the proposed project. The respondent Ministry has stated that it had examined the matter in detail and granted EC and CRZ Clearance to the proposal on 3rd January, 2014 stipulating various environmental safeguards.

53. The respondent Ministry has denied the contents of all the paras and grounds of the application, individually and specifically. It has been denied that cause of action for filing the instant application arose on 3rd January, 2014 because the CRZ Notification wherein the area of natural outstanding beauty was excluded in the CRZ Notification

of the year 2011 and therefore, the cause of action arose in the year 2011.

54. Specifically, the Ministry of Environment and Forest, respondent No. 1 has also filed a reply to the Application and also raised preliminary objections. It has been submitted that the MoEF reviewed the CRZ Notification, 2011, through an Expert Committee headed by Prof. M.S. Swaminathan. In the said objections the respondent Ministry has reiterated the averments made in the counter affidavit filed earlier on 10th September, 2014. As regards parawise reply, it has been stated that contents of Para 1 to 6 are denied, both individually and specifically. Further, it is denied that for the adjudication of the instant application it is necessary to implead CZMA of nine Coastal States and four Union Territories as well as the Inter Governmental Panel on Climate Change. Further, that the submissions made in the preliminary objections, mentioned in the reply, are reaffirmed and reiterated herein and the same are not being repeated for the sake of brevity. It is also submitted that the application under reply is frivolous and untenable and hence be dismissed.

55. The State of Kerala Coastal Zone Management Authority has filed the counter affidavit on behalf of respondent No. 2. All averments made in the appeal have been denied including para 1 to 3 as they are not connected with them. It is deposed that the Authority had recommended CRZ

Clearance after detailed discussion. It is stated that CRZ map was prepared by the Centre for Earth Science studies which is an authorized agency of Ministry of Environment and Forest for carrying out CRZ mapping. The CRZ area in the Vizhinjan area are marked as follows:

1. The water body and the bed are marked as CRZ IV.
2. The area landward of LTL are marked as CRZ III and the area between LTL and HTL is marked as CRZ I (ii).

56. There no areas marked as CRZ I (i) as per the CRZ report.

Though there are areas declared as area of outstanding natural beauty and 50 m Zone adjoining the laterite cliff edge as CRZ I in the approved Coastal Zone Management

Plan as per 1991 Notification, which is not relevant as per CRZ Notification, 2011. Hence it is not categorized as CRZ

I. The area is devoid of any features to be categorized as CRZ I(i). The KCZMA had approved the maps prepared by CESS and recommended the project, because Port Activity is permissible as per CRZ Notification clause 4.1 (f).

57. It is further stated that Port Activity is prohibited along high eroding beach. As per the shoreline status map of Thriuvananthapuram District, sheet No. 2, prepared by Institute of Ocean Management, Anna University, for Ministry of Environment and Forest, Government of India the project area is only a low eroding site. Therefore, according to the respondent the objection raised by the applicant against CRZ Clearance is not sustainable. The

CRZ Clearance is part of EIA clearance and it was accorded by the MoEF, based on the recommendation of the Expert Appraisal Committee on Infrastructure and Miscellaneous projects and CRZ in the MoEF.

58. We have heard the Learned Counsel for the parties at length and have also carefully gone through the records.

‘A common question which comes up for consideration in these cases is as to whether the grant of Environment and CRZ clearance by respondent No. 1 on 03.01.2014 to the Project Proponent for establishing a sea port at Vizhinjam is sustainable in law or not.’

59. **The Project:**

The instant project of Deepwater Container Port at Vizhinjam is first of its kind in the country. There is not a single deep water container port in India till date. The establishment of such deepwater container port would result in transfer of larger container vessels to the Indian Coast. This port is of vital importance. Presently, a large container cargo vessels dock at Dubai, Singapore, Colombo etc. which are Transshipment hubs for goods meant for India. This would result in transshipment of trade including of the goods meant for Bangladesh, Burma etc. This will also boost the development of Indian Coastal shipping which is much cheaper than any other mode of transport. The cost of deviation from International shipping route is very high for large container vessels. Therefore, the deepwater container port must be located

close to these routes. Building of such port is crucial for the economic development for the State as well as the country, lack of port infrastructure is seriously hampering India's international trade, competitiveness and India's economic growth. The Sagarmala Project of Government of India has a broad object to modernize and enhance the capacity of the port in the country that led to economic development. National security is also served in emergency because of proximity to international shipping routes. The Indian Navy and Coast Guard can make use of it. Cruise terminal of large cruise vessel at Vizhinjam will also boost tourism.

The deepwater container port at Vizhinjam is part of the overall strategy of Government of Kerala for economic development. Vizhinjam International Sea Port Ltd. (VISL) is to act as implementing agency. VISL is headed by the Chief Minister of the State as its Chairman, Minister of Ports as Vice Chairman and four other Ministers of the State and four Senior Secretary level officials as its Director.

60. Areas of Outstanding natural beauty:

1. The primary submission made by the Applicants/Appellants in these matters is with regard to non-inclusion of areas of outstanding natural beauty from classification of CRZ -1 under the CRZ Notification, 2011. Further it has been submitted that the port should not

have been located at the present site as the same being an areas of outstanding natural beauty in terms of CRZ Notification, 1991.

61. The Coastal Regulation Zone 1991 in (annexure) 'I' brings out categories of CRZs and the areas included under CRZ I, II, III and IV. At 6(1) (i) is Category I (CRZ I)

“Category I (CRZ –I)

- (i) Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/historically/heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State / Union Territory level from time to time.

62. The States / UT Administrations, in pursuance of the notification of 1991, prepared Coastal Zone Management Plan CZMP. The Notification required that the State Coastal Zone Management Plan along with maps

identifying the CRZ I, II, III and IV areas was to be submitted to the National Coastal Zone Management Authority (NCZMA) for its approval. In pursuance thereof, the State of Kerala prepared CZMP in 1995, which was approved by NCZMA in the Ministry of Environment and Forest in 1996. In response to the representation of various stakeholders recommendations of various Committees as well as judicial pronouncements and with a view to suggest a regulatory frame work consistent with well established scientific principles on Coastal Zone Management, the Ministry of Environment and Forest constituted a Committee on 19th July, 2004 under the Chairmanship of Dr. Swaminathan. The Said committee was appointed by MoEF with 13 most eminent persons available in the Country at that time. The said exercise of power by the MoEF was very much within the scope of the powers conferred on it under Section 3 of Environment Protection Act.

63. This Committee, among others, was required to define and analyse various coastal and marine resources and recommend the methodology for their identification and the extent of safeguards required for conservation and protection and suggest regulatory framework consistent with Environment (Protection) Act 1985.

The Committee gave an indicative list of ecologically sensitive areas to be included in CRZ I, which is reproduced below: CMZ-I: Indicative list of Ecologically Sensitive Areas (ESA)

- (i) Mangroves
- (ii) Coral reefs
- (iii) Sand Dunes
- (iv) Inland tide / water bodies such as estuaries, lakes, lagoons, creeks & straits
- (v) Mudflats
- (vi) Marine parks and sanctuaries
- (vii) Coastal forests & wildlife
- (viii) Coastal fresh water lakes
- (ix) Salt Marshes
- (x) Turtle nesting grounds
- (xi) Horse shoe crabs habitats
- (xii) Seagrass beds
- (xiii) Sea weed beds
- (xiv) Nesting grounds of migratory birds.

Guidelines for preparation of ICZMP of CMZ-I

- The above ecologically sensitive areas will be mapped and notified by the Ministry of Environment & Forests.
- The NCSCM under Ministry of Environment & Forests will prepare the ICZMP to protect the notified areas.

Activities, which are essential shall be permitted in the area based on the ICZMP and after public hearing.

64. The Ministry of Environment and forest notified the CRZ notification 2011 on 6th November, 2011 under clause 7

(i) CRZ 1 of the notification is reproduced below:

Classification of the CRZ – for the purpose of conserving and protecting the coastal areas and marine waters, the CRZ area shall be classified as follows, namely

:-

(i) CRZ-I:

A. The areas that are ecologically sensitive and the geomorphological features which play a role in the maintaining the integrity of the coast,

(a) Mangroves, in case mangrove area is more than 1000 sq.m., a buffer of 50 meters along the mangroves shall be provided;

(b) Corals and coral reefs and associated biodiversity;

(c) Sand Dunes;

(d) Mudflats which are biologically active;

(e) 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), the Forest (Conservation) Act, 1980 (69 of 1980) or Environment (Protection) Act, 1986 (29 of 1986); including Biosphere Reserves;

B: Areas between LTL and HTL

65. The decision to remove the category of outstanding natural beauty was taken in furtherance of the recommendations made by Swaminathan Committee. Broadly speaking, the relevant recommendations made in the year 2005 was reviewed and recommendations were made with regard to the implementation of the CRZ Notification 1991 and secondly in the year 2009, to recommend future steps on the Draft Costal Management Zone Notification 2008. The Committee observed in relation to the place of outstanding natural beauty that over the years open-ended definition has led to ambiguity and subjective interpretation. The

committee had suggested various other changes. It has elaborated these categories in the report and on the basis of such classification new categories have been incorporated in CRZ-I categories. Apart from the changes in CRZ-I changes were also made in CRZ-II and CRZ-IV Categories. The committee had nowhere recommended for continuation of category of natural beauty in the new Notification of 2011.

66. Dehors of CRZ Notification 2011 AONB be protected

The Applicants/Appellants has made yet another submission that the dehors of CRZ Notification, 2011 area of outstanding natural beauty should be preserved and protected by the respondent. In such view of the matter the coastal area in which lies the area of natural beauty including Vizhinjam coast should be protected. Such areas should be left free from any human intervention. It is pertinent to mention here that the applicant in his Original Applicant, while raising such contentions, has prayed in respect of such areas to direct the respondents that the coastal area of outstanding natural beauty and areas likely inundated due to rise in sea level consequent upon global warming and such other area as may be declared by the Central Government or the concerned authority at State/Union Territory from time to time be

protected as CRZ-I notwithstanding their non-inclusion in CRZ Notification 2011. Further, it has been prayed that the coastal area throughout the country, including Vizhinjam Coast has been declared as area outstanding natural beauty in CRZ Notification, 1991 be preserved and no activity which would damage such areas be undertaken.

67. As mentioned herein above, those items including the areas of outstanding natural beauty under CRZ Notification 1991 had been reviewed/reconsidered at the time of notification of 2011. There are certain items which have been deleted from the earlier notification but there are some which have been newly added. Therefore, in face of the fact that areas of outstanding natural beauty has been consciously deleted in the subsequent Notification, 2011 from protecting such areas on the coast of the country would tantamount to inclusion of these items under CRZ Notification 2011 by the Tribunal. This is neither in the domain of this Tribunal nor permissible under law to include an item under the Notification of 2011 which has been subsequently deleted from the items mentioned and were available in the earlier notification. Since CRZ Notification 2011, is in the nature of delegated subordinate legislation under the Environment Protection Act, 1986 this Tribunal does not have power to question validity of such notification nor add or insert any words in

it. It is in legislative domain and not in the domain of judicial powers. Such deletion of items is very categorical because at the time of mentioning the items which are to be protected, some of them have not only been taken away but, new items which were considered to deserve protection, have been subsequently included for the first time. CRZ Notification 1991 stands superseded by CRZ Notification, 2011. It has been expressly rendered redundant and ineffective. Moreover the question of AONB in the entire coastal area of the country relates to multiple States which would affect the very federal structure of the State. We are therefore, of the considered opinion that such submissions and prayers of the application cannot be accepted as the same is not sustainable under law.

CLIFFS:

Dehors the question of whether the lateritic cliffs present at the project sites are areas of outstanding beauty or not, we may look at the distribution, composition, status and the role played by lateritic cliffs in maintenance of coastal integrity.

The state of Kerala has a 560-km-long coastline characterised by long barriers with narrow beaches. Coastal cliffs have formed discontinuously over a cumulative length of 63.5 km mainly along the southern (23.25 km) and northern (40.25 km) parts of Kerala coast.

The nature of cliffs vary from permeable (laterite and sandstone) to semi-permeable (laterite with clay and silt) and impermeable (clay or igneous and metamorphic rock) types. Southern Kerala, consists of two group of impermeable cliffs—one from Puthikudi to Vizhinjam (3.50 km) and another from Vizhinjam port to Kovalam (4.00 km), a total of 7.50 KM. The cliffs are in various stages of retreat or erosion or slumping at different locations depending on lithology, material strength, beach width and exposure to wave activity, erosive factors and recession agents. The cliff profiles are mainly, vertical, sigmoidal and steep concave type. Profile morphology of permeable cliffs is very irregular during SW monsoon season. The nature of sliding of cliff is controlled by natural (either marine or sub-aerial erosion) and anthropogenic (construction of jetties, groins, seawalls, digging caves, vibration and irrigation) activities. Recession of cliffed coasts is the cumulative result of number of interacting forces and activities. Rate of cliff retreat depends on several factors but cliff height is the main factor. As and when waves attack the permeable cliff base, notches of various shapes are developed depending upon the wave conditions. Formation of wave-cut notches on the lower part of cliff faces leads to collapse of the upper part of the entire cliff and retreat rapidly. In case of high cliff, the rate of retreat is still more because the overlying

weight exerts pressure on the roof of the notches Natural processes are active at all permeable and impermeable sections. The degree of these processes varies from southern to the northern part, but erosion due to storm waves is found to be the dominant factor all along the coast. As a result, the cliff section is subjected to severe erosion and receded by 1m a^{-1} . Lateritic clay materials get easily dissolved and fall on toe of cliffs due to groundwater seepage, during SW monsoon, and wave undercutting activities. As a result, rockfall, mudslide and mudflow are quiet common.

In order to reduce slumping and erosion of cliffs, appropriate remedial measures have to be envisaged depending on the nature of profiles, lithology, geological structures and geotechnical properties. Reduction of wave impact on the cliff faces can be achieved by using two broad groups of engineering measure: (a) hard structures like revetments, groins, seawalls, breakwater and jetties, and (b) soft measures like artificial reefs / marsh creation, floating breakwater, beach nourishment, beach scraping and vegetation planting. **(Avinash Kumar et. al.: Distribution of coastal cliffs in Kerala, India. Their mechanisms of failure and related human engineering response: Environment Geology (2009) 58: 815 – 832).**

Under the present project, out of 7.5 kms of coastal cliffs including lateritic cliffs in Thiruvananthapuram district, only 800 m in the first phase of the project is being removed for the purpose of construction of port and the breakwater. These coastal cliffs, which, as per the above study, are receding at the rate of 1 m per year. Construction of breakwater and the port at the project site, where the lateritic cliffs are stated to have been removed by the Project Proponent for port construction work will stabilize the coast. In fact the study itself suggests construction of breakwater and jetties as one of the engineering methodologies to stabilize such cliffs subjected to erosion. The cliffs *per se* are not habitat of any unique floral or faunal bio-diversity and consequently no adverse impact either on terrestrial or aquatic eco system is anticipated.

68. Kerala CZMP:

Apart from it, submission have been made that Kerala CZMP of 1996 will be valid under which the project area falls in CRZ-I (i) that is area of outstanding natural beauty and area likely to get inundated due to rise in sea level, consequent upon global warming. At the outset, it may be stated that the Kerala CZMP of 1996 which indicates a long stretch of the coastline as areas of outstanding natural beauty, had specifically stated that this category had to be properly demarcated which was

never done. Secondly, the maps are applicable only to the extent that it is not in contravention with the CRZ Notification, 2011. The Kerala CZMP can operate only to the extent it demarcates area protected under CRZ Notification, 2011.

The law in this regard is well settled by the following judgments.

Ratheesh v. State of Kerala 2013 (3) ILR 227

(Kerala Series)

“100. There are differences between the 1991 Notification and the 2011 Notification. We have already referred to the manner in which the Coastal regulation Zone itself is defined in the 2011 Notification. That apart, in the 1991 Notification, areas close to breeding and spawning of fish and other marine life, is included in CRZ I. Marine parks are included both in the 1991 Notification and 2011 Notification under CRZ I. In the 2011 Notification, areas close to breeding and spawning of fish and other marine life, is conspicuous by their absence. Therefore, it is our understanding that areas close to breeding and spawning of fish and other marine life, does not fall within CRZ I after 6-1-2011. But then, what is the effect of the provision in the Notification by which it is provided that the plan prepared under the 1991 Notification will continue to hold the field for a period of 24 months. Admittedly, no new plan has been made under the 2011 Notification as such. In the plan prepared under the 1991 Notification, as we have understood, areas close to breeding and spawning of fish and other marine life have been marked with the word “FP”. Till 6-1-2011, any activity which was undertaken in regard to these areas, the islands in question which are admittedly marked with the words “FP” would fall foul of the terms of the Notification. But then, what is the effect of the non-inclusion of the words “areas close to breeding and spawning of fish and other marine life” in the categories under CRZ I in the 2011 Notification. Can it be argued

that it would still fall under CRZ I for the reason that it is ecologically sensitive as provided in the main heading of the CRZ I in the 2011 Notification. Does the 2011 Notification in regard to CRZ I contemplate areas which are ecologically sensitive being comprehended under CRZ I even though such areas are not specifically enumerated thereunder. Is it the requirement of the 2011 Notification that areas must not only be ecologically sensitive, but is there a further requirement in terms of the Geomorphological features which play a role in maintaining the integrity of the coasts. This is for the reason that under CRZ I, what is provided is that areas that are ecologically sensitive and geomorphological features which play a role in maintaining the integrity of the coasts. Still further, we notice that unlike the CRZ I category in the 1991 Notification, there is no provision providing for power with the Central Government or the concerned authorities in the State or Union Territory level to declare further areas from time to time. The words “such as” are used in the 1991 Notification. The Apex Court in the decision rendered, no doubt under the Andhra Pradesh General Sales Tax Act, 1957, held, inter alia, as follows:

“So far as the words ‘such as’ is concerned, there is no dispute that they are meant to be illustrative and not exhaustive.”

101. We are of the view that in view of the absence of the words “areas close to breeding and spawning of fish and other marine life” in the category of CRZ I in the 2011 Notification, merely because the plan prepared under the 1991 Notification was to hold good for a period of 24 months from 6-1-2011, such areas would not fall under the 2011 Notification. We cannot overlook the fact that by the 2011 Notification, the terms of the 1991 Notification was superseded. The effect of the supersession of the 1991 Notification is that we must ignore the 1991 Notification and instead we must give effect to the 2011 Notification from 6-1-2011. Even while it is true that the 2011 Notification mandates that the plan prepared under the 1991 Notification must hold good for a period of two years, in so far as CRZ I is worded differently in the 2011 Notification in contrast to the words used in the 1991 Notification, unless an area falls under CRZ in the 2011 Notification, by a mere reference to the plan prepared giving effect to the terms of the 1991 Notification which, no doubt, is to hold good for two

years from 6-1-2011, it can be understood as only meaning that the plan will hold good to the extent that it is in conformity with the mandate of the 2011 Notification.”

The said judgment was upheld by the Hon’ble Supreme Court in the case of:

Villianur Iyarkkai Padukappu Maiyam v. Union of India v. (2013) 8 SCC 760

69. Moreover, Kerala CZMP is subordinate to the CRZ Notification, 2011, and therefore, any classification, identification etc. in Kerala CZMP has to be in accordance with the existing CRZ Notification, 2011. It is noteworthy to mention here that there are many areas/categories which have now been protected under the new CRZ Notification, 2011. Only because such areas/ categories are not covered under Kerala CZMP 1996, it does not mean that same will not be regulated/ restricted or protected as mandated under CRZ Notification, 2011.

70. **Port Site:**

Besides, as regard the contentions of Applicants/Appellants that the port should not be located at the present site, it is to be mentioned that even under CRZ Notification 1991, port is not a prohibited activity but it is only a regulated activity. Under the Notification of 1991 although areas of natural beauty were avoided but the special mention was under established in CZMP 1996. Thus even under Notification 1991 the project site could not be said to the area of CRZ-I. The CZMP 1996 prepared

by the State of Kerala could not put an embargo on the ground of Environmental Clearance, at the said site. As the category of area of outstanding natural beauty does not find mention in CRZ 2011, there is no error in not considering the same at the time of granting of Environmental Clearance issuance of CRZ Notification, 2011.

71. It may also be mentioned here that the laterite Cliff at Vinzhijam are not to be treated as part of CRZ-I, on the ground of geomorphological feature. Reading of clause 7(i)(A) of the Notification shows that it is in two parts, as separated by word 'and' that is to say, geomorphological feature which play a role in maintaining the integrity of the coast is to be read with the words the areas which are ecological sensitive and there is no just reason to read them dis-junctly. Even otherwise the word geomorphology only means the study of physical feature of the surface of the earth and their relation to its geological structures. Everything on the coastline would be a physical feature of the surface of the earth which has a relation of some kind or the other to its geological structure. Therefore, when something is ecologically sensitive and have geomorphological feature that maintain the integrity of the coast, then only it can be said to have been covered under clause 7(i)(A).

72. Further under Clause 7(i)(A) the areas under ecologically sensitive and geomorphological feature that maintains integrity of the coast is exhaustive one and not illustrative. Under CRZ Notification 2011 the word “Such as” which preceded the listing of ecological sensitive areas in CRZ Notification 1991, has been removed in CRZ Notification, 2011. So far as laterite cliffs are concerned the same are not mentioned either in CRZ Notification 1991 or in CRZ Notification 2011.

73. It is note-worthy that the Applicants/Appellants have not challenged the provisions of CRZ Notification, 2011. This brings us to another aspect of the matter that the prayer made in the Original Application to issue direction to the MoEF to protect and preserve areas of outstanding Notification, 2011, in face of the fact that the validity of the CRZ Notification, 2011 has not been challenged, is not permissible under Law- (2012) 2 SCC 542 (Para 6 to 18)

74. **Highly Eroding Zone:**

Another important question raised and vehemently argued by the counsel for the Applicants/Appellants is that the proposed site is highly eroding stretch and in terms of clause 3(viii) of the CRZ Notification, 2011, setting up of ports in a high erosion stretches of the coast except those classified as strategic and defense related in terms of EIA Notification 2006, are prohibited activities within CRZ. It is undisputed that in the ACE report of 2012 the shoreline

studies was based on comparison of the satellite imageries of 1973, 1990, 2001, 2006 and 2011. It is also an admitted position that the range of satellite and the imageries available prior to 1990 were of low resolution 80 m which improved to 30 m in 1990 and later to 23 m in 2010.

75. Spatial resolution of imageries is a smallest discernible detail which can be distinguished on the imageries through visual presentation. In other words it represents the smallest size of the surface area measured on the ground by satellite sensor which can be distinguished as a separate feature from imageries. With the advancement of the satellite technology and use of data from IRS/LISS I, LISS II, LISS III, satellites, the resolutions have improved from 80ms to 23 ms and shoreline change maps prepared on 1:25000 m scales. Even high resolution stereo data from satellites such as IKONOS, RESOURCESAT-I and CARTOSAT have greatly improved, the resolution to 1-5 m and have facilitated preparation of maps for local planning at 1:5000 scale and larger. The ICMAM study of 2009 referred to by the Applicants/Appellants has also emphasized the merits of using high resolution satellite data to monitor shoreline change, particularly the high resolution data available from satellites of 2000 onwards with high periodicity and comparing the imageries of

timings when tide conditions are identically coupled with field validation of such remote sensing data.

76. The ACE study used the satellite imageries of 1973 with 80 m resolutions and compared the shoreline assessment with those of 1990 and subsequent years of 1997, 2001, 2006 & 2011 which had resolutions of 30 ms and 23 ms respectively. A comparison between the two set of imageries with resolution of 80m and 30m/23m without proper radiometric and geometric corrections will not bring out credible and reliable data. This shortcoming in the ACE study was also taken note of by the EAC by its 128th Meeting held on 28th November, 2013. Apart from the fact that even in ACE Report comparison of 1973 to 2011 imageries showed that the coast along Vizhinjam was an eroding coast, however, when comparison was made between imageries for the period of 1990 and 2011, that is for a period over 20 years, the shoreline was found to be stable, even as per the ACE Report. Reference can be made to INCOIS study which used satellite data from landsat and Indian Remote Sensing Satellites (IRS) with the resolutions of 30 ms to 23 ms for the period of 1992 to 2011. The INCOIS study which measured historical changes for shoreline for 20 years, from 1992 to 2011, came to the conclusion that the net shoreline change reveals no change (Very low erosion to accretion) except in a few patches in Poonthura in northern part of the Project

area. The comparison of shoreline areas between 1992 and 2011 by INCOIS was also accompanied by ground truthing, which is extremely important component of any exercise relating to interpretation of satellite imageries and comparative ground feature, which gives credence to averments of the Project Proponent that the coast around of port is a stable shoreline. The INCOIS study also came to the conclusion that around 15 km on both sides of the port is either stable or an accreting port. This finding of INCOIS was also taken note of by the EAC. Thus both ACE study and INCOIS study for the period 1992-2001 came to the same conclusion that port near Vinziam was stable or low erosion zone.

77. Another report of NCSCM, Society for Integrated Coastal Management (SICOM) carried out on behalf of Ministry of Environment and Forest which studied the historic data available from satellite imageries and supported by ground truthing for the period of 1992 to 2010, came to the conclusion that the project site is either rocky coast or with pocket beaches. They also observed that only 2.3 Kms of the Kerala coast is a high erosion zone and the rest of the 587.8 kms coast is either low or medium erosion zone or accretion zone 309.7 Kms of the Kerala coast have already been made into artificial coast. The Project Proponents and the State of Kerala asserted that the 2.3 Kms of the high erosion zone does not fall within the

project site. The report also suggests that the proposed Vizhinjam ports on the south has low erosion zone and an artificial coast on the North.

78. Shoreline Changes:

The Applicants/Appellants have submitted that the MoEF has not considered the deleterious effect on the shoreline changes. The said contentions are factually incorrect. On perusal of the material on record reveals that MoEF has considered in detail the effect of the project on the shorelines changes. After through deliberations by EAC, the EC was granted to the project. As many as 7 meetings were held by EAC where each and every concern, which are now being raised, had been adequately looked into and deliberated upon by the EAC. It was only after being satisfied by VISL that the EC was granted.

79. In order to understand evolution of the shorelines and coastlines, it is necessary to understand its process and factors responsible for affecting the changes. Shoreline changes are the result of longshore transport of sediments called littoral drift. Shorelines are generally in dynamic equilibrium and evolution due to change in waters, waves, currents and the sediments transport and are characterized by alternate erosion and accretion. Additional changes occur due to perturbations that are introduced by anthropogenic factors by activities such as construction of structures in coastal waters. Shorelines

are also in a natural process of evolution in coastal areas and the shoreline changes at a given site depends upon the interaction of the natural process and the geomorphic features of the coast. Although, anthropogenic factors can lead to accelerated changes in the shoreline, however, there are also instances where even without anthropogenic factors the shoreline changes can be very high.

80. The studies carried out by ICMAM and Rajawat et al have brought out that the Andaman and Nicobar Islands which has got the least disturbances to its coast line, has the longest coastline in the country and also has the highest erosion as well as the highest accretion along its shoreline. Even Kerala coast has 9.54 Sqkm of area under accretion and 5.31 Sqkm of area under erosion, with a net accretion of 4.23 Sqkm **(A S Rajawat et al: Assessment of coastal erosion along Indian coast on 1:25000 scale using satellite data 1989-91 and 2004-2006 time frames, Current Science, Volume 109, No. 2, July 2015)**. Therefore, attributing the shoreline changes entirely due to one factor without exhaustive study at a particular site on the coast and effect of shoreline may not yield correct findings. All the three studies, namely ACE, INCOIS and NCSCM having shown that coast around

Vinzhijam has remained either stable or has shown low accretion during the last twenty years. The findings of the independent studies cannot be brushed aside in the face of the ACE study which has not only been questioned for the methodology used but also for arriving at the conclusion based on satellite imageries of incomparable resolutions as aforesaid.

We are, therefore, unable to accept the contention of the Appellants that the proposed port is in high erosion zone and that the EAC has merely accepted the contentions of the Project Proponent and given its recommendations for setting up of port at the proposed site. The documents placed on record reveals that the EAC had not only considered the shoreline changes in its 95th Meeting held on 18th to 20th January, 2011 which recorded that Thiruvananthapuram Districts falls in high erosion zone as per the study of ICMAM, Ministry of Earth Sciences, but other material also. The EAC had recommended that this aspect be examined and a detailed record on shoreline changes on the proposed site along with time series satellite imageries be furnished. These

findings were recorded before the site specific TORS were finalized.

81. Site Selection:

Subsequently, the EAC again examined the site specific TORS based on the study of 3 alternative sites proposed by the Project Proponents and after deliberations the EAC again examined the issue of site selection in the 101st and 102nd Meeting and based on the presentation made, the site selected for the project proponent was approved on examination of alternative sites, weightages which included the amount of dredging and filling required and impact on surrounding fishing harbor and fishing rehabilitation. Even in the 128th meeting when project was recommended for grant of EC, while recording the submissions of the project proponents, the EAC has also taken note of the various studies carried out by ICMAM, NCSCM and ACE as well as INCOIS and only thereafter gave its findings recommending the project for grant of EC. In the light of minutes recorded by the EAC particularly on the shoreline changes where references to various studies have been made, presumption has to be drawn that the Committee applied its mind after going through all the reports and its recommendations in favour of the Project. EAC is a statutory body and unless there are

glaring errors or discrepancies, there is no reason for us to interfere in its findings.

We also have no reason to believe that public hearing was not well represented or that it was not conducted fairly and transparently. The comments/suggestions received during the public hearing were incorporated. The allegation of deleting vital portion from the Draft EIA report also does not hold water as alterations by way of deletions and additions are a normal practice which a draft EIA Report is subjected to, before it is made as a final EIA Report to be placed before the EAC. We have no reason to disbelieve the Project Proponent and the State of Kerala in considering that the EAC, before recommending the Project, had access to all the documents including deleted portion of the ACE report and then recommended the Project for grant of EC, after being satisfied with the final ACE report.

82. The relevant extracts of the Minutes of the meeting of EAC (128th Meeting) which had considered all the aspects in detail, reads as under:

“The Minutes of the 128th Meeting of the Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held from 20th -23rd November, 2013

*in the Conference Hall, MMTC, Scope Complex, Lodhi Road,
New Delhi.*

- 1. -----*
- 2. -----*
- 3. -----*

***4.26 Environmental and CRZ Clearance for Vizhinjam
International Container Transshipment Terminal at
Vizhinjam by M/s Vizhinjam International Seaport Ltd
[F.No. 11-122-2011IA-III]***

*The 126th EAC in its meeting held in September, 2013
noted that the State Government had not adequately
responded and provided comments on the various
representations received w.r.t. the proposed project. The
representations received on the meeting day, were also
provided to the State Government. Principal Secretary,
Environment, Kerala Government was, requested to
respond to all these representations.*

*Numerous representations for and against the project
were received by the EAC. The Chairman, during the 127th
meeting checked whether any representations against the
project were present and if they wished to make any further
representations. None opposing the project were present.
Two supporters of the project were present and they
submitted their representations.*

*The Additional Chief Secretary, Government of Kerala
provided comments on the various representations vide
letter dated 17th October, 2013. In their reply, it is stated
that the representations which were received by the MoEF*

on 21st September, 2013 (after the Public hearing) and forwarded to the State Government have been reviewed by VISL and the State Government and it was noted that almost all the new representations are repetitions of the 235 representations received during the Public Hearing held on 29th June, 2013. These have been duly addressed in the relevant sections of the CEIA report, the consolidation of which is provided in Section 7.1.9 (page 7-26 to 7-71) of Volume I of CEIA report (Aug 2013). The State Government stated that the representations submitted after the Public Hearing are mainly on behalf of the resort owners whose land may have to be acquired for the project, and by their association, the Kerala Hotel & Restaurant Association (KHRA). The State Government informed that the CEIA study reveals that all the above resorts are located within 200M from the High Tide Line (HTL), in violation of the CRZ Notification, 1991 & 2011. The Hon. Supreme Court in its Judgment dated 08-08-2013 in SLP No. 24390-24391 of 2013 filed by M/s Vaamika Island (Green Lagoon Resort) against the Judgment of the Hon. High Court of Kerala ordering demolition of the resort constructed violation the CRZ Notification, has held as under:

‘24. Further the directions given by the High Court in directing demolition of illegal construction effected during their currency of CRZ notification 1991 and 2011 are perfectly in tune with the decision of this Court in *Piedade Filomena Gonsalves Vs. State of Goa and others* (2004) 3 SCC 445, wherein this court has held

that such notifications have been issued in the interest of protecting environment and ecology in the coastal area and the construction raised in violation of such regulations cannot be lightly condoned.'

The project proponent and the State Government pleaded that the EAC should take note of the advantage of the mega project development, vis-a-vis the inconvenience caused to any party. In that respect, the project proponent stated the advantage of the project to the Country, state and locality far outweigh the apprehended social issues. It was pointed out that many of the resorts on whose behalf the petitions have been sent to MoEF are violators of CRZ against whom Government have directed the KCZMA to take action. They stated that such petitions from violators of environmental laws of the land may not get consideration from the authority charged with the responsibility of ensuring compliance with such laws. The State Government stated that it was a Green Port project, incorporating all the modern environmental and ecological safeguards. 5% of the project cost amounting to Rs. 140 crores have been set apart for social responsibility activities.

As regards the issues on behalf of fishing community, the Project Proponent/State Government stated that an additional fishing harbour with 500m additional berth which could double the capacity of the existing fishing harbour, would benefit the fishing community immensely. The Project will solely benefit the fishing community and the

locality. Such mega development projects of immense consequence to the community have been subjected to judicial scrutiny' in the environmental point of view in important cases reported as AIR 1992 Bom: 471 (Konkan Railway), AIR 2000 SCC 3751 (Narmada Bachao Vs Union of India), etc where the development needs were held to be equally important as the environmental considerations. The project Proponent stated that apprehensions in the petitions have been duly taken care of in the EIA report and the mitigation measures proposed would certainly take care of any genuine concern.

The Project Proponent also submitted point wise replies vide their letters dated 21st & 29 October, 2013. The Project Proponent stated that out of 31 resorts in the vicinity, 29 are in violation of the CRZ Notification and the State Authorities have initiated action against them.

Indian Navy and Coast Guard officials also made a presentation in support of the project and highlighted its strategic importance considering that the site is at the tip of the Indian peninsula near the international shipping route, which is hardly 18 km away, where about 100 vessels are sailing daily. They also informed that the presence of foreign powers in the Indian Ocean and neighbouring countries make the site strategically important from the national security perspective, for joint operation with the

amphibian unit of the Indian Army and the Southern Air Command stationed at Thiruvananthapuram.

The project proponent in his presentation stated that this port located near to the international shipping route should be a strong competitor to the Colombo port, which at present is handling about 40% of the Indian transshipment cargo and Vizhinjam is poised to become the transshipment hub of India with 18 m natural draft with no maintenance dredging, which can dock the largest (18000TEU) vessels, which no other Indian port can boast. They also stated that a dedicated cruise terminal will result in the transformation of Vizhinjam as the cruise hub of the country resulting in a quantum jump in tourism.

The proposal was examined by the EAC in its 127th meeting held in October, 2013. After deliberation, the EAC asked the Project Proponent to prepare a response subject wise on the issues raised during the public hearing and in the representations received subsequently.

The major issues raised in the various representations are, false date in Form-I, presence of endangered species not given, site is in CRZ-I area, Shoreline study focus on impacts after 1980 but needs to assess the changes in 1969-73 also, fishery and tourism related impacts not addressed/mitigated in final CEIA, Difficulties in crossing the ship channel and to fish in deep

sea, dredging might cause extensive damage & pollution, no specific parameters in ToR on tourism and impact on tourist was not studied, EIA study area was taken as 10 against 15 km, unscientific site selection, violation of CRZ/MoEF, ToR compliance, Pollution & social relevant impacts already being felt.

During the 128th meeting of EAC Mr. Cyriac Kodath and Mr. John Jacob Puthur, c/o Centre for Fisheries Studies, Two representatives of Coastal Watch were present at the venue and submitted representations.

Project Proponent presented the details of all major issues in the 128th EAC meeting. It was stated that all the issues have already been raised and addressed during Public Hearing. The purpose of raising the same issues again was to delay the process of clearance. Project Proponent informed that economic viability has been carried out as suggested by EAC and findings are in favour of the project. The issues raised are in personal interest of certain Resorts. Project Proponent provided the information/clarification along with the reference on each of the issues raised.

- (i) False data in Form- I, i.e. the presence of endangered species not given, site is in CRZ-1 area: Project Proponent informed that the EIA study has confirmed that the proposed project stretch is not a nesting ground for turtles*

or any protected (RET) species, based on the field studies, social surveys, review of secondary data and historical data base & studies done by CMFRI station at Vizhinjam (refer section 4.5.6.7 of CEIA). The same was confirmed by the CRZ mapping report (CESS, April, 2013, P-9), which stated “the Project does not have any sensitive ecosystems such as mangroves, sand dunes, corals, etc. eligible to be categorised as CRZ IA”

(ii) Shoreline study: Shore line study carried out by Indian National Centre for Ocean information service (INCOIS), Government of India. The Study categorically established that it is not in high erosion zone. Project Proponent informed that shoreline analysis are to be done with the images of comparable resolution. 30 m resolution image of 1992 and 23 m resolution images of 1997, 2001, 2006 and 2011 were compatible (p-6 of shoreline report, Aug, 2013) and hence used for the shoreline analysis excluding the low resolution image (80m) image of 1973. Ground truthing was carried out as part of the shoreline studies. The 1969-73 satellite data are not available with comparable resolution. However, ground truthing is matching with the findings. Further the findings are in conformity with the ICMAM and NCSCM study. The copy of the shoreline change map prepared by NCSCN presented before EAC reveals that generally the site has rocky coast with pockets beaches with a small area having low erosion status towards the

northern end of the proposed port boundary. The Topo sheet of Thiruvananthapuram and Kanayakumari Districts, No. 58/3/SW, 58D/15/NE, prepared based on survey carried out in 1989-90, produced by the Project Proponent, showed that the proposed site has rocky shore. The Project Proponent submitted the comprehensive EIA study along with the shoreline change and modelling studies was carried out as required. Further the CESS, who mapped the CRZ also confirmed the suitability of site for port construction as per the CRZ Notification, 2011.

Regarding the issues on deletion of pages from report on shoreline changes, Project Proponent informed that according to the TOR granted by MoEF, INCOIS, GoI was engaged and a standalone report was prepared. Asian Consulting Engineers (ACE) were also engaged who have included a section on shoreline changes in the Draft EIA. The method used by ACE was a crude method of Sedimentation pattern analysis by comparing the Brightness values of the infrared band of the shoreline waters under different years. Project Proponent stated that comparison of 80 m low resolution image (1973) with 30/23 m resolution images of 1990/2002/2011 used by ACE are not compatible for shoreline analysis due to high difference in resolution. In fact, infrared band is not used for turbidity analysis because water will not reflect any radiation in the infrared band. Moreover, it requires radiometric correction to

compare the temporal satellite data for digital signatures. The methodology followed by INCOIS is similar to the methodology followed by MoEF through NCSCM. In view of the above, the report portion in Section 4.3.7 in the Draft EIA was excluded in the final EIA report. A comparison of the above two the methodology was presented to the Committee. The EAC note form the above comparison that the methodology followed by INCOIS is similar to the methodology followed by NCSCM and the findings are the same and also in conformity with the ground turthing. Further, Modelling studies show that there will not be any significant erosion due to the development of the port.

(iii) Impact on Fishing Activities and fishermen livelihood:

Project Proponent informed that extensive stakeholder consultations with, 28 nos. of focus group discussions were carried out for fisheries sector, 22 coastal villages located up to 25 km, North and 15 km on South were consulted. The exact number of fishermen affected due to the project were estimated and compensation will be provided to all eligible persons. Steps to safeguard the interests of the fisheries sector are included in the Resettlement Action Plan (RAP), Corporate Social Responsibility (CSR) and in the Integrated Fishing Community Management Plan (IFCMP). The project proponent has set apart Rs. 7.1 crores as part of the compensation package for the fishers sector (Table 7.17,

CEIA Report, Aug. 2013), as livelihood restoration measures for mussel collectors, shore seine fishermen and others. As part of CSR activities in the fisheries sector an additional amount of Rs. 41.30 crores has been set apart under (i) water supply scheme (7.3 crores) (ii) new fishing landing centre (16 crores) (iii) adoption of existing fishing harbour (5 Crores) (iv) sea food park (4 crores) (v) skill development centre (4 crores) (vi) environmental sanitation (3 crores) and (vii) solid waste management (2 Crores), (CEIA Report, Aug, 2013 Table 8.1). The Project Proponent has also submitted a stand alone report on Integrated Fishing Community Management Plan (October, 2013) based on the CEIA Report, Aug. 2013).

Regarding the issue raised with respect to difficulties in crossing the ship channel and to fish in deep sea, due to the development of port, Project Proponent informed that presently the fishing vessels are crossing about 100 ships daily in the international shipping route located hardly 18 km from Vizhinjam coast. During the construction phase a maximum of 8 barges and during peak operation phase a maximum of 3 container/other vessels are only expected and that too approaching the port in slow speeds under navigational guidance. Hence, the difficulties will be marginal, if not nil.

Further, project proponent responded to the apprehended difficulty regarding long distance travel due to the project. The project proponent stated that the apprehension was not a major impact since the fishermen form the south of the proposed port have to circumvent the new breakwater only on two days in a year-prior to monsoon to dock their boats to Vizhinjam harbour and back to their home beach after monsoon. It was informed that Mussels re-colonisation on the outer BW is expected in 2-7 years after the commencement of port construction. The beach existing near the fishing harbour will be maintained in the 300m stretch between the proposed port and the existing fishing harbour and an additional fish landing centre is included as part of the proposed project in this 300 m stretch with berth along the outer phase of the proposed breakwater.

(iv) Impact due to dredging: Project Proponent informed that Capital Dredging is a short time activity. The capital dredged material (7.6 Mm³) in full can be utilised for reclamation of berths, based on geotechnical studies and hence there was no need of offshore disposal or marine borrow areas. This has been covered under of CEIA Report, Vol. I Aug, 2013 (p-2.24).

The annual sedimentation within the proposed port assessed is about 30000m³/year implying no need of

routine maintenance dredging. Further the sedimentation rate within the fishing harbour will get reduced from the current 3000m³/ year to 400m³/year (Modeling Report, Aug, 2013, p-108)

(v) Impact on Wadge Bank a fish breeding ground: Project proponent informed that Wadge Bank is located about 40 km away on the existing international shipping route, over which about 100 ships are sailing daily. Out of the above, only three ships are expected to deviate to vizhinjam, and hence the concern of impact expected to be is nil or minor. Since the capital dredged material would be completely used for reclamation and maintenance dredging is not anticipated, there will be any degree disposal and impacts on that account are also ruled out (CEIA, Aug, 2013, Fig. 4.40)

(vi) Impact on Tourism: Project proponent informed that only 8 resorts are to be acquired for the project (all located in CRZ NDZ) for all the Phases. No land is proposed to be acquired for the projects in Phase II & III in accordance with current master plan. While finalising the master plan it became absolutely necessary that a stretch of about 14 acres of land behind the Phase I berths lying within the 200M HTL (housing 8 resorts in CRZ NDZ) shall also be acquired for the project for the backup facilities (for all the three phase of development) over and above the three resorts envisaged at the ToR approval stage. However this change has not

affected the site selection analysis as is evident from Chapter 3 of CEIA Report, Aug, 2013 which analysed the site selection under three scenarios, viz: Original sitting studies (2003), impacts on tourism comprehensively and is complete in all respects including the impacts on tourism. Further alone report titled “Tourism Impact Mitigation & Management Plan”, October, 2013 was prepared by integrating the information in the CEIA Report, August, 2013 and submitted to MoEF vide letter No. VISL/EC/MoEF/2013 dated 29th October, 2013.

Compensation packages in accordance with the entitlement framework will be given to the resort owners as project proponent has set apart Rs. 1,464 crores for livelihood restoration measures to the staff of the 8 resorts (CEIA, Aug, 2013, Table 7.17). As part of CSR activities in the tourism sector, Rs. 63 crores has been set apart, with Rs. 58 crore for construction of cruise terminal (DPR, May, 2013 Annexure 2) and Rs. 5 crore for tourism facilities (CEIA, Aug, 2013 Table 8.1)

Further the project proponent has set apart Rs. 34 crores for Area Development Activities under CSR (CEIA, Aug, 2013, Table 8.1), for planned development of the region, to be implemented based on the ongoing study though CEPT University, Ahmadabad.

(vii) Site Selection: Project proponent informed that the CEIA report, 2013, Aug, 2013, Chapter 3 unequivocally justifies the site selection. The site analysis (Section 3.2 of the CEIA report) shows that the site north of Vizhinjam was not suitable as the same is eroding and the coast is more dynamic especially till Kollam (as per the MoEF report Status of Shoreline Change Due to Erosion & Accretion, by Institute of Ocean Management, Anna University, Chennai & MoEF)

(viii) Violation/construction of approach road without prior CRZ/EC: Project proponent informed that Vizhinjam International Seaport Limited (VISL), a fully owned Company of the Government of Kerala is of national and international importance. Accordingly VISL purchased land for the development of the project through a negotiated purchase basis, including land for a 2 Km long and 45m wide port road. As part of the Kerala State Transport Project works of the Kovalam-Kaliyikkavila stretch, adjoining the proposed port road, the State Government initiated construction of a small temporary services road of 670m length and 10 m width through the land in possession of VISL. The construction initiated on 16th August 2010 was stopped on 4th July, 2010, after completing 550m, based on the revelation that part of the above stretch of road fell in the 200m/500m landward zone of the HTL as per the CRZ Notification, 1991/2011. After the revelation it was also

decided that further construction activities shall only be taken up after obtaining the required clearance from Ministry of Environment and Forests (MoEF), Government of India. On completion of the EIA study, VISL has submitted the application for Environmental Clearance to the MoEF in August 2013. On compliance with section 5(i) of the MoEF office memorandum No. J-11013/41/2006-IA.II(I) dated 12th December, 2012, the Board of Directions of the VISL has resolved to give a written Commitment to MoEF that further construction activities will be taken up only after obtaining Environmental Clearance. The copy of the resolution has been submitted to EAC of MoEF on 23rd Nov 2013, vide letter No. VISL/EC/MoEF/2013 along with the endorsement from the State Government.

(ix) Addition of Navy Components: Project Proponent informed that Navy Berth and Coast Guard Berth were included in keeping with the requirement of Ministry of Defence on consideration of national security. The port layout and engineering aspects remain unchanged. GoK gave in principle approval for the Navy & Coast Guard proposals (vide Government of Kerela letter No. 344/E1/2013/F&PD dated 23.03.2013 & NO. 11976/E1/2011/F&PD dated 04-04-2013). The impact were covered in the EIA and Navy Officers also made a presentation on the proposed components during Public Hearing. Photographs of the Public Hearing were shown to the EAC.

(x) Quarry of raw material for construction: Project Proponent informed that out of four quarry sites identified, two sites (existing quarries) were shortlisted.

(xi) Study area: project proponent informed that according to the EIA Guidance Manual for Ports & Harbours, 2010 “proponent should collect primary baseline data in the project area as well as the area falling within 5 km from the proposed project boundary and secondary data should be collected within 15 kms aerial distance from the project boundary, as specifically mentioned at part 9 (III) of Form I EIA Notification 2006”. The present study has been done accordingly, the primary data generated (Air, Water, Noise, Soil, etc.) are in 10 km radius, and secondary data collected from the whole district i.e. Thiruvananthapuram (PIA District), Further, the details of the sensitive areas from 15 Km radius are given in Table 4.2 of CEIA, Aug, 2013. The Socio-economic survey has been carried out for a 15 km stretch on both sides of the project site along the coast. Shoreline studies have also been carried out for a 15km stretch on both sides of the project site along the coast.

(xii) Viability: Project Proponent informed that a detailed study on the economic benefit of the project was carried out, which reiterated the economic viability of the project with an economic internal rate of return of 12.93 % which justified the investment (refer EIRR report, May, 2013 submitted vide letter No. VISL/EC/MoEF/2013 dated 29th October, 2013).

This has been computed based on financial model acceptable for all international projects. It was the acceptable scientific way of computation of cost benefits. The Project Proponent stated that the Project would bring overall economic benefit to the area, state, region and the country and this has been addressed in the EIA report.

Regarding the issues raised by the opponents on 23rd November, 2013, Project Proponent reviewed the representations during the meeting and informed that all the concerns have been addressed in the CEIA report and subsequent submissions. All the mitigation measures suggested by the EIA, EMP will be followed strictly.

The EAC noted that the Project Proponent has assessed all likely impacts due to the project and arrived at a suitable EMP. Also responded properly to all the issues raised in the Public hearing as well as in various representations made against the project. Therefore, the EAC has recommended for grant of Environmental/CRZ clearance stipulating following conditions”:

- i. “Consent for Establishment” shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.*

- ii. Project Proponent shall carry out intensive monitoring with regular reporting six monthly on shore line changes to the Regional Office, MoEF
- iii. The capital dredged material (7.6Mm³) shall be utilised for reclamation of berths.
- iv. Additional fish landing centre shall be developed as part of the proposed Vizhinjam port for upliftment of fisheries sector.
- v. The project shall be executed in such a manner that there is minimum disturbance to fishing activity.
- vi. Steps would be taken to safeguard the interest of the fisheries sector as detailed in the Resettlement Action Plan (RAP), Corporate Social Responsibility (CSR) and in the Integrated Fishing Community Management Plan (IFCMP: namely a component of Rs. 7.1 crores as part of the compensation package for the fisheries sector, as livelihood restoration measures for mussel collectors, shore seine fishermen and others, Rs. 41.30 crores as part of CSR activities in the fisheries sector under (i) water supply scheme (7.3 crores) (ii) new fishing landing centre (16 Crores) (iii) adoption of existing fishing harbour (5 crores) (iv) sea food park (4 crores) (v) Skill development centre (4 crores) (vi)

- environmental sanitation (3 crores) and (vii) solid waste management (2 crores)*
- vii. Rail connectivity shall be parallel to the harbour road on elevated structures at +4/5.00m level without affecting the entry to the existing harbour.*
- viii. Compensation packages in accordance with the Central/State Government norms shall be given to all the authorised-cum-affected (having valid clearances as applicable) resort owners.*
- ix. The port shall ensure that all ships under operation follow the MARPOL Convention regarding discharge of spillage of any toxic, hazardous or polluting materials like ballast water, oily water or sludge, sewage, garbage etc. The emission of NOx and SOx shall remain within permissible limits.*
- x. CSR activities shall cover villages within 10km radius of the project*
- xi. Oil spill contingency Management Plan shall be put in place.*
- xii. All the recommendations of the SCZMA shall be complied with.*
- xiii. The responses/commitments made during public hearing shall be complied with in letter and spirit.*
- xiv. All the recommendations of the EMP shall be complied with in letter and spirit. All the mitigation*

measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.

xv. The Ministry will examine and take necessary action in accordance with the prevailing regulation against the construction of temporary service road by project proponent.

xvi. The project proponent shall bring out a special tourism promotion package for the area in consultation with the State Government and implement the same along with the project

xvii. The project proponent shall place on its web site its response to the Public Hearing, and representations as presented to the EAC in the 128th Meeting held on 23rd November, 2013, for information of the general public.”

83. The applicants/appellant have also raised a question that the present site was not the best available and accordingly the selection of the site for the port was improper and arbitrary. It may be noted that while selecting a site for port certain factors are to be kept in mind. Firstly, proximity to the shipping route. The present site is more suitable because Vizhinjan is on the Southern Coast of Kerala and it was selected because of the two of the most

important international shipping route, namely Atlantic-far East and Middle East-far East, which are within 10 nautical miles. This would facilitate the port to compete with the Port Hambantota, Sri Lanka which is being developed by China. Moreover, the present site is better than the other two alternative sites at Pulluvilla and Poovar which were considered by the EAC. Secondly, the site was selected because of its natural depth and draft of 18 meters fit for largest container vessels. Thirdly, therefore the annual dredging would be minimum. Fourthly, as discussed above the coastline is stable and not prone to high erosion. Fifthly, there is a very small population at the project site. Sixthly, the other two sites namely Pulluvilla and Poovar are prone to siltation because they are situated in Karichal and Neyyar Rivers respectively.

84. It was on the parameters namely proximity to the shipping route natural depth and draft, status of erosion and final implementation of dredging etc. and present status of surrounding area from the point of view of population, and fishing harbour etc. that three sites were selected. Over a period of time grading was done for each of the sites by using different situations for giving the points. The present site was found to be the best for construction of the port, amongst all the three sites under consideration.

85. Even otherwise it was not for the applicants/appellant to select the site as it was the domain of MoEF/EAC to decide about the same. The EAC had in its 101st and 102nd Meeting deliberated upon site of the project. In pursuance of the directions of the EAC in its 101st Meeting, that VISL had submitted a Comparative Evaluation Matrix on 14.06.2011 to MoEF along with a map of alternative locations. Thereafter, the EAC reviewed the present Comparative Evolution Matrix and map in its 102nd Meeting and after being duly satisfied selected the site at Vizhinjan as the best site for the project.

86. Changes in Form-I:

The respondents had further submitted that Project Proponent had arbitrarily and without notice changed Form-I dated 01.04.2011, on the basis of which the ToR had been granted. After perusal of the record, we are of the considered view that the changes so made are neither substantial nor they can be said to be of a nature which would vitiate the Environmental Clearance. VISL had to carry out minor enhancement in the project components as an outcome of the finding of the Environmental/Engineering and Social studies which was undertaken by it for optimized environment management. Thereafter, an updated Form-I along with a Consolidated ToR and a Tabulated Statement capturing the optimization from the ToR to the draft EIA Report stage was submitted to the

MoEF on 27th May, 2013. The Changes alleged are increase in water consumption to 3000 KLD already mentioned in the first Form I (given on 01.10.2010 and returned by EAC), as Government of Kerala had already allotted 3000 KLD from Vellayan Lake including water supply to local people as part of CSR. Secondly, the change in reclaimed area 42.2 Ha to 66 Ha was because the beach area was included. Thirdly, the length was increased from 650 meters to 800 meters to accommodate the largest container vessels introduced at that time. Fourthly, there was an increased dredging because of deepening of the ship channel, all these changes are confined to breakwater area which was already been studied under ToR.

87. It is also to be noted that all necessary studies of final Form-I parameters were done for EIA Report. The final Form-I along with EIA Report was made available for public consultation. Accordingly objections taken during public consultation to changes in Form-I were placed before EAC on 20th – 23rd November, 2013, in its 128th Meeting EAC concluded that EIA Report and studies on which it was based, had been properly done and no need was felt for any fresh studies.

88. Endangered Species:

The appellants have drawn attention to the EIA report where in a mention has been made about the

presence of endangered and other rare species, in the project area. Presence of nesting grounds of Olive Ridley turtles have been reported in the beach near Mulloor fishing village, which is currently being used for fishing activity. It is to be noted that Mulloor fishing village and the coast is proposed to be used and reclaimed for the port. The appellant has also relied on a Central Marine Fisheries Research Institute (CMFRI) study paper to contend that the proposed site falls in an area, which needs to be classified as Marine Protected area on account of Stressed fishing zones. The Appellant has also referred to some species of fishes, like Catfish, cuttlefish, chorinomes, kalava and seer fish which have breeding and spawning grounds in the area and will be adversely affected due to dredging, reclamation and other port construction works.

This fact has been disputed by the Respondents 3 and 4, who claim that there has been very occasional sighting of turtles and even the record of sighting is based on secondary sources and is not of recent times.

89. India has a coastal line of about 8000 KM starting from the states of Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Kerala, Andhra Pradesh, Orissa, West Bengal, Andaman and Nicobar Islands and the Lakshadweep. Apart from sustaining fishing grounds, India's coastal waters and beaches provide foraging and

nesting sites for a variety of marine species, including sea turtles. Five species of sea turtles are known to inhabit Indian coastal waters and islands, which are the Olive Ridley (*Lepidochelys olivacea*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), Loggerhead (*Caretta caretta*) and the Leatherback (*Dermochelys coriacea*) turtles. Except the Loggerhead, the remaining four species nest along the Indian coast.

90. Threats to marine turtles in India are many, and varied.

Some of the major threats include unplanned beach development (including ports, lighting, tourism and plantations), by-catch mortality (in trawl nets and gill nets), weak enforcement of fisheries and Protected Area regulations and, to a limited extent, killing of turtles for meat and the poaching of eggs (**World Wildlife Fund-India Study Report of 2013 titled “Marine turtles along the Indian Coast-Distribution, status, threats and management implications”**)

91. The coastal state of Odisha; on the eastern coast of India, experiences one of the world’s largest mass nestings of Olive Ridley turtle during the months of October to April. Three of the world’s major mass nesting beaches for this species are located in Odisha, supporting a nesting population of probably more than half a million Olive Ridleys, making this one of the most critical conservation areas for this species globally. (Swaminathan Committee

Report on CRZ, 2005). This report has also referred to a new nesting site of Olive Ridley turtle site in Payyoli beach, North Kerala.

92. According to WWF study referred to above, Kerala which has a 580 KM of coastline, shows turtle nesting across nine coastal districts of Kerala, of which seven locations show higher nesting numbers between 2005-2011. All these locations are in districts, other than Thiruvananthapuram. The UNEP-CMS also carried out survey between 2003 and 2004, in the North Kerala along Kannur and Kasargod coast, previously reported to be important nesting habitats of sea turtles (Bhupathy, 2007). No turtle mortalities were recorded during the survey, and reports from fishermen revealed only occasional stranding. Nest depredation by humans and predation by dogs/wild animals was reported to be unknown. The locations are known to have some confirmed and unconfirmed reports of nesting.

93. The broad conclusion is that number of turtles nesting along the Kerala coast is very less and the records maintained are very few. Major part of the coast (more than 50%) has already been converted into artificial coast preventing turtles to visit such coastal area. There is, once in a while, rare sightings of olive turtles hatchlings and sighting of turtles. Tourist inflow in to the few pocket beaches has already reduced turtle sighting. In any case

there is no endemic species of turtles which occurs only in Kerala coast. Setting up of port at Vinzhijam is not expected to cause a threat to the survival of any of the turtle species recorded to have been sighted in Thiruvanthpuram district. The presence of regular nesting and on a large scale of Olive Ridley turtles is reported and confirmed in Orissa Coast and not at Kerala coast.

Though conservation of species of turtle and species of fishes occurring is important from the point of view of documenting species distribution across coastal length of India, the question that needs to be answered is whether the proposed port project of the strategic nature, should be given up on account of this.

94. The applicants/appellants have failed to show the presence of any RET (rare/endangered/threatened) animal or plant species restricted to this area. Nor have they been able to show that any of the plant or Animal species is endemic to the project area. Merely saying that some animal species are there does not carry any weight as it is but natural that the area must be having population of animals. But that is true for all other places. Construction of the port shall have some impact on the occurrence and abundance of species living there but while deciding about a developmental project, the pros and cons of its impact on the environment are determine and preparation of EIA/EMP is the steps in that direction.

95. Sustainable development principle requires us to balance the two. The entire east coast of India particularly Odissa, Andhra Pradesh, Tamil Nadu and Andaman Nicobar islands are known for extensive presence of the five main species of turtle known to occur in India. Kerala only has occasional sighting through catches and nestings. There is no endemism of the species in Kerala. Besides the port in the first phase will be less than 1Km and will eventually go up to less than 3KM in coastal length.

We are unable to convince ourselves that the construction of the port at the proposed site will result in serious threat to the survival of the turtle as a species though what may happen is the shifting of the turtle from the areas to other more favourable nesting beaches and sites particularly because the turtle is known for migrating periodically over large distances across the oceans.

96. Modelling Study

The Applicants/Appellants have also questioned the grant of EC on the ground that modelling study of the project is faulty. The Mathematical Modelling Study compiles of all the best models available for the purpose. The modelling study was undertaken by L&T Ramboll which has more than 20 years of experience in mathematical modelling of coastal processes and had prepared shoreline modelling studies. The report had thereafter undergone reviews on two occasions and at

separate levels. The First one was at the level of Government of Kerala by constituting Expert Technical Committee (ETC) and second by the EAC. At both the levels, there had been experts who specialized in Coastal Sciences. The inputs from ETC, EAC and stakeholders were incorporated, considered and addressed.

97. Queries of similar nature were also raised during the public hearing by the representative by Kerala Hotel and Restaurant Association (KHRA), of which the owners of illegal resorts, near the project site, are also members. These queries were duly addressed in the Updated Modelling Report in August, 2013, and replied as item No. 39 and 40 of Table 7.26 of EIA, Volume (I) August 2.13, pages 7.57 to 7.66, submitted to MoEF. The EAC had reviewed the above also before granting the EC.

98. The Applicants/ Appellants have failed to provide any cogent/ substantial evidence on the basis of which they have challenged the modelling study conducted by the experts. As the Applicants/ Appellants challenge is not based on any expert evidence, the contention with regard to modelling study is not sustainable.

99. Doctrine of Public Trust

Another submission made by the Applicants/ Appellants is with regard to Doctrine of Public Trust. It would suffice to say that Public Trust Doctrine relied upon by the Applicant/Appellants does not apply in the present

case for the simple reason that the principle of law is that it is not to apply to any situation covered by legislation or a regulatory framework. In this regard, reference be made to the case of M.C. Mehta Vs. Kamal Nath (1997) 1 SCC 388 wherein the Hon'ble Supreme Court, in Para 35 has laid down as under:

“35. We are fully aware that the issues presented in this case illustrate the classic struggle between those members of the public who would preserve our rivers, forests, parks and open lands in their pristine purity and those charged with administrative responsibilities who, under the pressures of the changing needs of an increasingly complex society, find it necessary to encroach to some extent upon open lands heretofore considered inviolate to change. The resolution of this conflict in any given case is for the legislature and not the courts. If there is a law made by Parliament or the State Legislatures the courts can serve as an instrument of determining legislative intent in the exercise of its powers of judicial review under the Constitution. But in the absence of any legislation, the executive acting under the doctrine of public trust cannot abdicate the natural resources and convert them into private ownership, or for commercial use. The aesthetic use and the pristine glory of the natural resources, the environment and the ecosystems of our country cannot be permitted to be eroded for private, commercial or any other use unless the courts find it necessary, in good faith, for the public good and in public interest to encroach upon the said resources.”

Apart from it, in this case public resources are not being diverted for commercial/ private interest but for a project which will be for larger public good and serve national interest. So on this count also the doctrine of public trust is not attracted in the instant case.

100. Public Hearing

Further, the Applicant/ Appellants have contended that the public hearing was not conducted in accordance

with the procedure set out in the EIA Notification, 2006 and EAC did not consider the objections raised by the public. It may be stated here that the Kerala State Pollution Control Board had held a public hearing on 29th June, 2013 and the same was chaired by a District Magistrate. About 800 stakeholders participated in the hearing and the record of the proceedings by KSPCB was forwarded to MoEF with a copy to the Project proponent on 6th July, 2013. The Project proponent has prepared the separate comprehensive Volume (Volume iii-final EIA Report) compiling and classifying of the complaints/ responses received to all representations (Volume I CEIA Report), press clippings and Notifications. The EAC had admitted representations till the last, i.e. 26th November, 2013 and the Project proponent addressed these representations completely. Each and every stakeholder was given an opportunity to present his views and concerns in front of the District Magistrate, officials of KSPCB and local administration. Therefore, in view of the above, we do not find any force in the contention raised by the Applicants/Appellants that there was casual dismissal of their contentions during the public hearing.

101. Deletion of chapter from draft EIA

There is yet another contention raised by the Applicants/Appellants that the chapter of Shoreline Erosion was deleted from the draft of EIA Report (Section 4.3.7). A perusal of the minutes of 128th Meeting of EAC

reveals that a detailed discussion had taken place in respect of deletion of the said chapter from the draft. The reasons provided by Project proponent were analyzed and accepted by the EAC and recorded in the minutes of the meeting of 20th and 23rd November, 2013. It has been submitted by the Project proponent that otherwise also Section 4.3.7 title Shoreline Erosion included in the draft of EIA Report was prepared by Asian Consulting Engineering (ACE), who were appointed to carry out the study relating to marine environment. The Project proponent had in compliance of the additional ToR Commissioned a separate stand alone stand on long term Shoreline changes through INCOIS (Government of India Undertaking in Ocean information and advisory services who was associated with ICMAM for the preparation of shoreline changes report for MoEF in October, 2009) simultaneously with the EIA study. The report title 'Assessment of Long Term shoreline changes in and around the proposed Vizinjam Port December, 2012' was published along with the draft EIA Report in May, 2013 during the public hearing. At that time the section on shoreline changes prepared by ACE was discussed in detail. The Project Proponent reviewed the issue and discussed the same with INCOIS while preparing the final EIA Report and observed that the methodology followed by ACE was totally unreliable. The ACE has no expertise in

studies relating to shoreline changes and it had used a crude method of sedimentation (turbidity/ silt/ impurity) pattern analyses by comparing the brightness (DN) values of the satellite images relating to the infrared band of the shoreline waters under different years. The infrared band is not used for turbidity analyses because water does not reflect any radiation in the infrared band. Moreover, it requires radiometric correction to compare the temporal satellite data for digital signatures.

102. On review of the accepted methods as enunciated in the ICMAM Report, it became evident that the methodology employed by ACE is not an accepted/ scientific method for shoreline change analyses. Therefore, it appears that ACE had arrived at an erroneous conclusions and as such, Section 4.3.7 was excluded. It was the Sections from the stand-alone 'long term shoreline change' report which was incorporated in the final EIA Report. Moreover, EIA Report is an evolving document which remains a draft and is bound to undergo changes after incorporation of the views of the public, stakeholders and necessary changes by EMP.

103. It is noteworthy that Clause 7 (i) III (vii) of the EIA Notification, 2006 mandates that the Project proponent is to address on all material of environmental concerns expressed during process and to make appropriate changes in the draft EIA and EMP, therefore, the

appropriate changes made, on the completion of the process, in the final EIA Report is permissible under law.

104. **Viability Gap Funding**

According to the Applicants/Appellants the instant project is not financially viable. It appears that the said contention made is based on certain deliberations made in the report prepared by the Ministry of Finance, Government of India, while considering the viability gap funding. While considering the question of fund to the project, the Ministry of Finance considered all possible circumstances, including adverse. The fact that some adverse comments were made during the deliberation, itself was to show that it had considered all possible aspects while granting the approval. It rather shows that decision making process was objective. The Government of India had, while approving viability gap funding, had not only considered the financial viability but also the economic benefits.

The purpose of VGF Scheme is to support economically important infrastructure projects that are financially unviable due to high capital investment, long gestation and inability to realize high user charges.

105. There is a difference between financial viability and economic viability. While the former refers to financial

profitability from the point of view of an individual or enterprise, the latter to the benefit cost analysis from the point of view of the society at large. For instance, the infrastructure projects like metro rail, hospitals, air ports etc. maybe completely financially unviable but still they may be vital for economic development. The real balance to be struck is not between financial viability and environmental cost but between economic development and the environment cost. It has been laid down in the case of:

Indian Council For Enviro-Legal Action v.

Union of India (1996) 5 SCC 281

“31. While examining the validity of the 1994 Notification, it has to be borne in mind that normally, such notifications are issued after a detailed study and examination of all relevant issues. In matters relating to environment, it may not always be possible to lay down rigid or uniform standards for the entire country. While issuing the notifications like the present, the Government has to balance various interests including economic, ecological, social and cultural. While economic development should not be allowed to take place at the cost of ecology or by causing widespread environment destruction and violation; at the same time, the necessity to preserve ecology and environment should not hamper economic and other developments. Both development and environment must go hand in hand, in other words, there should not be development at the cost of environment and vice versa, but there should be development while taking due care and ensuring the protection of environment. This is sought to be achieved by issuing notifications like the present, relating to developmental activities being carried out in such a way so that unnecessary environmental degradation does not take place. In other words, in order to prevent ecological imbalance and degradation that developmental activity is sought to be regulated.”

106. For Vizinjam Port, the Economic Internal Rate of Return (EIRR), which is the basis for selecting high priority infrastructure project, is 12.93 per cent. This is more than what is accepted Internationally. There are two reports, namely, “IFC and Vizinjam Port PPP Project Preliminary Project Plan” which had been prepared by Royal Haskoning and the other “Estimation of Economic Internal Rate of Return of the Vizinjam Port Project” by Deloitte Touche Tohmatsu India Private Ltd., which have concluded that the port project as a positive NPV, even after taking into account the environmental cost.

107. The environmental cost, in the present case is minimal as there are no rare species of ecologically sensitive areas at the project site. The cost to the environment has been factored in through an Environmental Management Plan of Rs. 140 crores (including CSR) which outlines steps to minimize and mitigate adverse effects on environment. Therefore, there is no legal basis in the EIA Notification or EIA Manual to contend that the project should not be granted the EC unless the financial benefit from the project outweighs its environmental cost. The Central Government, after having due regard to the economic, social and strategic importance of the project to the country,

has sanctioned a VGF of Rs. 818 crores for the project.

108. **Port Estate Development**

It has been submitted that in the garb of development of the Port, licensee/ concessionaire has been given Port estate development for which no EC has been granted. First of all, the port estate development is in terms of master plan for the port. Secondly, the test is whether the project is really for development of a port. The first phase for which the EC has been granted is purely for the Port. The container terminal and the cruise terminal at Vizhinjam will need associated infrastructure such as port related-residential facilities, commercial facilities, hospitals etc.

Such estate development being necessary for infrastructural facilities as part of the port development activity, is permissible under law. In the case of :

**Villianur Iyarkkai Padukappu
Maiyam v. Union of India** (2009) 7 SCC 561
(Para 212-213, 216 and 217)

212. *The argument that Respondent 11 is permitted to carry on real estate business by construction of five-star hotels, a trade centre as well as a beach resort in the garb of development of Pondicherry Port and therefore, the project should be grounded, cannot be accepted. It can hardly be disputed by anyone that the main objective of the project is the development of Pondicherry Port. The Government of Pondicherry has not entered into concession agreement with*

Respondent 11 to permit the said respondent to run a real estate business. While developing the Port, it is necessary to provide certain infrastructural facilities for passengers, shipping crew, port staff and other personnel associated with the Port, as part of the port development activity.

213. *Respondent 11 as developer of the Port has not yet submitted necessary plans for scrutiny of Ministry of Environment and Forests, Government of India, seeking clearance to the project. As and when, the plans are submitted for clearance, the competent authority can always decide upon the desirability of making of constructions which do not fall within the development of the Port. The ancillary activities to be undertaken while developing a port cannot be stopped by merely naming them as real estate business.*

216. *The appellants have failed to bring on record any material to substantiate the allegation that there is a conspiracy to grab the land belonging to the Government of Pondicherry for the purpose of real estate of Respondent 11 by permitting it to construct five-star hotel, commercial mall, etc. The reply-affidavit filed by the respondent before the High Court, on the contrary, shows that the feasibility report prepared by it indicated that the Port was to be developed in composite manner and therefore project should be commercially viable and therefore considering the enormous cost involved in the development of the Port, certain activities are sought to be undertaken for the benefit of passengers, crew of ships, staff, etc.*

217. *On the facts and in the circumstances of the case, this Court is of the opinion that the appellants have failed to make out the case that the Pondicherry Government has permitted Respondent 11 to carry on real estate business and therefore the appeals should be accepted.*

The Ernst & Young report on project feasibility had recommended Port estate development only to reduce viability gap funding to the level of 40 per cent of the total project cost. This is a precondition for getting funding from

Government of India under its VGF Scheme. Concessionaire will exercise the option to develop port only if financially viable. The port estate development cost is Rs. 3500 crores and may not be financially feasible. No lease has been granted to the concessionaire and only a license to construct and use. Concessionaire is required to apply for and take EC and all other statutory approval, under the concession agreement, for port estate development.

109. **Benefits for Fishermen Community**

As Government of Kerala has been actively involved in the project, VISL has taken several steps to alleviate the impact on fishermen who would be affected by the port project. The steps taken include building additional fish landing centre, providing housing, mechanized boats, fishing kiosks, alternative livelihood and entrepreneurship development. The Project proponent is also modernizing the existing fishing harbour and also to construct an additional 500 meters long fishing berth in the new fishing harbour. The Government of Kerala has, in addition to, announced the package of welfare measures including payment of Rs. 1.50 lakhs per family or a boat with an outboard motor for 5 families for Rs. 7.50 lakhs. Subsequently, the Government of Kerala had raised the amount to Rs.

2 lakhs per fishermen or Rs. 11 lakhs per boat owner. The State Government has also announced a package of Rs. 475 crores for overall welfare of the coastal area of Thiruvananthapuram District for housing, stay boats for multiday fishing, mechanized boats for deep sea fishing, alternative livelihood, skill development, etc.

110. **Another Port- Enayam**

The Applicants/ Appellants had made an attempt to challenge the EC on the ground that there is another port namely Enayam at Colochal which is also coming up. The Enayam Port is still at the proposal stage and is port of Sagarmala project along with Vizinjam Port. According, to the Respondent, State of Kerala, the Enayam Port will be a sister port to the present project and it would complement it. The Enayam Port is yet to prove its economic viability in the light of the existence of Vizinjam port. The question of Enayam port was not even in existence when the EIA study was being conducted for the present project. When the Enayam project is still at the proposal stage, in our considered view such a contention raised by the Applicants/ Appellants as a ground to challenge the environmental clearance already granted to Vizinjam port, cannot be accepted.

111. **Heritage Site**

The Applicants/ Appellants had, during their submissions in rejoinder, advanced an argument that area of outstanding natural beauty be read as heritage site. There is no dispute about the fact that the category of area of natural beauty was mentioned under 1991 CRZ Notification but they do not find place in 2011 CRZ Notification. The said category was specifically removed/ deleted on the recommendation of Swaminathan Committee Report which had found such a category too subjective to identify and demarcate. Besides, when area of outstanding natural beauty and heritage sites were the two separate terms given in 1991 CRZ Notification and when the subsequent Notification of 2011 had totally dropped the category of area of natural beauty then the argument raised by the Applicants/ Appellants to read area of outstanding natural beauty into the other category namely heritage sites, cannot be permitted.

It is a settled principle of law that amendments in a statute must be presumed to have been made in order to bring about changes in the law and must be given full effect.

Lalu Prasad Yadav v. State of Bihar,

(2010) 5 SCC 1 (Para 39)

“39. However, if the later statute does not use the same language as in the earlier one, the alteration must be taken to have been made deliberately. In his classic work, *Principles of Statutory Interpretation* by G.P. Singh, 12th Edn., 2010 at p. 310, the following statement of law has been made:

“Just as use of same language in a later statute as was used in an earlier one in *pari materia* is suggestive of the intention of the legislature that the language so used in the later statute is used in the same sense as in the earlier one, change of language in a later statute in *pari materia* is suggestive that change of interpretation is intended.”

The learned author also refers to the observations of Lord MacMillan in *D.R. Fraser & Co. Ltd. v. Minister of National Revenue*¹³: “When an amending Act alters the language of the principal statute, the alteration must be taken to have been made deliberately.”

State of U.P. v. Malik Zarid Khalid,(1988)1

SCC 145 (Para 10):

“10. We are unable to accept the appellant’s contention. The interpretation placed by the Full Bench of the High Court on ¹⁵¹Section 3(o) equates the position under the statute after the amendment of 1976 to the position both as it stood prior to the 1976 amendment and also as it stood after the 1983 Ordinance. Such an approach fails to give any effect at all to the change in language deliberately introduced by the 1976 amendment. No doubt, prior to the amendment, only buildings of which the government was owner or landlord were excluded from the Act. But the legislature clearly intended a departure from the earlier position. If the intention was merely to extend the benefit to premises owned or let out by public corporations, it could have been achieved by simply adding a reference to such corporations in Section 2(1)(a) and (b) as they

stood earlier. Reading Section 2(1)(a) and (b) as they stood before amendment and the definition in Section 3(o) side by side, the departure in language is so wide and clear that it is impossible to ignore the same and hold that the new definition was just a re-enactment of the old exemption. The exclusion was earlier restricted to buildings owned by the government and buildings taken on lease or requisitioned by government and granted by it by creating a tenancy in favour of someone. The amendment significantly omitted the crucial words present in the earlier legislation which had the effect of restricting the exclusion to tenancies created by the government, either as owner or as landlord. Full effect must be given to the new definition in Section 3(o) and to the conscious departure in language in reframing the exclusion.”

Moreover, the meaning and very nature of heritage sites in the ordinary parlance do not support the interpretation which the Applicants/Appellants have sought to make. The area only at Varkala was retained in CRZ I because Geological survey of India made it a national geo- park and recommended that it may be made UNESCO geo-heritage site. Therefore, the areas or structure of archeological importance and heritage sites at Varkala only falls under Clause 7 (i) A (K). In such a situation the submission made by the Applicants/Appellants to read area of outstanding natural beauty into heritage sites, as being covered by clause 7 (i) A (K) is not sustainable.

112. We may conclude, from the above discussion that the order impugned in these Application/Appeals relates to establishment of deepwater container port at Vinzjam. The building of such port is crucial for economic development of State of Kerala as well as the Country. The Government of Kerela had appointed Vinzjam International Sea Port Ltd. (VISL) as the nodal agency to develop an International Container Transshipment Terminal of which the Chief Minister is the Chairman. VISL formulated the project for developing Vinzjam International deepwater multipurpose Sea Port at Vinzjam. It is a major project to be completed in three phases. The first phase is to come up in 66 Hectares of land which is to be reclaimed from the sea. The Material required for the purpose is to be obtained from dredging activities in the sea. The construction would include breakwater stretch of about 3.180 Km into sea and the material required would be about 7 million metric tons. After filing of the application by Project Proponent for obtaining Environmental Clearance in August, 2010 the matter was considered by Expert Appraisal Committee.

Thereafter the matter was considered in various meeting of Expert Appraisal Committee. The

Government of Kerala had undertaken the exercise for selection and Vinzjam sea port was found to be best suited. The Expert Appraisal Committee had also agreed to the site and issued TOR. Subsequently a draft comprehensive report for Environmental Impact Assessment (EIA) was prepared and public hearing was also conducted on 29th June, 2013. The final EIA Report was then submitted to Expert Appraisal Committee for Environmental Clearance. The Expert Appraisal Committee ultimately recommended on 23rd November 2013 for the grant of Environmental Clearance. MoEF granted the clearance on 3rd January, 2014.

113. In the instant Applications/Appeals challenge has been made to the grant of clearance to the project on different grounds. The first and foremost ground taken by the appellant is that of the site in question is one of the areas of outstanding natural beauty which according to CRZ Notification, 1991 falls in the category of CRZ-I. It is an admitted position that in the subsequent CRZ Notification of 2011 the category of areas of outstanding natural beauty has not been included. It is pertinent to mention here that the Appellant has preferred not to challenge the Notification of CRZ, 2011.

Moreover the emphasis placed by the learned Counsel appearing for the Applicants/ Appellants upon places of '*area of outstanding natural beauty*' is in relation to the cliff is misplaced. The cliff primarily and alone is not a subject of natural beauty but has greater utility in protecting soil erosion. It stops the soil erosion from sea waves and protects the ecology. We have already discussed at some length that only a part of cliff has been demolished while by creating alternative methodology of preventing soil erosion. Major part of the cliff still remains intact near the project area. The plea of preserving or protecting the '*areas of outstanding natural beauty*' is a general concept applicable to all States while, the subject matter of the present application is limited to the granting or otherwise of environmental clearance and CRZ to Vizhinjam Port. Thus the contention is entirely unfounded.

Therefore, the prayer either to protect or preserve an area natural beauty or that the instance project cannot come in the area of natural beauty which was under CRZ-I in the CRZ Notification 1991 is not tenable. After coming up into existence of CRZ-2011 the earlier Notification of 1991 is non-existent and stands superseded. In case the prayer of the

appellant is considered then it would amount to directing the MoEF to amend the CRZ Notification of 2011 which is not permissible under law.

114. As regards the objection taken by the Applicants/Appellants shoreline change and erosion on the ground of modification relating to Asian Consulting Engineers (ACE) study between the Draft EIA Report and the Final EIA Report is concerned, it would suffice to say that the same does not vitiate the process for the reasons given herein above. The draft of L & T Ramboll and INCOIS were placed along with ACE Report. A draft of EIA Report for public hearing was also available on VISL website. The changes to EIA Report so as to include any response and objection received from the public consultation in final EIA are mandated by Class 7(3)(vii) of EIA Notification. EAC had permitted the project proponent or the public to present their views on the Final EIA report and they had raised objections. The EAC had actually called EIA Report referring to ACE study and examined the same on merit in its 128th meeting. The question raise with regard to high erosion is not correct. The study in this regard as mentioned above goes to show that the coast near the proposed site is stable and areas of high erosion are far off.

It has also been submitted by the appellant that the site proposed for the port was not proper. In all three sites namely Vinziam, Pooruvill and Poovar were considered by the EAC. Taking into consideration the purpose of competing with other ports of Sri Lanka etc. and that the proposed site is only 10 nm away from the international route that present site was considered. It was also the reason that there was a natural depth and draft of 18 m which was appropriate for large container vessels and this would also minimise the dredging of the sea. The sites of pulluvilla and Poovar were rejected as these were prone to siltation because of two rivers Karichal and Neyyar River in the vicinity. Even otherwise it is the domain of MoEF and EAC to select the site and once it has been so done it would not be proper for this Tribunal to interfere in the same.

115. Therefore, after having considered the facts and Circumstances of the cases; the material on record and provisions of law we do not find any substance in the submission made by the Applicants/Appellants. In the result, the application and appeals are disposed of while declining the principle reliefs prayed for.

116. However, in the facts and circumstances of the case we pass following directions for strict compliance by the concerning respondents:-

1. We hereby constitute an Expert Committee of the following, for compliance and adherence to the directions given in this judgment.
 - i) Senior Scientist (Grade F or above), representing the Director, Indian National Centre for Coastal Information Services, Ministry of Earth Sciences.
 - ii) Senior Faculty/Scientist of (Grade F or above) from the National Centre for Sustainable Coastal Management, MoEF.
 - iii) Senior Scientist (Grade F or above) representing Director, Central Marine Fisheries Research Institute, Kochi (ICAR).
 - iv) Senior Scientist representing Director, National Remote Sensing Agency (NRSA), Department of Space, Hyderabad.
 - v) Senior Officer not below the rank of Director from the Chief Hydrographer of Indian Naval Hydrographic Department, Dehradun.
 - vi) Dr. A.B. Akolkar, presently Member Secretary, Central Pollution Control Board, Delhi.

vii) Member Secretary, Kerala Coastal Zone Management Authority, who will also function as the Member Secretary and Nodal Officer of the Committee.

The Senior Scientists and Senior Officers as aforesaid shall be nominated, by the Heads of the department of the respective institutions within one week from the date of passing of this judgment and confirm such nomination to the Member Secretary.

2. The Expert Committee shall monitor each and every condition stipulated in the EC and CRZ clearance granted by the MoEF and the directions contained herein. The Member Secretary of the Committee shall file a report, in every six months, to the Tribunal.
3. Establish mechanism for setting up a Cell within CZMA Kerala for regular monitoring of the Shoreline changes in the project area, and within 10 Km on either side, at the cost of project proponent. The Cell shall be located with the CZMA Kerala and the entire funds for establishment and recurring expenses for that purpose shall be provided by the Project proponent. The shoreline changes monitoring will be carried out by using the latest imageries of the best available resolution and supported with ground truthing. Annual report on shoreline changes will be brought out by the CZMA Kerala duly

- vetted by the Expert Committee and kept in the public domain.
4. Dredging, if any required in the shipping harbour and within 10 kms of the Project on account of accretion and sediment deposit, shall be carried out by the Project proponent periodically and shall be monitored by the Committee both before and after dredging.
 5. Appropriate steps, both engineering and otherwise, shall be taken by the Project proponent if coastal erosion within 10 kms of the project site is observed based on the Shoreline studies. These measures shall be carried out by and at the cost of the Project proponent, as per the suggestions of the Expert Committee.
 6. The sewage from the entire Harbour Complex shall be so managed that the entire sewage is processed within the complex without discharging any untreated sewage into the sea or on Land. All the sewage shall be treated to a level making the treated sewage suitable for all non-drinking uses, including industrial use. No sewage shall be released into municipal sewer line. In case the sewage is not processed, as aforesaid, the same shall be done at the cost of the Project proponent.
 7. All the municipal waste generated within the Harbour Complex shall be processed within the Complex strictly in accordance within SWM Rules, 2016. Responsibility for processing the MSW will be that of the Project

- proponent and no MSW shall be dumped at the municipal site or handed over to the Municipal authorities for processing. If any municipal waste is not properly processed then the same shall be got done at the cost of project proponent.
8. Setting up adequate number of air quality monitoring stations by the Project proponent within the project site in consultation with the Kerala Pollution Control Board. In case of default such monitoring stations shall be established at the cost of Project proponent.
 9. To implement all the recommendations of the Fisheries management Plan, particularly those relating to creation of additional fish landing Centres, up-gradation of existing fishing harbour, skill development, creating community infrastructure for the benefit of the fisher community and other welfare measures required for fishermen and their families.
 10. The Committee shall also monitor resettlement and rehabilitation programme of the project.
 11. The Committee may impose additional conditions, over and above those in the EC, CRZ clearance and those outlined above, in the interest of the protecting environment, ecology and the interest of different stakeholders. The Proponent shall implement such additional conditions imposed by the Expert Committee.

The Expert Committee, through its Member Secretary, shall submit a quarterly report on the monitoring carried out by it to this Tribunal.

12. All the dredged material, silt and sand, shall be used in land reclamation work as per the EIA and EMP and the project document. Any excess dredged material, if available, shall be disposed only after site for the purpose has been indentified and approved by the SPCB Kerala. No wetlands, water bodies or river or streams or any area located within the CRZ I shall be used for the purpose of dumping the dredged material.
13. Hotmix plants/ quarries/ stone crushing unit if any set up during construction phase, whether within the project site or off site should have adequate antipollution devices installed and should conform to ambient air quality standards.
14. Noise pollution during construction and operation phase must meet standards prescribed, particularly in case of those for residential areas, schools, hospitals located within the project or in recently thereof.
15. The project proponent shall ensure that air pollution, both during the construction and operation phase, from construction works, transportation of construction debris and material and due to vehicular emission is within the ambient air quality standards during all the times.

16. In case this Tribunal finds any default on the part of the Project proponent in relation to compliance of EC or CRZ or directions contained in this Judgment or in relation to instructions given by the Expert Committee, the Tribunal shall be constrained to pass penal and coercive orders, including imposition of environmental compensation.

117. Consequently, the Original Application No. 74 of 2014, Appeal No. 14 of 2014, Appeal No. 71 of 2014 and Appeal No. 88 of 2014 are disposed of. There shall be no order as to cost.

The Miscellaneous Application Nos. 277 of 2014 and 221 of 2016 do not survive in view of the final judgment passed in the cases by the Tribunal today.

....., CP
(Swatanter Kumar)

....., JM
(M.S.Nambiar)

....., JM
(Raghuvendra S. Rathore)

....., EM
(B.S Sajwan)