

*Subhas Datta*  
Advocate

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

EASTERN ZONE BENCH KOLKATA

ORIGINAL APPLICATION NO. 151/2022

SUBHAS DATTA

.....APPLICANT(S)

-VS-

STATE OF WEST BENGAL & ORS.

.....RESPONDENT(S)

AFFIDAVIT ON BEHALF OF RESPONDENT NO. 2, URBAN DEVELOPMENT & MUNICIPAL AFFAIRS DEPARTMENT, GOVERNMENT OF WEST BENGAL IN COMPLIANCE WITH THE ORDER DATED 21.11.2022 OF HON'BLE NATIONAL GREEN TRIBUNAL, EASTERN ZONE BENCH, KOLKATA

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Filed by

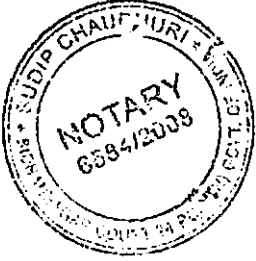
*Rajib Ray*

Mr. Rajib Ray  
Advocate

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

EASTERN ZONE BENCH KOLKATA

ORIGINAL APPLICATION NO. 151/2022



SUBHAS DATTA

.....APPLICANT(S)

-VS-

STATE OF WEST BENGAL & ORS.

.....RESPONDENT(S)

SL. NO. 64-2023

BEFORE THE NOTARY PUBLIC  
AT KOLKATA  
DIST.-NORTH 24 PARGANAS

AFFIDAVIT ON BEHALF OF RESPONDENT NO. 2, URBAN DEVELOPMENT & MUNICIPAL AFFAIRS DEPARTMENT, GOVERNMENT OF WEST BENGAL IN COMPLIANCE WITH THE ORDER DATED 21.11.2022 OF HON'BLE NATIONAL GREEN TRIBUNAL, EASTERN ZONE BENCH, KOLKATA

Most Respectfully Sheweth:

I, Nandini Ghosh, daughter of Samir Dasgupta, aged about 54 years, by occupation - service, working for gain as Special Commissioner, Urban Development and Municipal Affairs Department, Government of West Bengal, having office at 'Nagarayan', DF -8, Sector - 1, Saltlake, Kolkata - 700064, do hereby solemnly affirm and state as under:-

1. That I am the Special Commissioner, Urban Development and Municipal Affairs Department, Government of West Bengal. I am well acquainted with the facts and circumstances of the case and I have been duly authorized to affirm this affidavit on behalf of the Urban Development & Municipal Affairs Department, Govt. of West Bengal.

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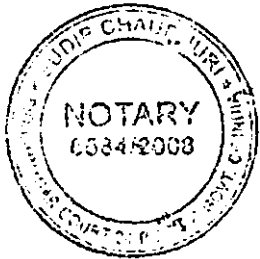
2. I say that the Hon'ble NGT has pleased to passed an order on 21.11.2022 directing *inter-alia* that-

“...All the Respondents shall file their counter-affidavits within four weeks”.

3. Before dealing with answering the statements and/or allegations as contained in the said application. The following facts are being stated –

(i) That I say that the Department of Urban Development and Municipal Affairs has undertaken initiatives for planned and scientific development and beautification of Digha.

(ii) That I say that Town & Country Planning Branch of this Department *inter-alia* has submitted the following actions taken on the basis of short term, midterm and long term measures for planning of Digha coastal region:



- a) Master plan for redevelopment of Digha coastline has been taken up to make Digha a resilient and economy generating tourist hub in consultation with all stakeholder Departments and Statutory Bodies following several site visits and meeting with all stakeholders.
- b) After the cyclone, on emergency basis the restoration and detailed investigation of work started with entire manpower. Costs of the damages are enquired. A synopsis of damage and cost has been calculated which is to the tune of Rs. 45 crores.
- c) On emergency basis, restoration of stalls, crematorium has been done.
- d) A midterm plan has been conducted and under midterm plan, the repair of infrastructure related to livelihood was given priority.

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e) Major works like Beach front Beautification, Roads, Electrical works etc. (16 nos.) have been completed in war footing mode.

f) IIT Kharagpur has been appointed for preparation of Long term Master Plan.

(iii) That I say that the Department of Urban Development and Municipal Affairs has sent a letter bearing No. 82 (4) UDMA-15011(15)/15/2022-LS-UD SEC-Dept. of UDMA dated 25/11/2022 to Managing Director, West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO); CEO, KMDA; Director, SUDA; CEO, Digha Sankarpur Development Authority (DSDA) with a request to provide a detailed report in connection with the matter bearing Original Application No. 151/2022/EZ.

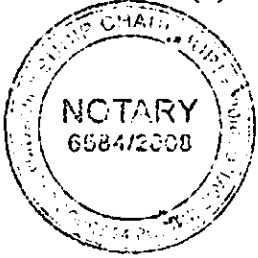
A photocopy of the letter *vide* No. 82 (4) UDMA-15011(15)/15/2022-LS-UD SEC-Dept. of UDMA dated 25/11/2022 is annexed herewith and marked as Annexure R-1.

(iv) That I say that, Digha Sankarpur Development Authority (DSDA), an autonomous body constituted by the Government of West Bengal in Urban Development and Municipal Affairs Department under the West Bengal Town & Country (Planning & Development) Act, 1979, has submitted a detailed report *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022 in reply to the letter bearing No. 82 (4) UDMA-15011(15)/15/2022-LS-UD SEC-Dept. of UDMA dated 25/11/2022.

A photocopy of the Report as received from DSDA *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022 is annexed herewith and marked as Annexure R-2.

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4. That I say that, West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO) (a Government of West Bengal Undertaking) has submitted a copy of Statement of Facts on behalf of WBHIDCO along with annexure *vide* Memo No. 911/HIDCO/Law-68/2022 dated 16.12.2022 in reply to the letter bearing No. 82 (4) UDMA-15011(15)/15/2022-LS-UD SEC-Dept. of UDMA dated 25/11/2022.



A photocopy of the letter as received from WBHIDCO *vide* Memo No. 911/HIDCO/Law-68/2022 dated 16.12.2022 is annexed herewith and marked as Annexure R-3.

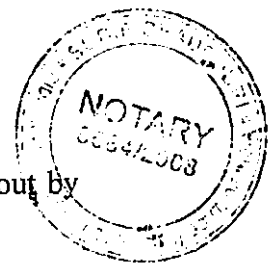
5. That I say that, with regards to the statement made in paragraph 1, 2 & 3 under reply of the Original Application it is respectfully submitted that no comments save and except the same are matters of record.

6. That I say that, with regards to the statement made in paragraph 4 under reply of the Original Application it is respectfully submitted that as per the Report received from Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, planned and scientific development of Digha is being undertaken in accordance with Land Use and Development Control Plan (LUDCP) framed as per section 31 of the West Bengal Town and Country (Planning & Development) Act, 1979.

Moreover, for the preparation of 'Long Term Master Plan' for sustainable development of Digha and important coastal belt under Digha Sankarpur Development Authority (DSDA) planning area, Government has recently engaged an expert consultancy i.e, I.I.T, Kharagpur.

7. That I say that, with regards to the statement made in paragraph 5 under reply of the Original Application it is respectfully submitted that as per the Report received from Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022

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dated 01.12.2022, all activities in respect of promotion of tourism have been carried out by maintaining all CRZ notifications and other environmental norms.

8. That I say that, with regards to the statement made in paragraph 6 under reply of the Original Application it is respectfully submitted that as per the Report received from Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, except the Lavatory block, no concreted structure is there. All structures are made of temporary basis and made of ceramic tiles, structural beam, glass, ACB, PVC material, corogated sheets, wood, bamboo etc. Only Lavatory block is a concreted roof structure. A temporary structure over the roof of toilet complex is made of wood, corogated sheets, glass etc.

9. That I say that, with regards to the statement made in paragraph 7, 10 and 11 under reply of the Original Application it is respectfully submitted that as per report submitted by DSDA *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, all beautification works have been done by maintaining all natural features like dune, trees etc. A good number of trees (both natural and planted) have been damaged by the series of cyclones like 'Phoni', 'Amphan', 'Yaas' etc. during recent past. Casurina trees and Ipomea are intact there. About 400 coconut trees and over 2000 Jhaw trees have been planted within the park during recent past.

10. That I say that, with regards to the statement made in paragraph 8 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, all structures are made of temporary basis and made of ceramic tiles, structural beam, glass, ACB, PVC material, corogated sheets, wood, bamboo etc. Only Lavatory block is a concreted roof structure. A temporary structure over the roof of toilet complex is made of wood, corogated sheets, glass etc.

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11. That I say that, with regards to the statement made in paragraph 9 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022,

a) Pathway is made of ceramic tiles

b) This is not a resort. This is basically some stalls for promotion of local handicrafts an office room surrounding a toilet block. The upper portion is built of corrugated sheet & PVC materials and wood.

c) These are Temporary structures made of container, wood, corrugated sheets etc. and all are easily removable structures.

d) Temporary structure is made of glass, ACB, PVC, material, corrugated sheets, wood, structural beams etc.

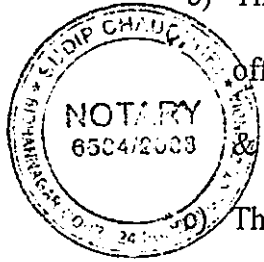
e) Purely temporary structure made of container, corrugated sheets, glass, ACB, wood etc.

f) Purely temporary structure made of corrugated sheets, glass, ACB etc. No concreted roof is there, only 2½ bricks wall is there at foundation.

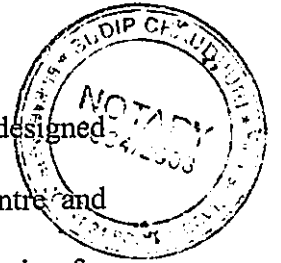
12. That I say that, with regards to the statement made in paragraph 12 and 13 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022,

a) In order to facilitate tourism construction of theme park on 'Satyajit Roy' is going on at the southern side of Forest Bungalow.

b) It is fact that the 3-storied building which is being constructed there within CRZ area and it is a part of this theme park.



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c) The building is a tourist amenity Centre. The ground floor of this building is designed as Lavatory block and first & second floor are designed for Amenity centre and restaurant for tourist visiting Digha. To facilitate tourists, one storied construction for the purpose of food court run by Self Help Group is also under the process. Digha has attracted over seventy thousand tourists per day and is showing a growing trend, but sufficient number of quality food court is not there.

13. That I say that, with regards to the statement made in paragraph 14 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) *vide* Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, following Solid Waste Management Rules 2016, solid waste have been collecting from hotels/houses through segregation method.

14. That I say that, with regards to the statement made in paragraph 15 and 16 under reply of the Original Application it is respectfully submitted that as per letter as received from West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO) *vide* Memo No. 911/HIDCO/Law-68/2022 dated 16.12.2022,

- a) The Govt. of West Bengal is proposing a Temple complex at Digha named 'Jagannath Dham Sanskriti Kendra' near Digha Railway station, in line with the Jagannath Temple, Puri. The proposed temple complex will be at the same scale as that of the Temple complex in Puri, with the main temple going up to a towering height of 65 metres.
- b) The Temple complex is proposed on a land of area 22 acres, located between the Digha Railway station and Dighali-II Hotel. The land is abutted by the main road connecting Old Digha to New Digha.
- c) For construction of the proposed project, the required CRZ clearance has been obtained from the following authorities: -

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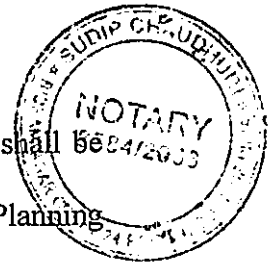
Since the project site is located at a distance of approximately 400 mts from the sea, it attracted the applicable CRZ regulations. A meeting regarding the same was held at WBSCZMA office on 04.07.2022. Further to that, WBSCMA has placed their recommendation in favor of providing the project with the necessary CRZ clearance.

- d) To understand the regulations and to get clearance for the project, WBHIDCO had approached Institute of Environmental Studies & Wetland Management (IESWM) for preparing the CRZ maps of the temple complex site as per coastal regulation act.
- e) After that the CRZ report and maps were received from Institute of Environmental Studies and Wetland Management (IESWM) and the same have been forwarded to West Bengal State Coastal Zone Management Authority (WBSCZMA) for further processing. The main temple structure is being constructed outside the CRZ zone.

- (i) All the structures falling under the CRZ-II zone are of low height (within 9 mts) which is within the permissible limit.
- (ii) Rest of the areas is all landscaped with native and exotic trees, shrubs and grass lawn. This is done to promote greenery within the site. Also, while preparing the landscape design, the landscape architect consultant has taken measures to promote water percolation through the landscaped areas to enhance the water table underground.
- (iii) The ground cover in the whole project site has been kept minimal as approx. 40% only and rest of the areas are kept exposed to sky with the natural sand surface or landscaped areas.

- f) As per Coastal Zone Notification, Ministry of Environment and Forest (Department of Environment, Forests and Wildlife), Construction involving more than 20,000 sqm Built up area in CRZ-II shall be considered for approval in accordance with EIA

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notification 2006, however, for projects less than 20,000 sqm Built up area shall approved by the concerned State or Union Territory Planning Authority. Planning authorities in accordance with this notification after obtaining recommendations from the Coastal CZMA and prior recommendation from the concerned CZMA shall be essential for considering the grant of environmental clearance under EIA notification 2006 or grant of approval by the relevant planning authority.

g) The proposed project is planned by West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO) as an initiative to enhance the cultural (Sanskriti) heritage of the state of West Bengal.

(i) It was felt that the Jagannath Dham can be a Centre of culture, spirituality, heritage and harbinger of divine blessings. The Government is devoting adequate attention to develop the project as the cultural centre of the State as well as Digha town.

(ii) This proposed project of WBHIDCO has the following facilities that will act as the catalyst of cultural development of the region-

- **Amphitheatre** where cultural events related to divinity and faith can be held. This will systematically propagate spiritual knowledge to society at large and to educate all in the techniques of spiritual life.
- **Yogashala** where yoga training facilities and events can be organized.
- **Organic farming area and gardens** where vegetables and crops can be cultivated to promote the practice of being healthy with the consumption of organic products.

(iii) The project itself is being developed as a cultural as well as religious Centre where religious activities as well as cultural activities shall be performed side

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by side. The temple complex shall offer variety of regular religious activities  
by well trained and qualified representatives.

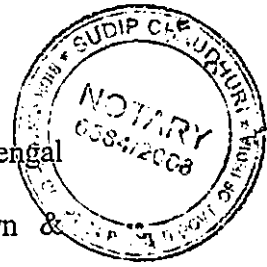


15. That I say that, with regards to the statement made in paragraph 17 under reply of the Original Application it is respectfully submitted that as per letter as received from West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO) vide Memo No. 911/HIDCO/Law-68/2022 dated 16.12.2022, complex is not just about the temple block and the deity where people would just visit for the puja ritual and leave, but a huge congregation of various cultural activities that would put a lasting impression in the visitor's mind.

16. That I say that, with regards to the statement made in paragraph 19, 20 and 21 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) vide Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, Digha Sewerage Treatment Plant was constructed by the PHE Dte., Govt. of West Bengal with the financial support of World Bank. PHE is redesigning the plan on request of DSDA and DSDA has approved financial sanction amounting to Rs.2, 34, 82,071.00 in favor of PHE for the up gradation of this project on urgent basis.

17. That I say that, with regards to the statement made in paragraph 23 under reply of the Original Application it is respectfully submitted that as per report submitted by Digha Sankarpur Development Authority (DSDA) vide Memo No. 1605/XXX-41(pt)/DSDA/2022 dated 01.12.2022, DSDA had been taken steps previously to restrict the use of single use plastic & Tharmocal at Digha. DSDA has taken several mass awareness programme under guidance of the State Urban Development Agency (SUDA), such as rally for prohibiting the use of plastic, and miking, postering to aware the people. DSDA has placed the colour bins along the beach by which the tourist can used these as dustbins.

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18. That I say that the Digha Sankarpur Development Authority (DSDA), West Bengal Housing Infrastructure Development Corporation Limited (WBHIDCO) and Town & Country Planning Branch of this department has undertaken initiatives for planned and scientific development and beautification of Digha and are regularly monitoring the progress of work.

19. That I further say that, the Digha Sankarpur Development Authority and the State Urban Development Agency (SUDA) are regularly undertaking and monitoring the work of solid, liquid and plastic waste management. The Urban Development and Municipal Affairs Department is giving utmost efforts to take necessary actions to curb and mitigate the pollution in and around sea resort town in the State of West Bengal named as Digha.

20. That the statements made in Paragraphs 1 to 19 are based on information derived from the record which are usually kept and maintained by the answering respondents in the ordinary course of business and which I believe to be true and rest thereof are my humble submission before this Hon'ble Tribunal.

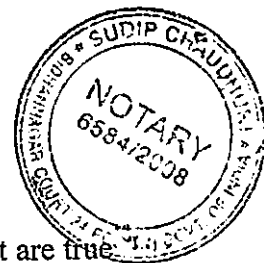
*Nandini Ghosh*

Deponent

  
S. CHAUDHURI  
\*NOTARY\*  
GOVT. OF INDIA  
Regd. No.-6584/08  
Bidhannagar Court  
Dist.-North 24 Pgs.

NANDINI GHOSH, IAS  
Special Commissioner  
Department of Urban Development &  
Municipal Affairs  
Govt. of West Bengal

03 JAN 2023



**VERIFICATION**

I, the deponent above named do hereby verify that the contents of the above affidavit are true which are derived from the relevant office records. No part of it is false and nothing material has been concealed there from.

Verified at Kolkata on this 03<sup>rd</sup> day of January, 2023.

*Nandini Ghosh*

**DEPONENT**

The deponent is identified by me.

*[Signature]*  
**Advocate**

**NANDINI GHOSH, IAS**  
Special Commissioner  
Department of Urban Development &  
Municipal Affairs  
Govt. of West Bengal

*[Signature]*  
**S. CHAUDHURI**  
\*NOTARY\*  
GOVT. OF INDIA  
Regd. No.-6584/08  
Bhadrnagar Court  
Dist.-North 24 Pgs.

**03 JAN 2023**

Annexure - R-1

GOVERNMENT OF WEST BENGAL  
DEPARTMENT OF URBAN DEVELOPMENT & MUNICIPAL AFFAIRS  
NAGARAYAN DF-8, SECTOR-I,  
SALT LAKE CITY, KOLKATA 700064

No. 82 (4) UDMA-15011(15)/15/2022-LS-UD SEC-Dept. of UDMA

Date: 25/11/2022

From : Smt. Nandini Ghosh, IAS,  
Special Commissioner to the Govt. of West Bengal.

To :

1. Managing Director, WBHIDCO,
2. CEO, KMDA.
3. Director, SUDA
4. CEO, Digha Sankarpur Development Authority.

*Sub: O.A. No. 151/2022/EZ [Mr. Subhas Datta -Vs- State of West Bengal & Ors.]*

Sir,

*In enclosing herewith a copy of the order dated 21.11.2022 passed by Hon'ble NGT, I have been directed to request you to kindly provide a detailed reports including a report w.r.t issues involved in this case (Copy enclosed) along with all supporting documents, photographs, designs, maps etc. within 29.11.2022 positively, so that Deptt. may file the affidavit before the Hon'ble NGT in due time. This may be treated as extremely urgent.*

Encl: As stated above.

Yours faithfully,

  
Special Commissioner

No. 82(5) UDMA-15011(15)/11/2022-LS-UD SEC-Dept. of UDMA

Date: 25/11/2022

Copy forwarded for information and necessary action to :

1. Chief Engineer, KMDA,
2. PHE, WBSPMG
3. PS to Principal Secretary, UD & MA Department.
4. PS to CEO, KMDA.
5. PS to CEO DSDA.

  
Special Commissioner

**NANDINI GHOSH, IAS**  
Special Commissioner  
Department of Urban Development &  
Municipal Affairs  
Govt. of West Bengal

DIGHA SANKARPUR DEVELOPMENT AUTHORITY  
P.O. DIGHA NTS, DIST-PURBA MEDINIPUR  
PIN :: 721463

Phone No. 03220-266001  
ax No. 03220-266273  
E-mail Id: [eodsda@gmail.com](mailto:eodsda@gmail.com)

Memo. No. 1605/XXX-41(pt)/DSDA/2022

Dated, Digha, the 01.12.2022

From : The Executive Officer,  
Digha Sankarpur Development Authority &  
Spl. Officer, U.D. & M. A. Deptt.  
Digha NTS :: Purba Medinipur.

To : The Special Commissioner  
to the Government of West Bengal,  
Urban Development & Municipal Affairs Deptt.  
Nagarayan, DF-8, Sector-I, Bidhan Nagar,  
Kolkata - 700 064

Sub : O.A No.151/2022/EN (Mr. Subhas Datta -VS- State of W.B. & Ors)

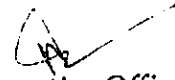
Ref : U.D & M.A. Deptt.'s memo. no. 82(4)-UDMA-15011(15)/2022-L.S- UD  
SEC-Dept. of UDMA dated 25.11.2022

Madam,

In reference to above, an issuewise details report is forwarding herewith for your kind  
perusal.

Enclo : As stated.

Yours faithfully



Executive Officer

Digha Sankarpur Development Authority  
& Spl. Officer, U.D. & M. A. Deptt.

Original Application No.151/2022  
Subhash Datta - Vs- State of West Bengal  
(Ref : Digha)

Ref : Order of Hon'ble NGT, Eastern Zone Bench, Kolkata dated 21.11.2022

**Issue : 1.**

- a) Planned and scientific development of Digha being undertaken in accordance with Land Use and Development Control Plan (LUDCP) framed as per section 31 of the West Bengal Town and Country (Planning & Development) Act' 1979.

Moreover, for the preparation of 'Long Term Master Plan' for sustainable development of Digha and important coastal belt under DSDA planning area, Government has recently engaged an expert consultancy i.e, I.I.T, Kharagpur,

- b) All activities in respect of promotion of tourism have been carried out by maintaining all CRZ notifications and other environmental norms.

**Issue : 2.**

Except the Lavatory block, no concreted structure is there. All structures are made of temporary basis and made of ceramic tiles, structural beam, glass, ACB, PVC material, corogated sheets, wood, bamboo etc. Only Lavatory block is a concreted roof structure. A temporary structure over the roof of toilet complex is made of wood, corogated sheets, glass etc.

**Issue : 3.**

All beautification works have been done by maintaining all natural features like dune, trees etc. A good number of trees (both natural and planted) has been damaged by the series of cyclones like 'Phoni', 'Amphan', 'Yaas' etc. during recent past. Casurina trees and Ipomea are intact there. About 400 coconut trees and over 2000 Jhaw trees have been planted within the park during recent past.

**Issue : 4.**

All structures are made of temporary basis and made of ceramic tiles, structural beam, glass, ACB, PVC material, corogated sheets, wood, bamboo etc. Only Lavatory block is a concreted

roof structure. A temporary structure over the roof of toilet complex is made of wood, corogated sheets, glass etc.

- a) Pathway is made of ceramic tiles
- b) This is not a resort. This is basically some stalls for promotion of local handicrafts an office room surrounding a toilet block. The upper portion is built of corogated sheet & PVC materials and wood.
- c) These are Temporary structures made of container, wood, corogated sheets etc. and all are easily removable structures.
- d) Temporary structure is made of glass, ACB, PVC, material, corogated sheets, wood, structural beams etc.
- e) Purely temporary structure made of container, corogated sheets, glass, ACB, wood etc.
- f) Purely temporary structure made of corogated sheets, glass, ACB etc. No concreted roof is there, only 2½" bricks wall is there at foundation.

**Issue : 5.**

In order to facilitate tourism construction of theme park on 'Satyajit Roy' is going on at the southern side of Forest Bungalow.

It is fact that the 3-storied building which is being constructed there within CRZ area and it is a part of this theme park.

The building is a tourist amenity Centre. The ground floor of this building is designed as Lavatory block and first & second floor are designed for Amenity centre and restaurant for tourist visiting Digha. To facilitate tourists, one storied construction for the purpose of food court run by Self Help Group is also under the process. Digha has attracted over seventy thousand tourists per day and is showing a growing trend, but sufficient number of quality food court is not there.

**Issue : 6.**

At present solid waste are dumped in the area belongs to DSDA of which southern side is forest area.

A Solid Waste Management Project has been taken up on the land of DSDA but due to resistance of local people, the said project has not yet started. Work orders of different components of this project have already been issued.

Another site has been selected for the shifting of this project and will be completed within six months.

Following Solid Waste Management Rules 2016, solid waste have been collecting from hotels/houses through segregation method.

**Issue : 7.**

“Jagannathdham Sanskriti Kendra” is a project of the West Bengal Housing Infrastructure Development Corporation (W.B.H.I.D.C.O).

**Issue : 8.**

Digha Sewerage Treatment Plant was constructed by the PHE Dte., Govt. of west Bengal with the financial support of world Bank. This project is also maintaining by the PHE Deptt.


A good number of Hotels were connected with this system but presently, it is not performing upto the mark since the existing system has choked in different points and also a vast area including huge hotels has developed during last few years.

Due to inefficiency and inadequacy of existing sewerage system, the PHE has redesigned the plan on request of DSDA and DSDA has approved financial sanction amounting to Rs.2,34,82,071.00 in favour of PHE for the upgradation of this project on urgent basis.

**Issue : 9**

The DSDA had been taken steps previously to restrict the use of single use plastic & Tharmocal at Digha. In the year 2016 Digha became plastic & Tharmocal free town by havoc checking & seizing the items. After that, during the period of pandemic Covid, the programme for prohibiting to use of plastic had been stopped and as a result the use of plastic had then increased. Now Digha become a plastic carry bag and tharmocol free zone. This office has taken several rapid programme under guidance of the SUDA, such as rally for prohibiting the use of plastic, checking , sizing etc. shop to

shop and myking, postering to aware the people. Now the plastic cover of processed food such as cake, chips, papad, plastic cover of different toys of kid, Gutka are oftenly thrown by the tourist. DSDA has placed the colour bins along the beach by which the tourist can used these as dustbin. In spite of that some are throwing the plastic cover waste outside the bins and also these are collecting by the DSDA with their regular mechanism.

  
*Executive Officer,  
Digha Sankarpur Development Authority  
& Spl. Officer, U.D. & M.A. Deptt.*

Annexure - R-3.

ESTD 1971 DEPT. OF URBAN DEVELOPMENT  
MUNICIPAL AFFAIRS  
GOVT. OF W.B.  
DT. 19/12/2022  
DAIRY NO. 4542

1824/Spe. Law/UDMA-Poll

19/12/2022



Memo No. 911/HIDCO/Law-68/2022

Date: 16<sup>th</sup> December, 2022

To:  
The Special Commissioner,  
Urban Development & Municipal Affairs Deptt.  
Govt. of West Bengal

Sr. L.O.  
19/12/2022

Sub: O.A. No. 151/2022/EZ in the matter Subhas Datta -Vs- The State of West Bengal & Others

Ref: Your Memo No. 82(4) UDMA-15011(15)/2022-LS-UD SEC Dated 25.11.2022

Madam,

With reference to above, I am directed to send herewith a copy of Statement of Facts on behalf of WBHIDCO along with annexures for your information and necessary action.

Yours faithfully,

16-12-22  
General Manager (Law)  
WBHIDCO

Encl: As stated

Memo No. 911/1(3)/HIDCO/Law-68/2022

Date: 16<sup>th</sup> December, 2022

Copy forwarded to:

1. The Chief Engineer WBHIDCO
2. The Sr. P.S. to the Managing Director, WBHIDCO
3. The P.A. to the Jt. Managing Director, WBHIDCO

General Manager (Law)  
WBHIDCO

**WEST BENGAL HOUSING INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.**  
(A Govt. of West Bengal Undertaking)

"HIDCO BHABAN", Premises No. : 35 - 1111, Biswa Bangla Sarani, 3rd Rotary, New Town, Kolkata-700156  
Telephone : (033) 2324-6037/6038, Fax No. : (033) 2324-4833/3016/6009, e-mail : wbhidcoltd@gmail.com / info@wbhidco.in  
Website : www.wbhidcoltd.com CIN : U70101WB1999SGC089276

# ANNEXURE-I

**WEST BENGAL STATE COASTAL ZONE MANAGEMENT AUTHORITY**

PranisampadBhawan, 5<sup>th</sup> Floor, Block-I.B-2, Sector-III, Kolkata-700106

Tel:033-2335-5246

FAX:-033-2335-0271

Email - [environmentwb@gmail.com](mailto:environmentwb@gmail.com)

Website :[www.environmentwb.gov.in](http://www.environmentwb.gov.in)

No. 79/EN/T-II-04/13/2022

Date : 20/7/2022

**Sub: CRZ approval for the proposed temple complex named 'Jagannath Dham Sanskriti Kendra' at Digha, District – Purba Medinipur, West Bengal**

This has reference to the above-mentioned subject wherein the Project Proponent, namely West Bengal Housing Infrastructure Development Corporation Ltd (WBHIDCO) has submitted an application to West Bengal State Coastal Zone Management Authority (WBSCZMA) seeking CRZ clearance for the proposed temple complex named 'Jagannath Dham Sanskriti Kendra' at Digha, District - Purba Medinipur, West Bengal.

The salient features of the Project, for which CRZ clearance has been sought, are as follows:

1	Location	Mouza - Bhagibaharumpur, J.L. No. - 79, P.S. - Digha, Block - Ramnagar I (Near Digha Railway Station)	
2	Area (Project Size)	20 Acres (approx.) [Land was already handed over to WBHIDCO by DSDA]	
3	CRZ classification	CRZ-II (wherein 52.52% of the Aol falls in CRZ-II area while rest 47.48% is outside the CRZ boundary).	
4	Expected Project Cost	Rs.120 crores (approx.)	
5	Geographic co-ordinates	Latitude	Longitude
		21°37'22.640"N, 21°37'26.186"N	87°47'.299"E, 87°30'47.034"E
		21°37'25.968"N, 21°37'28.440"N	87°30'43.833"E, 87°30'43.702"E
		21°37'29.567"N, 21°37'31.519"N	87°30'47.532"E, 87°30'47.435"E
		21°37'32.070"N, 21°37'29.379"N	87°30'46.780"E, 87°30'34.592"E
		21°37'30.310"N, 21°37'24.272"N	87°30'38.387"E, 87°30'34.783"E
		21°37'24.364"N, 21°37'21.830"N	87°30'36.522"E, 87°30'36.580"E

The above proposal for recommendation under CRZ was considered by WBSCZMA in its meeting held on 04.07.2022 (Copy enclosed). As per the project documents submitted and presentations made by the Project Proponent, it is observed that;

1. The proposed temple complex will be constructed by the West Bengal Housing Infrastructure Development Corporation Ltd. (WBHIDCO) near Digha Railway Station. The project cost is approx. Rs. 120 crores.
2. The total project area of 20 acres, which was handed over to the Housing Department by Digha Sankarpur Development Authority, has been finally handed over to WBHIDCO for development of the Jugannath Dham Sanskriti Kendra.
3. As per the CRZ Report prepared by IESWM, based on MOEF&CC approved CZMP, 2011, the Area of Interest (AOI) of the project falls under the following CRZ categories;

Description	Approx. Area (sqm)	Approx. Area
Total area of interest (AOI)	81214.08	~ 100 %
CRZ-II(Developed Area)	42653.50	~ 52.52 %
Outside CRZ.	38560.58	~ 47.48 %

4. As per the CRZ Report prepared by IESWM, the proposed project site is entirely on the landward side of Digha foreshore road and 52.52 % of the project area falls within CRZ II area (wherein construction is permissible as per CRZ Notification 2011).
5. From the presentation made by Managing Director, WBHIDCO it is observed that the main temple block falls outside the CRZ line. It is mostly the landscaped areas and ancillary blocks of the temple that are falling under CRZ II.
6. As per the temple master plan submitted by WBHIDCO, only the Dala Arcade/ Souvenir Shop, Facility Block, Engineering Block, Entry Gates, Roadside Shelters, feet wash and internal roads lie within CRZ II area. As informed by the project proponent, the total built-up area of the project is 11,293,404 sq mts out of which only 3182.84 sq mts falls within CRZ II area.
7. As reported by the project proponent, pre-construction investigation i.e. soil testing has been carried out by the project proponent. The water demand will be met through local arrangement and the power requirement will be met from WBSEDCL (220 KW).
8. For environmentally safe management of temple solid waste including flowers, after being offered to the deity, would be disposed of by using vermi-composting technique.. Additionally, the project proponent plans to establish an organic composting unit at site.

After going through the project document and presentation made by Project Proponent during the meeting certain clarifications were asked for by the experts and the following decisions were taken up:

1. To strengthen the buffer zone between the Area of Interest and the High Tide Line by taking up more plantations so as to provide a protection buffer to the proposed structure from high speed winds, tidal surges etc.
2. The WBSCZMA experts enquired if any further/additional construction will be taken up in CRZ II area. MD, HIDCO assured that HIDCO has prepared Master Plan and will stick to it, and there will be no additional construction in CRZ II area.
3. The Authority clarified that only small structure such as internal pathways, gates etc. may be taken up within the CRZ area. It was also suggested to take up plantation within the AOI alongside the boundary facing the beach/waterside.
4. WBSCZMA advised that considering the frequent cyclones in the coastal areas, a disaster mitigation and management plan for the project should be prepared by HIDCO. MD, HIDCO assured that a separate plan will be prepared incorporating the same.
5. The experts emphasised the need to protect the sand dunes and inter-dunal area besides creating a bio-shield to protect the Project from the sea-ingress.
6. The Authority recommended that coastal shelter belt plantations not only inside the project area but also outside towards sea will need to be taken up to protect the proposed structure from natural hazards such as tidal surges & cyclones. The Authority suggested that WBHIDCO Ltd. could approach the Forest Department for undertaking plantations in and around the Project area.

The Project Proponent was directed to incorporate the suggestions and observations of WBSCZMA as discussed during the meeting.

**DECISION:** Based on the detailed deliberations and clarification given by the Project Proponent, the WBSCZMA unanimously agreed to recommend the said project to the State Public Policy and Planning Board under the Department of Planning, Statistics and Programme Monitoring, Govt. of West Bengal, subject to the observations above and the conditions specified below, for CRZ clearance as per CRZ Notification, 2011:

#### **PART A- SPECIFIC CONDITIONS:**


- ❖ The Project Proponent shall protect the sand dunes and inter-dunal areas besides creating a bio-shield to protect the Project from the sea-ingress. Indigenous species should be used for plantation in the area, in collaboration with the Forest Department.

- ❖ The project proponent shall make adequate provisions towards safety and hazard prevention and mitigation measures considering the frequent super cyclones in the coastal areas. Details of the same to be submitted for State Public Policy and Planning Board under the Department of Planning, Statistics and Programme Monitoring and WBSCZMA for further monitoring and compliances.
- ❖ Coastal shelter belt plantation shall be taken up not only inside the project area but also outside towards sea to protect the proposed structure from natural hazards such as tidal surges and cyclones. The project proponent may approach Forest Department for undertaking plantations in and around the project area. The costs on this head may be met out of the project funds earmarked for environment protection & mitigation.
- ❖ The Project Proponent shall develop the project in a manner to ensure that it will not pose any hazard to the environment. CRZ norms specially should be strictly followed as laid down in CRZ Notification, 2011 along with amendments from time to time.
- ❖ All necessary clearances from the concerned authorities, as may be applicable should be obtained prior to commencement of project or activity. Approval of West Bengal Pollution Control Board should be obtained prior to establishment and operation.
- ❖ Green DG sets shall be installed for controlling sound and gaseous emission.
- ❖ Proper fire fighting equipment shall be kept ready, regularly maintained and occasional drills to be carried out. Storage of fuel should be as per the Rules and guidelines laid down in relevant statutes.
- ❖ All vehicles, machinery and equipment to be engaged for construction shall conform to relevant pollution standards.
- ❖ There should not be any removal of vegetative cover at the establishment as well as operations stage, without the sanction of appropriate authority. Compensatory afforestation of suitable tree species 5 times that of the number of trees felled would have to be done with the Forest Department's clearance, in case of tree felling.

#### **PART B- GENERAL CONDITIONS:**

- ❖ No excavated material during the construction shall be dumped in water bodies or adjacent areas.
- ❖ Drawal of ground water within 200m of HTL is prohibited. In no case, ground water should be extracted without permission of the Competent Authority under the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
- ❖ Liquid waste from this area should not be allowed to drain into the river without proper treatment.

- ❖ The Project Proponent shall abide by the Municipal Solid Waste (Management & Handling) Rules, 2016. The Proponent must develop the solid waste management and disposal plan ensuring storage and segregation of bio-degradable and non-biodegradable wastes. The bio-degradable wastes to be composted and used as manure. The inorganic wastes should be handed over to the Municipal Authority.
- ❖ The Project Proponent shall strictly abide by The West Bengal Trees (Protection and Conservation in non-forest areas) Rules, 2007.
- ❖ The Project Proponent shall submit a half-yearly compliance report to State Public Policy and Planning Board under the Department of Planning, Statistics and Programme Monitoring, with a copy to WBSCZMA, in respect of compliance of the stipulated terms and conditions in hard and soft copies on 1st July and 31st December, each calendar year.
- ❖ Adequate provisions for the infrastructure facilities including water supply and sanitation shall be ensured for the labourers during the construction period in order to avoid damage to the surrounding environment. Medical aid facility to be made available quickly in the event of an accident.
- ❖ Construction materials and wastes including hazardous substances, if any, shall not be allowed to pollute the surrounding land or aquatic environment, as the case may be and should be disposed of as per prevalent rules.
- ❖ The noise level and the suspended particulate matter shall be kept within permissible levels during construction as well as operation phase.
- ❖ First-aid kits shall be ensured at construction sites. Use of site safety equipment like goggles, helmets etc. to be ensured compulsorily.
- ❖ The WBSCZMA shall have the power to inspect the site so as to monitor the implementation of the conditions imposed by the State Authority. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary.
- ❖ Regular monitoring of the environmental parameters should be done to maintain the environmental status of the area.

  
 (Vivek Kumar)  
 Addl. Chief Secretary,  
 Environment Department &  
 Chairman, WBSCZMA


Incl.: 1. Minutes of meeting of WBSCZMA held on 04.07.2022

No. 73 /2(3) EN/1-II-04/13/2022

Date: 20/7/2022

Copy forwarded for kind information to:


1. The Managing Director, West Bengal Housing Infrastructure Development Corporation Ltd. HHDCC Bhavan, Biswa Bangla Sarani, 3<sup>rd</sup> Rotary, New Town, Kolkata-700156 for kind information and necessary action.
2. The Addl. Chief Secretary, Deptt. of Planning, Statistics and Programme Monitoring, Govt. of W.B., Joint Administrative Building, 7 HC Block, Sector 3, Kolkata- 106 for kind information
3. The Principal Secretary, Urban Development and Municipal Affairs Department, Govt. of W.B. for kind information

  
Member Secretary,  
WBSCZMA

No. 73 /2(3) EN/1-II-04/13/2022

Date: 20/7/2022

1. District Magistrate, Purba Medinipur District.
2. Member Secretary, West Bengal Pollution Control Board
3. P.S. to Hon'ble MIC, Environment Department

  
Member Secretary,  
WBSCZMA

**ANNEXURE-II**

**Delineation of High Tide Line (HTL), Low Tide Line (LTL),  
Coastal Regulation Zone (CRZ) for Proposed Temple Complex-  
"Jagannath Dham Sanskriti Kendra" at Digha  
Mouza Bhagibaharampur, Ramnagar-I, Purba Medinipur District, West Bengal**

**Prepared for:**

**West Bengal Housing Infrastructure Development Corporation Ltd (HIDCO)**

Vide Ref: Memo No. 70/HIDCO/AGM Engg-IV/Date- 08-04-2022

**Prepared by:**

**Institute of Environmental Studies and Wetland Management (IESWM),  
Kolkata**

**May - 2022**

## Disclaimer

The study has been conducted unbiased, without any prejudice and truthfully, abiding by the laws, notifications and regulation of this country as applicable. All efforts have been taken to represent the work as accurately as possible.

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## Document Control Sheet

1a	REPORT No.	CRZ/2022/030
1b.	FILE REF No.	3P-54/2021-22(216CL)
2.	REPORT TYPE	COASTAL REGULATION ZONE (CRZ)
3.	TITLE	Delineation of High Tide Line (HTL), Low Tide Line (LTL), Coastal Regulation Zone (CRZ) for Proposed Temple Complex- "Jagannath Dham Sanskriti Kendra" at Digha, Mouza Bhagibaharpur, Ramnagar-I, Purba Medinipur District, West Bengal.
4.	PREPARED BY	Institute of Environmental Studies and Wetland Management (IESWM)
5.	KEY WORDS	Coastal Regulation Zone (CRZ); Coastal Zone Management Plan (CZMP); High Tide Line (HTL); Low Tide Line (LTL); CRZ categories; CRZ I; CRZ II; CRZ III; No Development Zone (NDZ); Ecologically Sensitive Area (ESA), Hazard Line, Critically Vulnerable Coastal Area (CVCA)
6.	ABSTRACT	<p><b>West Bengal Housing Infrastructure Development Corporation Ltd (HIDCO) has proposed to setup a Temple Complex namely- "Jagannath Dham Sanskriti Kendra", east of Digha railway station at Mouza Bhagibaharpur (JI No.-79), Digha, Block Ramnagar- I, District Purba Medinipur. Such activity requires CRZ clearance as per Gazette Notification, 2011 and accordingly the study has been carried out by the Institute of Environmental Studies and Wetland Management (IESWM), Kolkata as per guidelines.</b></p> <p>Two separate maps (i) on scale 1:25000 covering the 7 km radius from the Area of Interest (AOI) depicting the CRZ categories and lines, HTL, LTL, ESA and (ii) on scale 1:4000 depicting the detailed CRZ categories and lines along with HTL LTL ESA of the AOI on top of cadastral information have been prepared. <b>The High Tide Line (HTL) and Low Tide Line (LTL), Ecologically Sensitive Area (ESA) and Hazard Line has been used in accordance with the MOEF&amp;CC approved CZMP for the state of West Bengal as per CRZ Notification 2011.</b> CRZ extends up to 500mts from HTL along sea front and 100 m along tidal rivers (width&gt;100m) and/or average width (width&lt;100m) of other tidal creeks from their respective HTL. Ecologically Sensitive Areas (ESA) have been classified as <b>CRZ-IA</b>. The inter-tidal region has been classified as <b>CRZ-IB</b>. Areas within the jurisdiction of <b>Digha Sankarpur Development Authority (DSDA)</b> are being considered as <b>CRZ-II</b>. Areas outside the jurisdiction of DSDA, having a primarily rural setup, relatively undisturbed and undeveloped and not substantially built up and do not belong to CRZ-I or II and has been classified as <b>CRZ-III</b>. Area up to 200m from HTL and 100 m along tidal rivers (width&gt; 100) and/or average width (width&lt;100m) of other tidal creeks is earmarked as <b>NDZ</b>. The tidally influenced water bodies such as creeks have been classified as <b>CRZ-IVB</b> and Bay of Bengal as <b>CRZ-IVA</b>.</p> <p><b>The extent of CRZ in and around the project (AOI) site is 500m from HTL and is categorised as CRZ-II, being part of DSDA. Southern part of the AOI comprising nearly 53% lies within CRZ-II and the rest approximately 47% lies beyond the CRZ limit. The AOI lies landward side of Digha Foreshore Road (NH-116B). The AOI lies within "older dune complex" along with interdunal depression, however MOEF&amp;CC approved CZMP on scale 1:25000 as per CRZ Notification 2011, do not reflect any CRZ-1A category within or overlapping with the AOI.</b></p>
7.	DISTRIBUTION STATEMENT	Not for Circulation
8.	PROJECT PROPONENT	West Bengal Housing Infrastructure Development Corporation Ltd (HIDCO)

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## Abbreviations

AOI	:	Area of Interest
CRZ	:	Coastal Regulation Zone
CZMP	:	Coastal Zone Management Plan
CVCA	:	Critically Vulnerable Coastal Areas
DSDA	:	Digha Sankarpur Development Authority
GIS	:	Geographic Information Systems
GPS	:	Global Positioning System
HTL	:	High Tide Line
IESWM	:	Institute of Environmental Studies and Wetland Management
IRS	:	Indian Remote Sensing Satellite
LTL	:	Low Tide Line
LULC	:	Land Use/Land Cover
MOEF&CC	:	Ministry of Environment and Forest and Climate Change
NDZ	:	No Development Zone
NRSC	:	National Remote Sensing Centre
RS	:	Remote Sensing
SCZMA	:	State Coastal Zone Management Authority
SOI	:	Survey of India
UTM	:	Universal Transverse Mercator
WGS	:	World Geodetic System

## 1. Introduction:

### 1.1. Background:

West Bengal Housing Infrastructure Development Corporation Ltd (HIDCO) has proposed to setup a Temple Complex namely- "Jagannath Dham Sanskriti Kendra", east of Digha railway station at Mouza Bhagibaharampur (JI No.-79), Digha, Block Ramnagar- I, District Purba Medinipur. The site is located at Digha, along the Bay of Bengal, having a low gradient with sandy beach making it one of the most popular seaside tourist spots of West Bengal. The Government wishes to enhance the importance of the place by boosting tourism and highlighting its rich heritage, art, and cultural activities. With a view to this cultural tourism and to create a spiritual attraction, the Jagannath Dham Sanskriti Kendra was envisioned (Photo 1 & 2).

As the project site is adjacent to tide influenced water bodies i.e., Bay of Bengal, it attracts Coastal Regulation Zone (CRZ) clearance as per Gazette Notification dated 6<sup>th</sup> Jan, 2011 by the Ministry of Environment and Forests and Climate Change (MoEF&CC).

Institute of Environmental Studies and Wetland Management (IESWM) functioning under the Department of Environment, Government of West Bengal, is one of the authorised agencies by the Ministry of Environment, Forest and Climate Change (MOEF&CC) to prepare CRZ maps, has taken up the task of delineating and mapping High Tide Line (HTL), Low Tide Line (LTL), identification of CRZ in and around the proposed site as per CRZ Notification 2011 guidelines which is required to be submitted to the respective State Coastal Zone Management Authority (SCZMA) by the project proponent.

## 1.2. Context and CRZ Categories:

The Government of India Notification [S.O.19 (E) dated 06-01-2011] under Section 3(1) and Section 3(2)(v) of the Environment (Protection) Act, 1986 and Rule 5(3)(d) of Environment (protection) Rules, 1986 declares 'the coastal stretches of the country and the water area upto its territorial water limit, excluding the islands of Andaman & Nicobar and Lakshwadweep and the marine areas surrounding these islands upto its territorial limit, as Coastal Regulation Zone (herein referred to as CRZ)' (MoEF&CC, 2011).

The CRZ categories consist of:

- i. The land area from High Tide Line (HTL) to 500mts. on the landward side along the sea front.
- ii. The land area between HTL to 100 mts. or width of the creek whichever is less on the landward side along the tidal influenced water bodies that are connected to the sea and the distance upto which development along such tidal influenced water bodies is to be regulated shall be governed by the distance upto which the tidal effects are experienced which shall be determined based on salinity concentration of 5 parts per thousand (ppt) measured during the driest period of the year and distance upto which tidal effects are experienced shall be clearly identified and demarcated accordingly in the Coastal Zone Management Plans (CZMPs). *Tidal influenced water bodies mean the water bodies influenced by tidal effects from sea, in the bays, estuaries, rivers, creeks, backwaters, lagoons, ponds connected to the sea or creeks and the like.*
- iii. The land area falling between the hazard line and 500mts. from HTL on the landward side, in case of seafront and between the hazard line and 100mts line in case of tidal influenced water body, the word 'hazard line' denotes the line demarcated by Ministry of Environment and Forests (hereinafter referred to as the MoEF&CC) through the Survey of India (hereinafter referred to as the SOI) taking into account tides, waves, sea level rise and shoreline changes.
- iv. Land area between HTL and LTL which will be termed as the *intertidal zone*.

- v. The water and the bed area between the LTL to the territorial water limit (12 Nm) in case of sea and the water and the bed area between LTL at the bank to the LTL on the opposite side of the bank, of tidal influenced water bodies.

The CRZ notification (2011) categories Coastal Regulation Zones based on ecologically sensitive, developed, underdeveloped, water body and its bed area namely:

- i. **CRZ I:** Areas that are ecologically sensitive and geomorphological features which play a role in maintaining the integrity of the coast (CRZ 1A) and area between LTL and HTL (CRZ 1B).
- ii. **CRZ II:** Areas that have been developed up to or close to the shoreline.
- iii. **CRZ III:** Areas that are relatively undisturbed and those do not belong to either CRZ I or II.
- iv. **CRZ IV:** The water area and the bed from LTL to twelve (12) nautical miles seaward (CRZ IVA) and water area of tidal influenced water body from the mouth of the water body at the sea up to the influence of tide (CRZ IVB).

## 2. Objectives:

The objectives for the study are as follows: -

- i. Delineation of HTL, LTL, CRZ lines for the proposed study area as per specified map scales.
- ii. Demarcation of CRZ zones including notified ecologically sensitive areas if any.
- iii. Observation on CRZ categories.

## 3. Study area:

### 3.1. Location:

The site lies in Mouza Bhagibaharampur (J.L. 79), Digha, under Block Ramnagar-I, District Purba Medinipur. The area is covered in SOI toposheet no. 730/10 as illustrated in "Location Index (Fig 1)". The project area can be accessed by NH 116B and by South Eastern Railway. The coordinates of the AOI as derived from the .kml file provided by the Project Proponent (PP). (Photo: 3- 11).

Table: I

SI No	Latitude	Longitude
1	21° 37' 22.640" N	87° 30' 47.299" E
2	21° 37' 26.186" N	87° 30' 47.034" E
3	21° 37' 25.968" N	87° 30' 43.833" E
4	21° 37' 28.440" N	87° 30' 43.702" E
5	21° 37' 29.567" N	87° 30' 47.532" E
6	21° 37' 31.519" N	87° 30' 47.435" E
7	21° 37' 32.070" N	87° 30' 46.780" E
8	21° 37' 29.379" N	87° 30' 34.592" E
9	21° 37' 30.310" N	87° 30' 38.387" E
10	21° 37' 24.272" N	87° 30' 34.783" E
11	21° 37' 24.364" N	87° 30' 36.522" E
12	21° 37' 21.830" N	87° 30' 36.580" E

# Location Index for Proposed Jagannath Dham Sanskriti Kendra Temple Complex at Bhagibahampur, Ramnagar-I, Purba Medinipur District, West Bengal

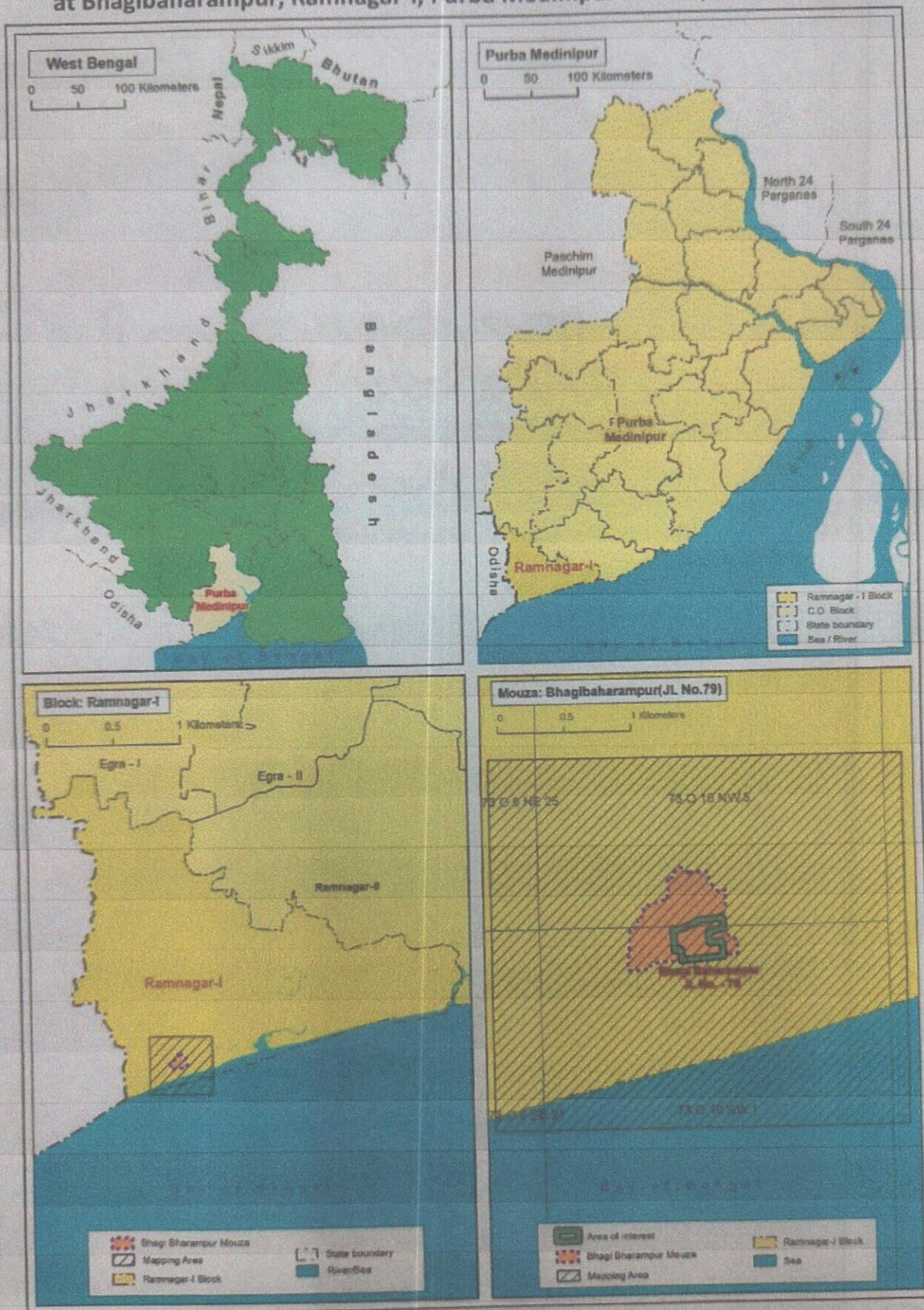


Fig 1

Delineation of High Tide Line (HTL), Low Tide Line (LTL), Coastal Regulation Zone (CRZ) for Proposed Temple Complex "Jagannath Dham Sanskriti Kendra" at Digha, Mouza Bhagibahampur, Ramnagar-I, Purba Medinipur District, West Bengal ~ IESWM



Photo 1: WorldView satellite image showing the project site and its surrounding area.

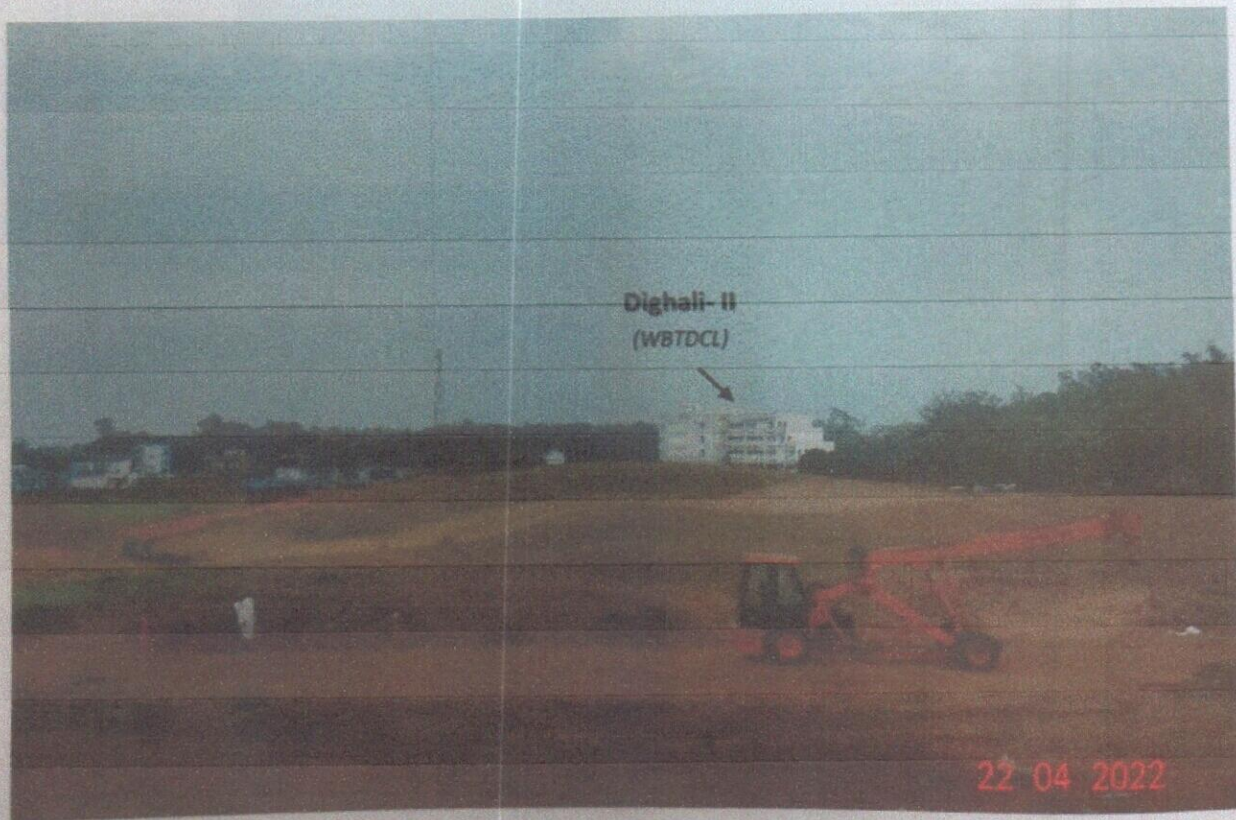


Photo 2: Ground scenario of proposed project site for Temple Complex- Jagannath Dham Sanskriti Kendra



Photo 3: Project Area with provided coordinates (Ref Table- I) overlaid on WorldView satellite image



Photo 4: Ground scenario of proposed project site (eastern side)

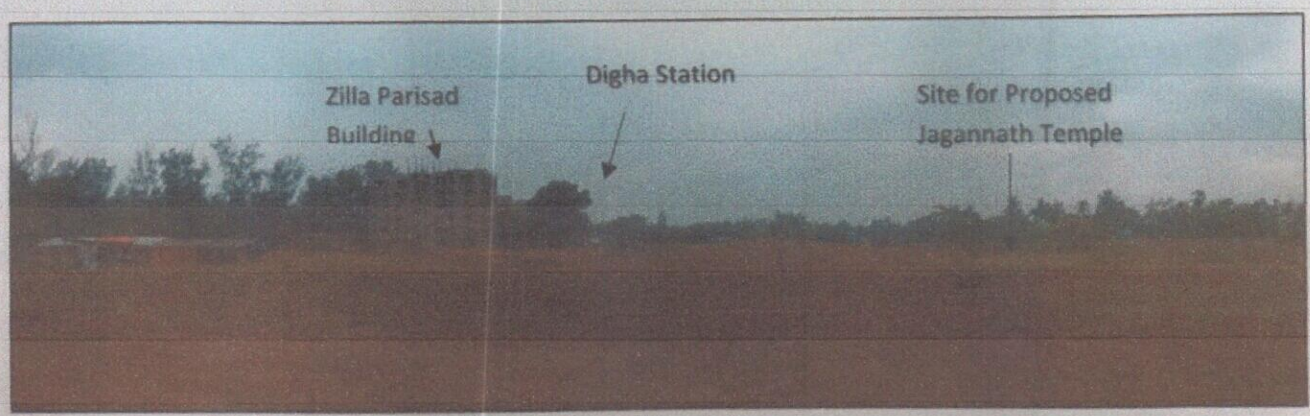


Photo 5: Ground scenario of proposed project site (western side)



Photo 6: GPS survey and data collection at project site

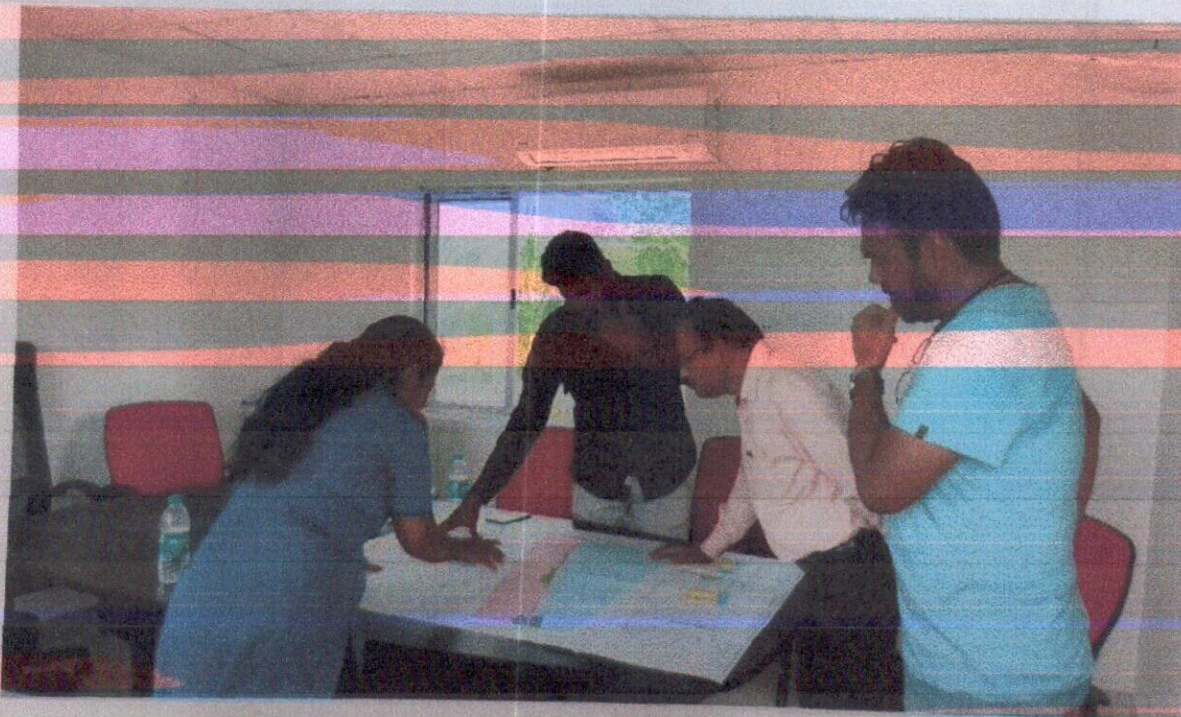


Photo 7: Discussion with HIDCO officials regarding project site



Photo 8: NH-116B towards Digha



Photo 9: Digha Gate on NH-116B



Photo 10: Digha Railway Station

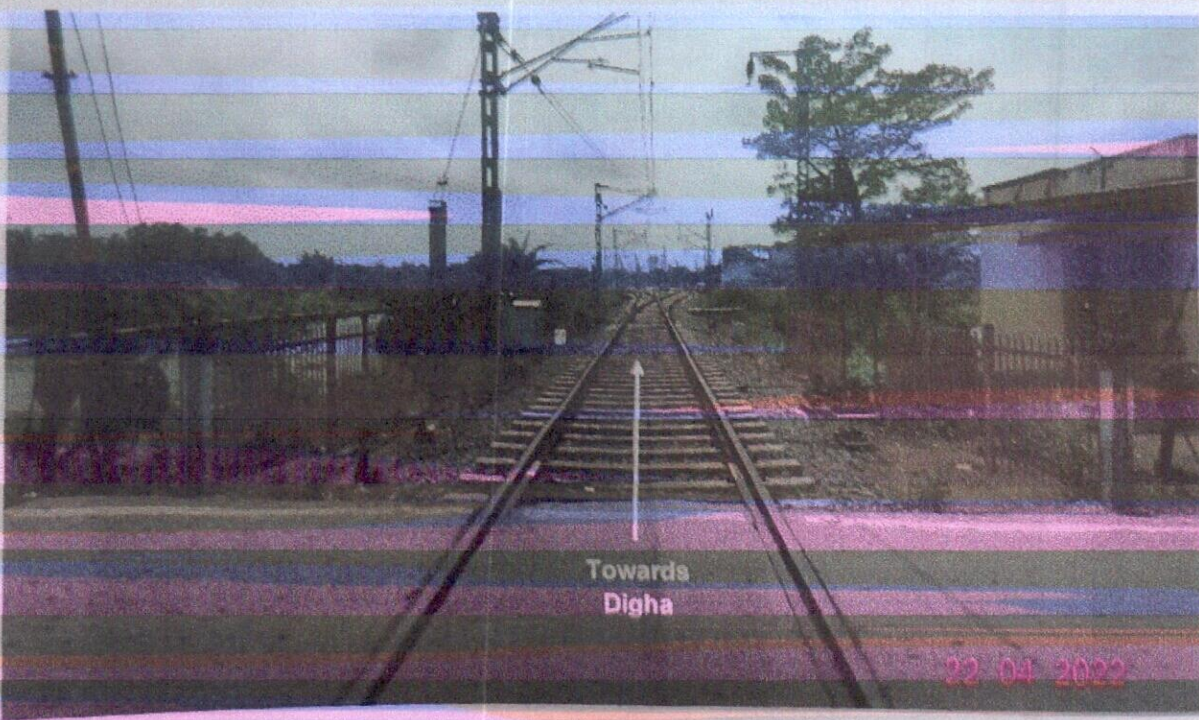


Photo 11: South Eastern Railway (Tamluk-Digha branch)



Photo 10: Digha Railway Station

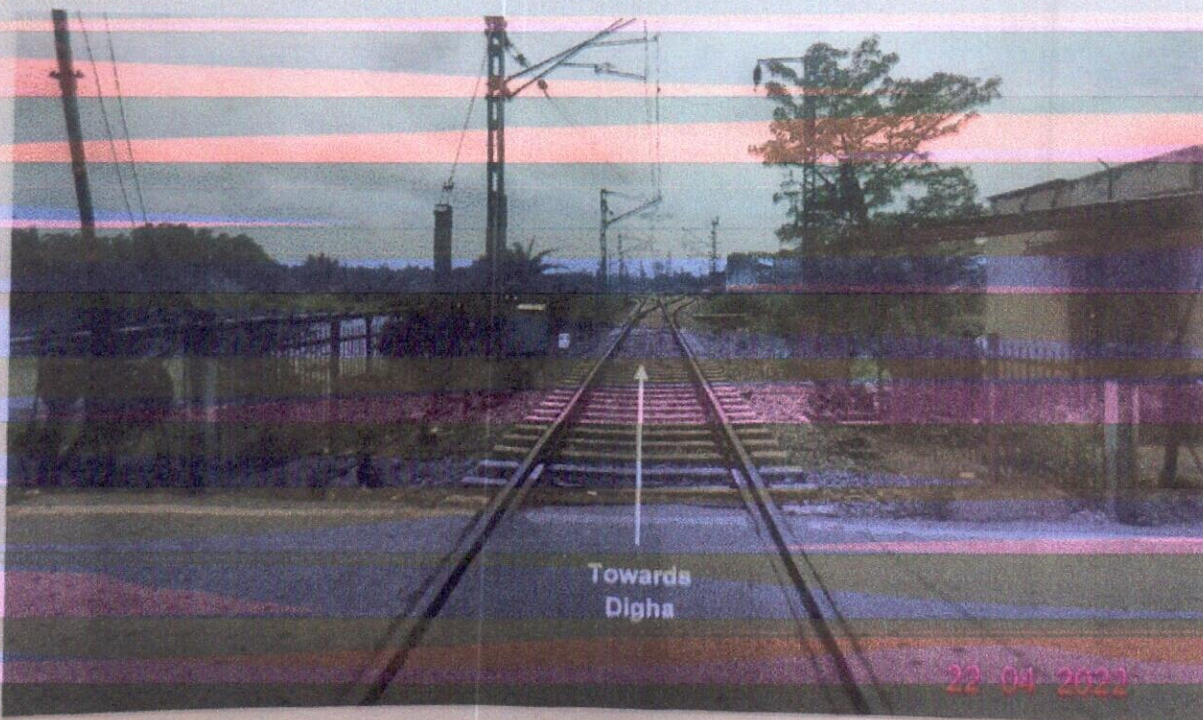


Photo 11: South Eastern Railway (Tamluk-Digha branch)

### 3.2. General Physiography

Regionally, the area is within the Medinipur (Digha – Junput) coastal plain. This mesotidal (tidal range: 2 - 4m) coastal plain is characterized by presence of successive rows of dunes with intervening clayey tidal flats. The 'beach-face dune complex' is with casuarina trees, "Keya" (Pandanus T.) bushes and sand loving creepers.

More specifically the coastal stretch of Medinipur is segmented into four sectors and the Digha sector lies at the western side. The proposed location of the temple complex occupies the 'older dune complex' with undulating topography. The irregular dome shaped sand ridges with sparse grass cover are discontinuous in nature with interdunal depressions. (Photo: 16, 17)

### 4. Scope of Work and Deliverables:

- i. Preparation of one CRZ map indicating HTL, LTL covering 7km radius around the project site on scale 1:25000 (Map Plate: 2) based on SOI toposheet, satellite imagery, following the CRZ Notification 2011.
- ii. Preparation of CRZ map on scale 1:4000 (Map Plate: 1) for the project site based on high resolution satellite image interpretation, ground truth verification and CRZ Notification 2011, superimposed on the cadastral map, showing the (a) HTL, (b) LTL, (c) CRZ categories (d) indicating ecologically sensitive areas if any, (e) project layout if available and provided in digital format with geographic coordinates, if it is required to be incorporated in the map (f) existing transportation network.
- iii. Delineation of CRZ lines of 500m / 200m /100m / or as applicable from the HTL along the shore or tidally influenced water bodies as per CRZ Notification 2011.
- iv. On-site Ground Truth Verification will be conducted to validate the maps.

**Deliverables:**

- a. One CRZ map on scale 1:25000 showing the proposed project site covering 7km radius, indicating CRZ boundary and category, HTL and LTL, in hardcopy in appropriate paper size following the CRZ Notification 2011.
- b. One CRZ map on scale 1:4000 showing the proposed project site superimposed on a cadastral map, showing HTL, LTL, CRZ boundary and CRZ category along with ecologically sensitive areas if any, in hardcopy in appropriate paper size following the CRZ Notification 2011.
- c. One project report with field photographs in hardcopy.

## 5. Data Used and Methodology:

### 5.1. Data:

Collateral data used in this study, were procured from the Survey of India (SOI), National Remote Sensing Centre (NRSC) and documents as received through the Project Proponent. A joint field work for ground truth verification was conducted from 21<sup>st</sup>-22<sup>nd</sup> April-2022 and the coordinates were measured in field, using Garmin GPS 78s. Key datasets and their brief description are described below in Table: I

Table: II

Sl	Data	Specification	Source
1.	Toposheets	Survey of India Toposheet 73 O/10 (1972) (Surveyed in 1968- 69).	Survey of India (SOI)
2.	Satellite Imagery	WorldView Image (Dec.2010, April 2020),	NRSC,
3.	Cadastral maps and Project details	Documents, cadastral maps (on scale 16" to 1 mile, Bhagibahampur Mouza JL No.- 79, 1980-93) and coordinates with boundary in .kml file format.	Provided by Project Proponent.
		Vector cadastral data	Procured from LR Dept.
4.	Geographic Coordinates	Instrument: Garmin GPS 78s	Measured during field, April - 2022
5.	Field Photographs	Instrument: Sony GPS Camera (DSC- HX60V) Sony GPS Camera (DSC- HX400V)	During field, April - 2022
6.	CRZ	HTL, LTL, CRZ categorization and ESA on scale 1:25000	MoEF&CC approved CZMP-2011

### 5.2. Software:

- i. ERDAS Imagine Digital Image Processing Software ver. 16.6.0 from Intergraph
- ii. ArcGIS GIS software ver. 10.8 from ESRI
- iii. MS Office 2010 from Microsoft Corporation

### 5.3. Methodology and Approach:

The process of identifying, delineating and mapping of HTL, LTL and CRZ involves couple of stages including ground truth validation in field. The overall approach has been illustrated in the following flow chart diagram below.

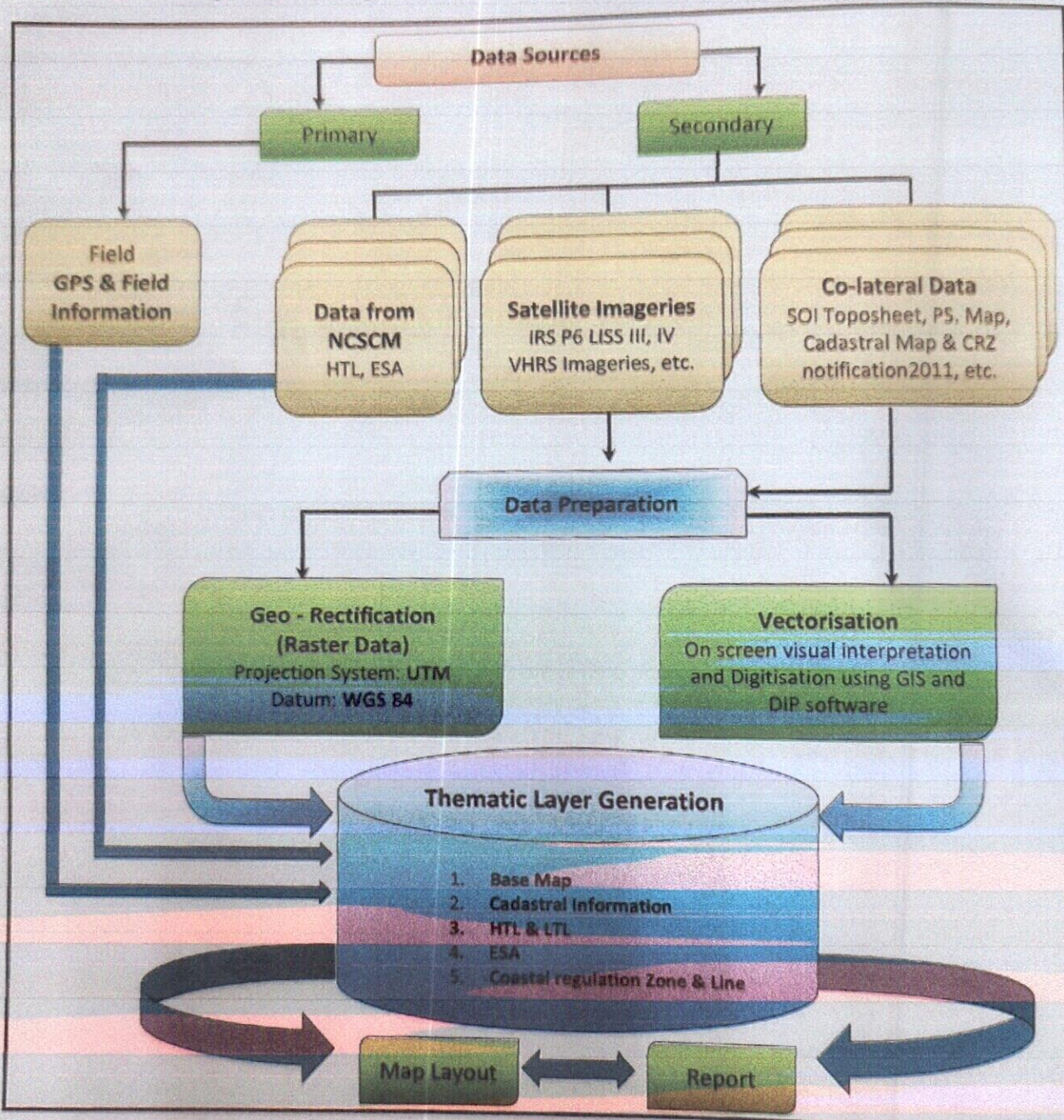


Fig 2

Several 'thematic layers' are prepared using the mentioned data sets (Table: II) and joint field visit conducted from 21st - 22nd April-2022 along with the officials of HIDCO.

All spatial datasets were digitized and geometrically rectified as per following projection system:

Projection system : Universal Transverse Mercator, UTM (Zone 45)  
Datum : World Geodetic System, WGS 84

- (a) As per guideline, the High Tide Line (HTL), Low Tide Line (LTL), Ecologically Sensitive Area (ESA) and Hazard Line has been used in accordance with the MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011.
- (b) GPS survey were carried out from 21st-22nd April-2022 using Garmin 78s instruments and coordinates were collected viz. two modes (a) Track and (b) Waypoints (Appendix: I). GPS traverses were collected in and around the project site and along the HTL, natural boundaries, important features and accessible areas (Photo: 6). Field photographs were taken using GPS enabled camera; Sony (DSC- HX60V & DSC- HX400V). Field validation was conducted using pre-field maps.

During Joint Field Work, the project site, which is the Area of Interest (AOI) was confirmed by the officials of HIDCO and the geographic coordinates were measured accordingly, using hand held GPS. The northern boundary of the AOI was updated based on *on-site* traverse measured by GPS and confirmed by the HIDCO officials, which marginally deviates from the AOI, as provided earlier in .kml format. The Project Proponent confirmed that, the AOI lies within the cadastral mouza map of Bhagibaharapur (J.L.-79), which was overlaid with the AOI. The approximate area of project site is found to be 81214 sqm i.e. appx. 20 acres. (Photo: 14, 15).

- (c) The CRZ extending 500 mts from the HTL along the sea front and 100mts from other tide influenced water bodies and average width (< 100m) for other tidal creeks from HTL have been delineated.
- (d) The CRZ classification was accomplished based on MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011.

- (e) Cadastral information of mouza Bhagibahampur (J.L.-79), is overlaid on the CRZ map on scale 1:4000, showing HTL, LTL, CRZ categories, indicating ESA if any, along with existing infrastructure network derived from high resolution satellite image and ground validation.
- (f) CRZ map on scale 1:25000 showing the proposed AOI covering 7km radius is prepared based on MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011. Drainage and classification of road, landmark etc are also overlaid on the CRZ map.
- (g) Standard cartographic practices were employed in assigning colour coding and designing of the prepared maps of thematic layers.

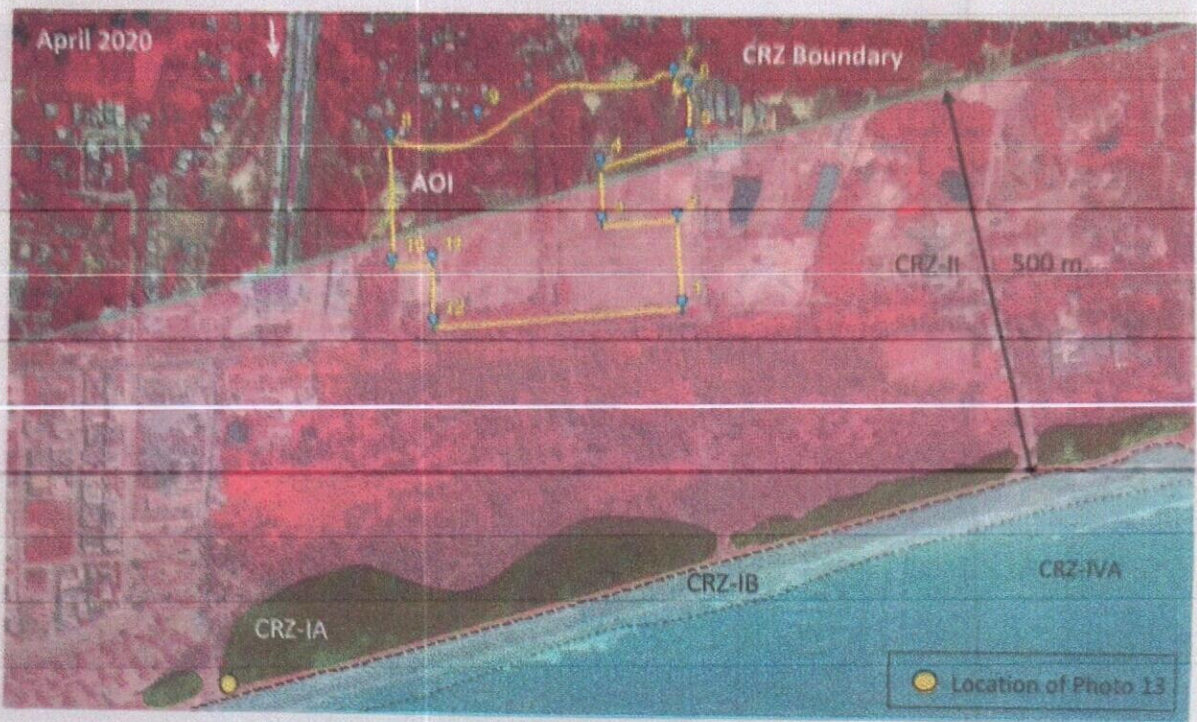


Photo 12: Project site in relation to Coastal Regulation Zone as viewed in WorldView satellite image



Photo 13: Bay of Bengal (CRZ- IVA) and sand dune (CRZ-IA), intertidal zone (CRZ- IB) with embankment south of proposed project site. Location given in photo 12.



Photo 14: Fencing along the northern boundary of the AOI



Photo 15: GPS Data collection along the northern boundary of the AOI

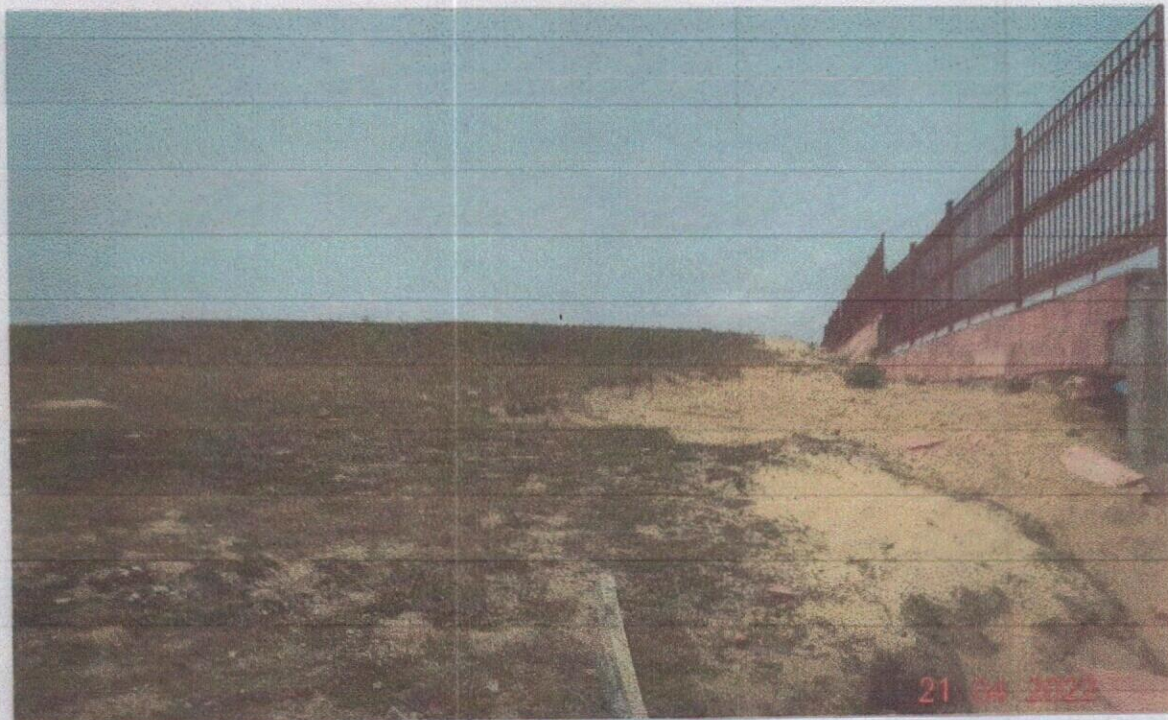


Photo 16: Dome shaped dune top within the Area of Interest (AOI)



Photo 17: Interdunal depression within the Area of Interest (AOI).



Photo 18: Udaypur beach (Digha west) during High Tide

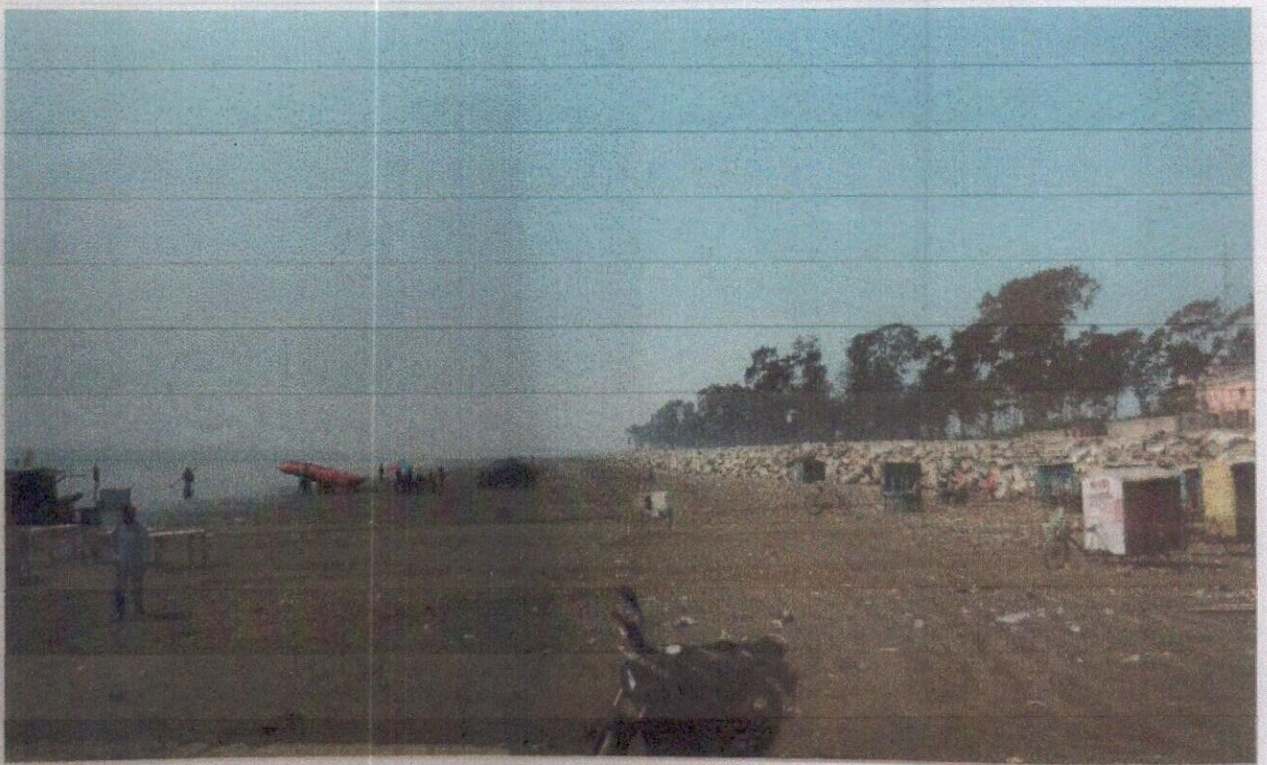


Photo 19: Udaypur beach (Digha west) during Low Tide



Photo 20: Digha Mohana or Champa River confluence (Digha east) during High Tide



Photo 21: Champa River at Digha Mohana during High Tide



Photo 22: Beach-face dune at Digha



Photo 23: Present view of Jatra Nala.



Photo 24. Digha Sankarpur Development Authority (DSDA) building

## 6. Results & Discussions:

- i. The Area of Interest (AOI) for the proposed "Jagannath Dham Sanskriti Kendra" lies in Mouza Bhagibaharampur (J.L. 79), Digha, Block Ramnagar – I, District- Purba Medinipur. Mapping has been done based on multiple satellite images, collateral data (Data,Para 5.1) and joint field verification conducted between 21st to 22nd April-2022. The AOI was confirmed by the officials of HIDCO during fieldwork. The approximate area of project site is 81214 sqm. ~ 20 acre (Photo: 12).
- ii. The project site comprises of 33 plots (full or part) of Mouza Bhagibaharampur, as per cadastral map of 1980-93 (revised map made in 1954- 57) on scale 1:4000, details of which is mentioned in Table: III. The area is presently under Digha Sankarpur Development Authority (DSDA).

Table: III

Full Plot	154, 222, 223, 227, 228, 239, 282, 283
Part Plot	144, 219, 220, 221, 224, 225, 226, 229, 231, 232, 233, 234, 235, 236, 241, 242, 243, 262, 278, 279, 280, 281, 284, 286, 287

- iii. **High Tide Line (HTL) and Low Tide Line (LTL)** has been used in accordance with the MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011. The HTL primarily follows the main embankment along the Digha coast.
- iv. CRZ categorization of project area (AOI) and its peripheral area has been carried out as per MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011. **Southern part of the AOI comprising nearly 53% lies within CRZ-II and the rest approximately 47% lies beyond the CRZ limit. The AOI lies landward side of Digha Foreshore Road (NH-116B).**
- v. Hazard lines are depicted as per MOEF&CC approved CZMP- 2011. (Photo:26)
- vi. Patches of sand dune, mangrove, Horseshoe Crab Habitat, Reserve Forest, Salt Marsh which are **Ecologically Sensitive Areas (ESA)** are accordingly classified as **CRZ-IA**. As per notification, **50m buffer** have been delineated around mangrove areas with more than 1000 sqm and marked as **CRZ-IA**. The intertidal region has been classified as **CRZ-IB** (Photo:12, 13). The AOI

lies within "older dune complex" along with interdunal depression, however MOEF&CC approved CZMP on scale 1:25000 as per CRZ Notification 2011, do not reflect any CRZ-1A category within or overlapping with the AOI (Photo: 16, 17).

- vii. Coastal Regulation Zone (CRZ) extends up to 500 mts from HTL along sea front and 100 mts along tidal rivers (for width > 100m) and/or average width (for width < 100m) of other tidal creeks from their respective HTL.
- viii. Areas within the jurisdiction of any development authority are considered as CRZ-II and accordingly delineated for Digha Sankarpur Development Authority (DSDA). Part of the AOI lies within the CRZ-II (Photo: 24).
- ix. Areas outside the jurisdiction of DSDA, having a primarily rural setup, relatively undisturbed and undeveloped and not substantially built up and do not belong to CRZ-I or II and has been classified as CRZ-III (100 m along tidal rivers having width > 100m and average width < 100m of other tidal creeks from their respective HTL), which has been earmarked as "No Development Zone (NDZ)" which attracts restriction for developmental activities other than the prescribed exceptions.
- x. The water area in the Bay of Bengal is delineated as CRZ-IVA and the water area of the tidal influenced water body is delineated as CRZ-IVB (Photo: 20 & 21).
- xi. The thematic layers thus prepared for the project are as follows, which are illustrated in Plate-1 and Plate-2:
  - (a) Coastal Regulation Zones (CRZ) maps on scale 1:25000 (Map Plate - 2) showing the proposed site covering 7km radius and on scale 1:4000 (Map Plate - 1) showing the proposed "Jagannath Dham Sanskriti Kendra" superimposed on cadastral map, at Bhagibahampur, Ramnagar-I Block, Purba Medinipur District.
  - (b) High Tide Line (HTL) and Low Tide Line (LTL) around the site on scale 1: 25000 and 1: 4000 scale.

- (c) Coastal regulation zones (CRZ) and ecologically sensitive areas (ESA) as applicable on scale 1: 25000 & 1: 4000.
- (d) Hazard line based on approved CZMP-2011.
- (e) Major drainage and transportation network.



Photo 25: Fencing of the AOI along the Digha Foreshore Road

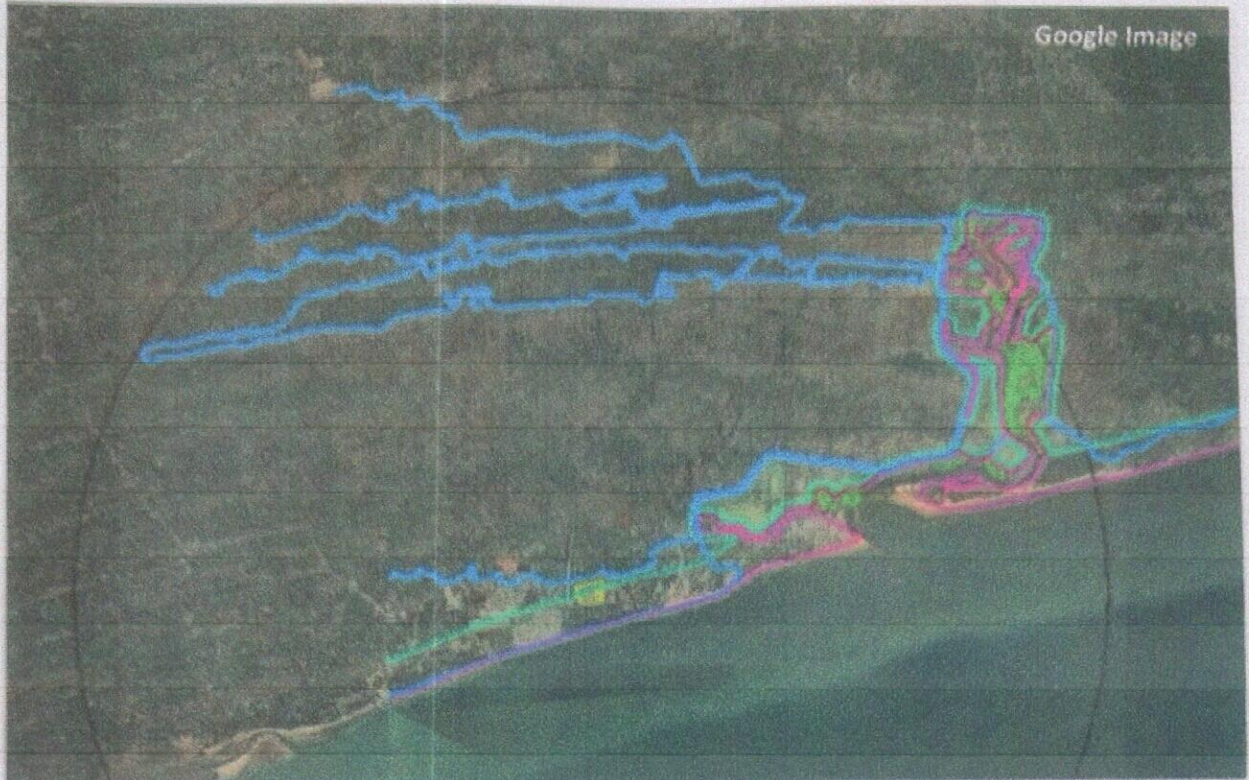


Photo 26: 7 km buffer of the AOI along with HTL, Hazard line and CRZ boundary overlaid on Google Image



Photo 27: Keya (Pandanus T.) bush on Sand dune



Photo 28: Developmental activity along the Old Digha beach



Photo 29: Sluice restricts tide flow near Sankarpur



Photo 30: Structural measures to arrest erosion in the beachface, Digha east.



Photo 31: Convention Centre, New Digha



Photo 32: Science Centre, New Digha

**Conclusion:**

Setting up of hotels, industries, operations or processes along the coastal stretches or tidally influenced water body attracts Coastal Regulation Zone (CRZ) clearance as per Gazette Notification dated 6<sup>th</sup> Jan, 2011 by the Ministry of Environment and Forests and Climate Change (MoEF&CC).

High Tide Line (HTL), Low Tide Line (LTL), Ecologically Sensitive Area (ESA), Hazard Line and CRZ categorization of the Area of Interest (AOI) and its peripheral area has been carried out and CRZ maps are prepared on scale 1:25000 and 1:4000 in accordance with the MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011.

West Bengal Housing Infrastructure Development Corporation Ltd (HIDCO) has proposed to construct a Temple Complex- 'Jagannath Dham Sanskriti Kendra' east of Digha railway station at Mouza Bhagibaharampur (Jl No.-79), Digha, Block Ramnagar- I, District Purba Medinipur. The project site comprises of 33 plots (full or part) of Mouza Bhagibaharampur, as per cadastral map of 1980-93 (revising the map made in 1954- 57) on scale 1:4000. The extent of CRZ in and around the project (AOI) site is 500m from HTL and is categorised as CRZ-II, being part of DSDA. Southern part of the AOI comprising nearly 53% lies within CRZ-II and the rest approximately 47% lies beyond the CRZ limit. The AOI lies landward side of Digha Foreshore Road (NH-116B). Although, the AOI lies within 'older dune complex' and interdunal depression, MOEF&CC approved CZMP on scale 1:25000 as per CRZ Notification 2011, do not reflect any CRZ-1A category within or overlapping with the AOI.

Table: IV

Sl.	Description	Approx. Area (sqm)	Approx. Area
1	Total area of interest (AOI)	81214.08	~ 100 %
2	CRZ-II	42653.50	~ 52.52 %
4	Outside CRZ	38560.58	~ 47.48 %

As per MOEF&CC approved CZMP-2011, Hazard lines, are depicted in the map accordingly.

The AOI was confirmed by the officials of HIDCO during Joint Field Verification and the approximate area of project site is 81214 sqm. ~ 20 acres.

HTL, LTL, ESA, CRZ delineation and categorization of the project site i.e. (AOI) and its peripheral area normally covering 7km, has been carried out as per MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011. The CRZ maps on scale 1:4000 (Map Plate - 1) and 1:25000 (Map Plate - 2) also includes drainage network and infrastructure facilities (road categories, embankments, culverts, sluices etc).

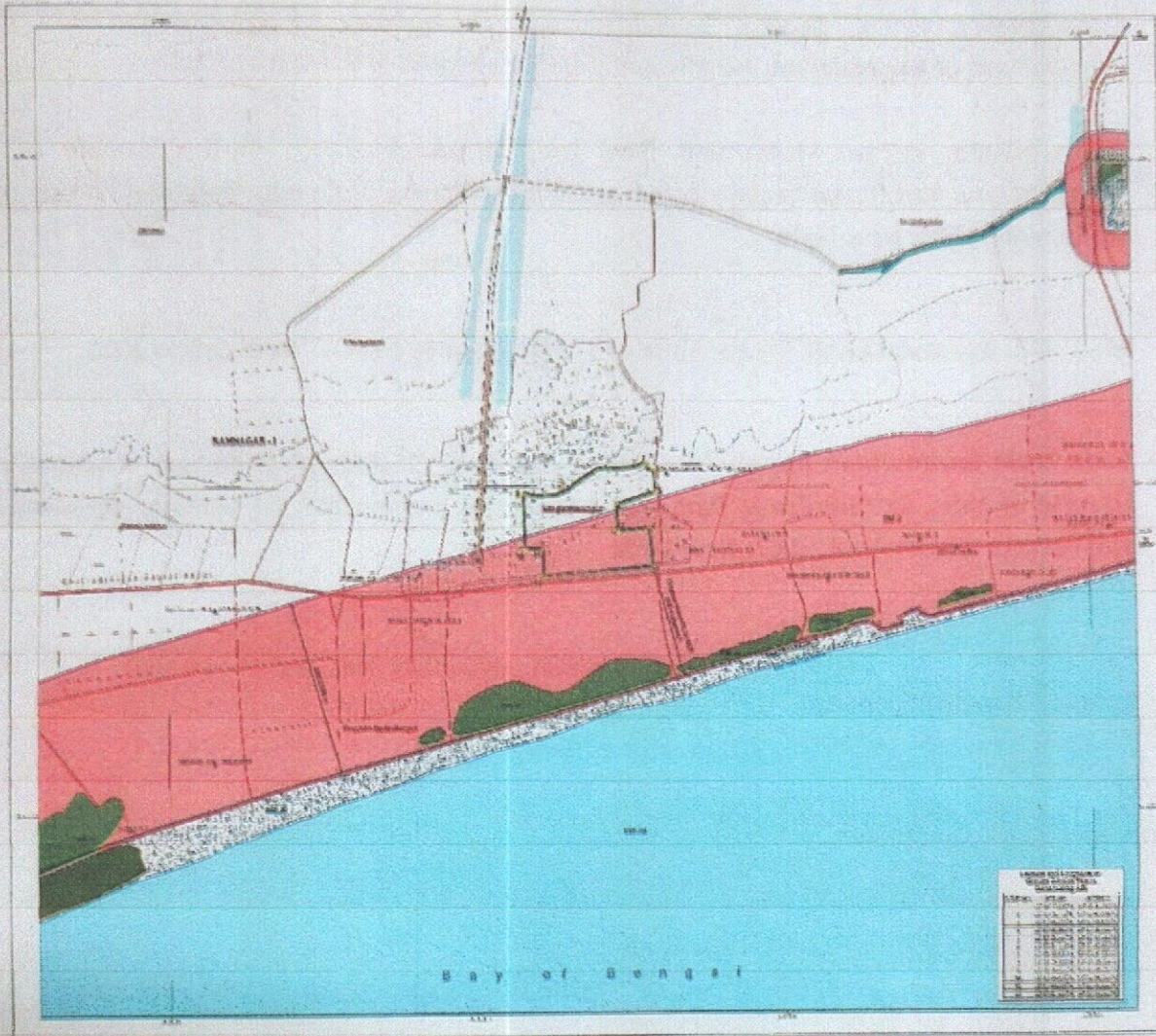
## References

1. Coastal Regulation Zone (CRZ) Notification, 2011, published in the Gazette of India, Extraordinary, Part-ii, Section 3, Sub-section (ii), Ministry of Environment and Forests (Department of Environment, Forests and Wildlife of dated 6th January, 2011)
2. Environmental Impact Assessment (EIA) Notification, published in the Gazette of India, Extraordinary, Part-ii, and Section 3, Sub-section(ii) Ministry of Environment and Forests of 14th September, 2006, New Delhi
3. MOEF&CC approved CZMP for the state of West Bengal as per CRZ Notification 2011
4. State Level Environment Impact Assessment Authority (SEIAA), West Bengal, published in the Gazette of India, Extraordinary, Part-ii, and Section 3, Sub-section (ii) Ministry of Environment and Forests of 13th April, 2007, New Delhi
5. Parthasarathi Chakrabarti, Former Chief Scientist and Sanjay Nag, Senior Scientist - River of West Bengal, Changing Scenario

### Coastal Regulation Zone (CRZ) Map

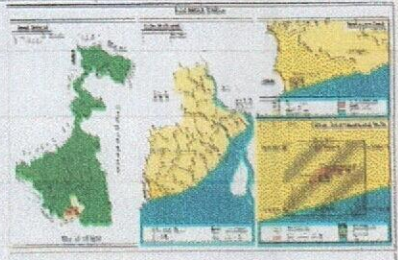
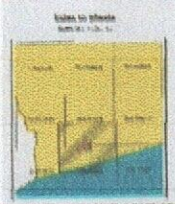
Mouza- Bhagibahampur, Block- Ramnagar-I, Purba Medinipur District, West Bengal  
 (Based on CRZ Notification 2011, Ministry of Environment, Forest and Climate Change, Govt. of India)

Proposed Temple complex 'Jagannath Dham Sanskriti Kendra' at Digha (With Coastal Information)



Symbol/Color	Description
Red	Coastal Regulation Zone (CRZ)
Blue	Bay of Bengal
Green	Forest Area
Grey	Settlement Area
Black	High Tide Line (HTL)
Black	Low Tide Line (LTL)
Black	Proposed Temple Complex

Symbol/Color	Description
Red	Coastal Regulation Zone (CRZ)
Blue	Bay of Bengal
Green	Forest Area
Grey	Settlement Area
Black	High Tide Line (HTL)
Black	Low Tide Line (LTL)
Black	Proposed Temple Complex



Prepared by:  
 M/s. (Pvt.) Ltd. (Environmental & Ecological) Corporation Ltd. (INDCO)  
 Head Office: ...

Delineation of High Tide Line (HTL), Low Tide Line (LTL), Coastal Regulation Zone (CRZ) for Proposed Temple Complex- 'Jagannath Dham Sanskriti Kendra' at Digha, Mouza Bhagibahampur, Ramnagar-I, Purba Medinipur District, West Bengal ~ IESWM

# Map Plate-2

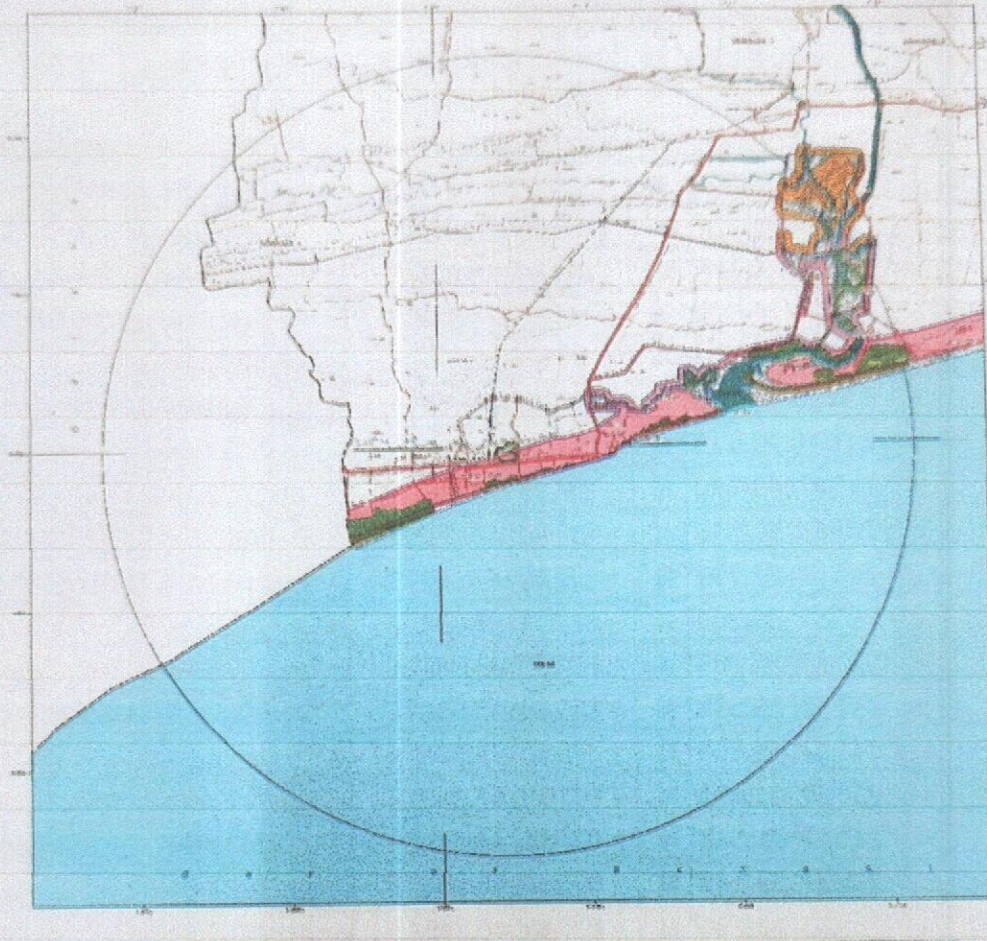
For Official Use

## Coastal Regulation Zone (CRZ) Map

Mouza- Bhagbahampur, Block- Ramnagar-I, Purba Medinipur District, West Bengal

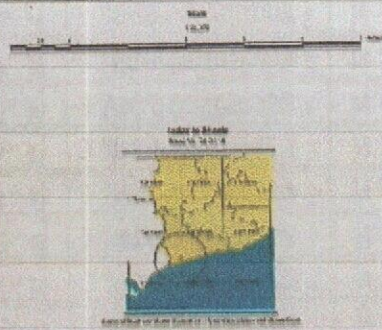
(Based on CRZ Notification 2011, Ministry of Environment, Forest and Climate Change, Govt. of India)

Proposed Temple complex 'Jagannath Dham Sanskriti Kendra' at Digha (with 7-m buffer)



**Legend**

Proposed Temple Complex	Orange
CRZ Buffer Zone	Red
High Tide Line (HTL)	Blue
Low Tide Line (LTL)	Green
Coastal Regulation Zone (CRZ)	Yellow
Water Body	Light Blue
Barren Land	Light Green
Barren Land	Light Yellow
Barren Land	Light Orange
Barren Land	Light Purple
Barren Land	Light Brown
Barren Land	Light Grey
Barren Land	Light Blue-Grey
Barren Land	Light Green-Grey
Barren Land	Light Yellow-Grey
Barren Land	Light Orange-Grey
Barren Land	Light Purple-Grey
Barren Land	Light Brown-Grey
Barren Land	Light Grey-Grey
Barren Land	Light Blue-Grey-Grey
Barren Land	Light Green-Grey-Grey
Barren Land	Light Yellow-Grey-Grey
Barren Land	Light Orange-Grey-Grey
Barren Land	Light Purple-Grey-Grey
Barren Land	Light Brown-Grey-Grey
Barren Land	Light Grey-Grey-Grey
Barren Land	Light Blue-Grey-Grey-Grey
Barren Land	Light Green-Grey-Grey-Grey
Barren Land	Light Yellow-Grey-Grey-Grey
Barren Land	Light Orange-Grey-Grey-Grey
Barren Land	Light Purple-Grey-Grey-Grey
Barren Land	Light Brown-Grey-Grey-Grey
Barren Land	Light Grey-Grey-Grey-Grey
Barren Land	Light Blue-Grey-Grey-Grey-Grey
Barren Land	Light Green-Grey-Grey-Grey-Grey
Barren Land	Light Yellow-Grey-Grey-Grey-Grey
Barren Land	Light Orange-Grey-Grey-Grey-Grey
Barren Land	Light Purple-Grey-Grey-Grey-Grey
Barren Land	Light Brown-Grey-Grey-Grey-Grey
Barren Land	Light Grey-Grey-Grey-Grey-Grey
Barren Land	Light Blue-Grey-Grey-Grey-Grey-Grey
Barren Land	Light Green-Grey-Grey-Grey-Grey-Grey
Barren Land	Light Yellow-Grey-Grey-Grey-Grey-Grey
Barren Land	Light Orange-Grey-Grey-Grey-Grey-Grey
Barren Land	Light Purple-Grey-Grey-Grey-Grey-Grey
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Barren Land	Light Yellow-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Grey-Light



Prepared by  
**Institute of Environmental Science and Wetland Management**  
 Kolkata

Proposed for  
**West Bengal Housing Infrastructure Development Corporation Ltd (WBHIDCL)**  
 Plot No. 10, Sector 1, Phase 1, Salt Lake, Kolkata-700 064

ix  
 Delineation of High Tide Line (HTL), Low Tide Line (LTL), Coastal Regulation Zone (CRZ) for Proposed Temple Complex-  
 "Jagannath Dham Sanskriti Kendra" at Digha, Mouza Bhagbaharampur, Ramnagar-I, Purba Medinipur District, West Bengal  
 ~ IESWM

Appendix II: GPS Co-ordinates

A. GPS co-ordinates of Waypoints collected by Garmin 78S

Way Point NO:	Latitude	Longitude	DateTime
1	21° 40' 42.503" N	87° 34' 29.856" E	2022-04-21T03:38:59Z
2	21° 40' 26.576" N	87° 33' 12.172" E	2022-04-21T03:43:58Z
3	21° 38' 10.853" N	87° 31' 33.787" E	2022-04-21T03:53:29Z
4	21° 37' 25.720" N	87° 31' 37.974" E	2022-04-21T03:55:43Z
5	21° 37' 6.884" N	87° 29' 38.677" E	2022-04-21T04:50:00Z
6	21° 37' 1.225" N	87° 29' 18.305" E	2022-04-21T04:51:14Z
7	21° 36' 46.109" N	87° 29' 21.437" E	2022-04-21T05:04:17Z
8	21° 36' 39.982" N	87° 29' 4.564" E	2022-04-21T05:31:50Z
9	21° 36' 59.080" N	87° 29' 4.870" E	2022-04-21T05:50:49Z
10	21° 37' 21.115" N	87° 30' 5.659" E	2022-04-21T05:57:10Z
11	21° 37' 47.690" N	87° 32' 48.833" E	2022-04-21T06:14:48Z
12	21° 37' 22.350" N	87° 30' 42.062" E	2022-04-21T07:02:12Z
13	21° 37' 22.793" N	87° 30' 47.092" E	2022-04-21T07:08:02Z
14	21° 37' 26.263" N	87° 30' 46.858" E	2022-04-21T07:11:10Z
15	21° 37' 25.993" N	87° 30' 43.787" E	2022-04-21T07:13:38Z
16	21° 37' 28.538" N	87° 30' 43.654" E	2022-04-21T07:15:44Z
17	21° 37' 29.604" N	87° 30' 47.527" E	2022-04-21T07:18:46Z
18	21° 37' 31.494" N	87° 30' 47.398" E	2022-04-21T07:20:15Z
19	21° 37' 31.548" N	87° 30' 46.865" E	2022-04-21T07:20:39Z
20	21° 37' 32.149" N	87° 30' 46.804" E	2022-04-21T07:23:19Z
21	21° 37' 32.250" N	87° 30' 46.260" E	2022-04-21T07:23:46Z
22	21° 37' 21.281" N	87° 30' 39.092" E	2022-04-21T10:54:42Z
23	21° 37' 24.316" N	87° 30' 36.353" E	2022-04-21T10:56:32Z
24	21° 37' 24.550" N	87° 30' 34.819" E	2022-04-21T11:03:21Z
25	21° 37' 27.329" N	87° 30' 34.736" E	2022-04-21T11:08:13Z
26	21° 37' 29.478" N	87° 30' 34.528" E	2022-04-21T11:11:17Z
27	21° 37' 29.665" N	87° 30' 38.164" E	2022-04-21T11:14:13Z
28	21° 37' 30.328" N	87° 30' 38.419" E	2022-04-21T11:15:29Z
29	21° 37' 30.400" N	87° 30' 38.300" E	2022-04-21T11:16:20Z
30	21° 37' 30.695" N	87° 30' 39.128" E	2022-04-21T11:19:19Z
31	21° 37' 31.177" N	87° 30' 40.237" E	2022-04-21T11:21:39Z
32	21° 37' 31.656" N	87° 30' 41.623" E	2022-04-21T11:22:55Z
33	21° 37' 27.638" N	87° 30' 41.940" E	2022-04-21T11:37:35Z
34	21° 37' 22.483" N	87° 30' 43.186" E	2022-04-21T11:44:04Z
35	21° 38' 39.818" N	87° 33' 57.330" E	2022-04-22T01:27:34Z

X

Delineation of High Tide Line (HTL), Low Tide Line (LTL), Coastal Regulation Zone (CRZ) for Proposed Temple Complex- "Jagannath Dham Sanskriti Kendra" at Digha, Mouza Bhagibaharampur, Ramnagar-I, Purba Medinipur District, West Bengal ~ IESWM

Way Point NO:	Latitude	Longitude	DateTime
36	21° 38' 43.692" N	87° 34' 6.528" E	2022-04-22T01:29:38Z
37	21° 38' 15.673" N	87° 34' 46.254" E	2022-04-22T01:39:39Z
38	21° 38' 22.114" N	87° 35' 14.662" E	2022-04-22T01:50:15Z
39	21° 38' 11.166" N	87° 34' 9.772" E	2022-04-22T02:09:18Z
40	21° 39' 19.692" N	87° 34' 22.433" E	2022-04-22T02:17:27Z
41	21° 39' 42.984" N	87° 34' 15.712" E	2022-04-22T02:20:16Z
42	21° 39' 6.192" N	87° 34' 20.683" E	2022-04-22T02:25:44Z
43	21° 38' 38.886" N	87° 33' 52.420" E	2022-04-22T02:29:27Z
44	21° 37' 22.228" N	87° 30' 41.544" E	2022-04-22T03:24:34Z
45	21° 37' 21.882" N	87° 30' 36.612" E	2022-04-22T03:28:48Z
46	21° 37' 31.872" N	87° 30' 45.860" E	2022-04-22T04:04:35Z
47	21° 37' 31.840" N	87° 30' 45.475" E	2022-04-22T04:05:25Z
48	21° 37' 31.840" N	87° 30' 44.784" E	2022-04-22T04:05:55Z
49	21° 37' 31.706" N	87° 30' 44.014" E	2022-04-22T04:06:25Z
50	21° 37' 31.739" N	87° 30' 43.506" E	2022-04-22T04:06:47Z
51	21° 37' 31.753" N	87° 30' 42.718" E	2022-04-22T04:07:31Z
52	21° 37' 31.757" N	87° 30' 42.185" E	2022-04-22T04:08:03Z
53	21° 37' 31.598" N	87° 30' 41.764" E	2022-04-22T04:08:26Z
54	21° 37' 31.166" N	87° 30' 41.209" E	2022-04-22T04:08:58Z
55	21° 37' 30.875" N	87° 30' 40.608" E	2022-04-22T04:09:23Z
56	21° 37' 30.310" N	87° 30' 39.841" E	2022-04-22T04:10:01Z
57	21° 37' 29.842" N	87° 30' 39.067" E	2022-04-22T04:10:38Z
58	21° 37' 29.471" N	87° 30' 38.290" E	2022-04-22T04:11:19Z
59	21° 37' 29.280" N	87° 30' 37.620" E	2022-04-22T04:12:21Z
60	21° 37' 29.230" N	87° 30' 36.922" E	2022-04-22T04:12:56Z
61	21° 37' 29.204" N	87° 30' 35.953" E	2022-04-22T04:13:35Z
62	21° 37' 29.240" N	87° 30' 35.381" E	2022-04-22T04:14:02Z
63	21° 37' 29.276" N	87° 30' 34.546" E	2022-04-22T04:14:55Z
64	21° 36' 58.406" N	87° 29' 56.947" E	2022-04-22T05:28:33Z
65	21° 37' 21.677" N	87° 30' 29.700" E	2022-04-22T05:55:11Z
66	21° 37' 20.024" N	87° 30' 17.179" E	2022-04-22T05:56:48Z
67	21° 37' 36.476" N	87° 30' 13.255" E	2022-04-22T05:58:56Z
68	21° 37' 56.554" N	87° 30' 28.771" E	2022-04-22T06:00:36Z
69	21° 37' 59.675" N	87° 31' 29.917" E	2022-04-22T06:12:53Z
70	21° 37' 57.792" N	87° 31' 31.192" E	2022-04-22T06:13:17Z

Appendix III:

**COASTAL REGULATION ZONE NOTIFICATION**  
**MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE**

COASTAL REGULATION ZONE NOTIFICATION  
MINISTRY OF ENVIRONMENT AND FORESTS  
(Department of Environment, Forests and Wildlife)

New Delhi, the 6<sup>th</sup> January 2011 (As amended upto 22.03.2016)

S.O.19(E).- WHEREAS a draft notification under sub-section (1) of section and clause (V) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 was issued inviting objections and suggestions for the declaration of coastal stretches as Coastal Regulation Zone and imposing restrictions on industries, operations and processes in the CRZ was published vide S.O.No.2291 (E), dated 15<sup>th</sup> September, 2010.;

AND WHEREAS, copies of the said Gazette were made available to the public on 15<sup>th</sup> September, 2010.;

AND WHEREAS, the suggestions and objections received from the public have been considered by the Central Government.;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government, with a view to ensure livelihood security to the fisher communities and other local communities, living in the coastal areas, to conserve and protect coastal stretches, its unique environment and its marine area and to promote development through sustainable manner based on scientific principles taking into account the dangers of natural hazards in the coastal areas, sea level rise due to global warming, does hereby, declare the coastal stretches of the country and the water area upto its territorial water limit, excluding the islands of Andaman and Nicobar and Lakshadweep and the marine areas surrounding these islands upto its territorial limit, as Coastal Regulation Zone (hereinafter referred to as the CRZ) and restricts the setting up and expansion of any industry, operations or processes and manufacture or handling or storage or disposal of hazardous substances as specified in the Hazardous Substances (Handling, Management and Transboundary Movement) Rules, 2009 in the aforesaid CRZ.;

In exercise of powers also conferred by clause (d) and sub rule (3) of rule 5 of Environment (Protection) Act, 1986 and in supersession of the notification of the Government of India in the Ministry of Environment and Forests, number S.O.114(E), dated the 19<sup>th</sup> February, 1991 except as respects things done or omitted to be done before such supersession, the Central Government hereby declares the following areas as CRZ and imposes with effect from the date of the notification the following restrictions on the setting up and expansion of industries, operations or processes and the like in the CRZ,-

- (i) the land area from High Tide Line (hereinafter referred to as the HTL) to 500mts on the landward side along the sea front.
- (ii) CRZ shall apply to the land area between HTL to 100 mts or width of the creek whichever is less on the landward side along the tidal influenced water bodies that are connected to the sea and the distance upto which development along such tidal influenced water bodies is to be regulated shall be governed by the distance upto which the tidal effects are experienced which shall be determined based on salinity concentration of 5 parts per thousand (ppt) measured during the driest period of the year and distance upto which tidal effects are experienced shall be clearly identified and demarcated accordingly in the Coastal Zone Management Plans (hereinafter referred to as the CZMPs).

Explanation.- For the purposes of this sub-paragraph the expression tidal influenced water bodies means the water bodies influenced by tidal effects from sea, in the bays, estuaries, rivers, creeks, backwaters, lagoons, ponds connected to the sea or creeks and the like.

- (iii) the land area falling between the hazard line and 500mts from HTL on the landward side, in case of seafront and between the hazard line and 100mts line in case of tidal influenced water body the word 'hazard line' denotes the line demarcated by Ministry of Environment and Forests (hereinafter referred to as the MoEF) through the Survey of India (hereinafter referred to as the Sol) taking into account tides, waves, sea level rise and shoreline changes.
- (iv) land area between HTL and Low Tide Line (hereinafter referred to as the LTL) which will be termed as the intertidal zone.
- (v) the water and the bed area between the LTL to the territorial water limit (12 Nm) in case of sea and the water and the bed area between LTL at the bank to the LTL on the opposite side of the bank, of tidal influenced water bodies.

2. For the purposes of this notification, the HTL means the line on the land upto which the highest water line reaches during the spring tide and shall be demarcated uniformly in all parts of the country by the demarcating authority(s) so authorized by the MoEF in accordance with the general guidelines issued at Annexure-I. HTL shall be demarcated within one year from the date of issue of this notification.

3. Prohibited activities within CRZ,- The following are declared as prohibited activities within the CRZ,-

- (i) Setting up of new industries and expansion of existing industries except,-
  - (a) those directly related to waterfront or directly needing foreshore facilities;

*Explanation:* The expression "foreshore facilities" means those activities permissible under this notification and they require waterfront for their operations such as ports and harbours, jetties, quays, wharves, erosion control measures, breakwaters, pipelines, lighthouses, navigational safety facilities, coastal police stations and the like.;

- (b) projects of Department of Atomic Energy;
- (c) facilities for generating power by non-conventional energy sources and setting up of desalination plants in the areas not classified as CRZ-I(i) based on an impact assessment study including social impacts.;
- (d) development of green field Airport already permitted only at Navi Mumbai;
- (e) reconstruction, repair works of dwelling units of local communities [especially]\*<sup>1</sup> [fisher folk]\*<sup>2</sup> in accordance with local town and country planning regulations.
- (ii) manufacture or handling oil storage or disposal of hazardous substance as specified in the notification of Ministry of Environment and Forests, No. S.O.594 (E), dated the 28<sup>th</sup> July 1989, S.O.No.966(E), dated the 27<sup>th</sup> November, 1989 and GSR 1037 (E), dated the 5<sup>th</sup>

\*1 and \*2 - Substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

December, 1989 except,-

- (a) transfer of hazardous substances from ships to ports, terminals and refineries and vice versa;
- (b) facilities for receipt and storage of petroleum products and liquefied natural gas as specified in Annexure-II appended to this notification and facilities for regasification of Liquefied Natural Gas (hereinafter referred to as the LNG) in the areas not classified as [CRZ- I (A)]\*<sup>3</sup> subject to implementation of safety regulations including guidelines issued by the Oil Industry Safety Directorate in the Ministry of Petroleum and Natural Gas and guidelines issued by MoEF and subject to further terms and conditions for implementation of ameliorative and restorative measures in relation to environment as may be stipulated by in MoEF.

Provided that facilities for receipt and storage of fertilizers and raw materials required for manufacture of fertilizers like ammonia, phosphoric acid, sulphur, sulphuric acid, nitric acid and the like, shall be permitted within the said zone in the areas not classified as [CRZ-I (A)]\*<sup>4</sup>.

- (iii) Setting up and expansion of fish processing units including warehousing except hatchery and natural fish drying in permitted areas:

- (iv) Land reclamation, bunding or disturbing the natural course of seawater except those,-

- (a) required for setting up, construction or modernisation or expansion of foreshore facilities like ports, harbours, jetties, wharves, quays, slipways, bridges, sealink, road on stilts, and such as meant for defence and security purpose and for other facilities that are essential for activities permissible under the notification;
- (b) measures for control of erosion, based on scientific including Environmental Impact Assessment (hereinafter referred to as the EIA) studies
- (c) maintenance or clearing of waterways, channels and ports, based on EIA studies;
- (d) measures to prevent sand bars, installation of tidal regulators, laying of storm water drains or for structures for prevention of salinity ingress and freshwater recharge based on carried out by any agency to be specified by MoEF.

- (v) Setting up and expansion of units or mechanism for disposal of wastes and effluents except facilities required for,-

- (a) discharging treated effluents into the water course with approval under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
- (b) storm water drains and ancillary structures for pumping;
- (c) treatment of waste and effluents arising from hotels, beach resorts and human settlements located in CRZ areas other than CRZ-I and disposal of treated wastes and effluents;

- (vi) Discharge of untreated waste and effluents from industries, cities or towns and other human settlements. The concerned authorities shall implement schemes for phasing out existing discharge of this nature, if any, within a time period not exceeding two years from the date of issue of this notification.

- (vii) Dumping of city or town wastes including construction debris, industrial solid wastes, fly

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\*3 and \*4 - Substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

ash for the purpose of land filling and the like and the concerned authority shall implement schemes for phasing out any existing practice, [within a period of one year]\*<sup>5</sup> from date of commencement of this notification.

Note:-The MoEF will issue a separate instruction to the State Governments and Union territory Administration in respect of preparation of Action Plans and their implementation as also monitoring including the time schedule thereof, in respect of paras (v), (vi) and (vii).

- (viii) Port and harbour projects in high eroding stretches of the coast, except those projects classified as strategic and defence related in terms of EIA notification, 2006 identified by MoEF based on scientific studies and in consultation with the State Government or the Union territory Administration.
- (ix) Reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities [except for construction of memorials/ monuments and allied facilities, only in CRZ-IV (A) areas in exceptional cases, by the concerned State Government, on case to case basis;]\*<sup>41</sup>
- (x) Mining of sand, rocks and other sub-strata materials except,-
  - (a) those (rare)\*<sup>6</sup> ~~deleted~~ minerals not available outside the CRZ area [and collection of dead shells by the traditional communities for poultry and animal feed supplements]\*<sup>7</sup>,
  - (b) exploration and exploitation of Oil and Natural Gas.
- (xi) Drawl of groundwater and construction related thereto, within 200mts of HTL; except the following:-
  - (a) in the areas which are inhabited by the local communities and only for their use.
  - (b) In the area between 200mts-500mts zone the drawl of groundwater shall be permitted only when done manually through ordinary wells for drinking, horticulture, agriculture and fisheries and where no other source of water is available.

Note:-Restrictions for such drawl may be imposed by the Authority designated by the State Government and Union territory Administration in the areas affected by sea water intrusion.
- (xii) Construction activities in CRZ-I except those specified in para 8 of this notification.
- (xiii) Dressing or altering the sand dunes, hills, natural features including landscape changes for beautification, recreation and other such purpose [except utilizing the rocks / hills/ natural features, only in CRZ-IV (A) areas, for development of memorials / monuments and allied facilities, by the concerned State Government]\*<sup>42</sup>
- (xiv) [Except]\*<sup>8</sup> Facilities required for patrolling and vigilance activities of marine/coastal police stations. ;

4. Regulation of permissible activities in CRZ area.- The following activities shall be regulated except those prohibited in para 3 above,-

- (i)(a) clearance shall be given for any activity within the CRZ only if it requires waterfront and foreshore facilities;
- (b) for those projects which are listed under this notification and also attract EIA notification, 2006 (S.O.1533 (E), dated the 14<sup>th</sup> September, 2006), for such projects clearance under EIA notification only shall be required subject to being recommended by the concerned State or Union territory Coastal Zone Management Authority (hereinafter referred to as the CZMA).
- (c) Housing schemes in CRZ as specified in paragraph 8 of this notification;

\*5 and \*7 - Substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*6 - deleted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*8 - inserted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*41, \*42 - inserted vide notification S.O. 556 (E) dated 17.02.2015.

- (d) Construction involving more than 20,000sq mts built-up area in CRZ-II shall be considered **[for approval]\*<sup>35</sup>** in accordance with EIA notification, 2006 **[however, for]\*<sup>9</sup>** projects less than 20,000sq mts built-up area shall be approved by the concerned State or Union territory Planning authorities in accordance with this notification after obtaining recommendations from the concerned CZMA and prior recommendations of the concern CZMA shall be essential for considering the grant of environmental clearance under EIA notification, 2006 or grant of approval by the relevant planning authority.
- (e) MoEF may under a specific or general order specify projects which require prior public hearing of project affected people.
- (f) construction and operation for ports and harbours, jetties, wharves, quays, slipways, ship construction yards, breakwaters, groynes, erosion control measures **[and salt works]\*<sup>36</sup>**;
- (ii) the following activities shall require clearance from MoEF, **[after being recommended by the concerned CZMA]\*<sup>37</sup>** namely:-
- (a) **[those activities listed under category 'A' in the EIA notification, 2006 and permissible under the notification:]\*<sup>38</sup>**
- (b) construction activities relating to projects of Department of Atomic Energy or Defence requirements for which foreshore facilities are essential such as, slipways, jetties, wharves, quays; except for classified operational component of defence projects. Residential buildings, office buildings, hospital complexes, workshops of strategic and defence projects in terms of EIA notification, 2006.;
- (c) construction, operation of lighthouses;
- (d) laying of pipelines, conveying systems, transmission line;
- (e) exploration and extraction of oil and natural gas and all associated activities and facilities thereto;
- (f) Foreshore requiring facilities for transport of raw materials, facilities for intake of cooling water and outfall for discharge of treated wastewater or cooling water from thermal power plants. MoEF may specify for category of projects such as at (f), (g) and (h) of para 4;
- (g) Mining of rare minerals as listed by the Department of Atomic Energy;
- (h) Facilities for generating power by non-conventional energy resources, desalination plants and weather radars;
- (i) Demolition and reconstruction of (a) buildings of archaeological and historical importance, **[(b)]\*<sup>10</sup>** heritage buildings; and buildings under public use which means buildings such as for the purposes of worship, education, medical care and cultural activities;

\*9 and \*10 - Substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*35, \*36 and \*37 - inserted vide notification S.O. 3085 (E) dated 28<sup>th</sup> November, 2014.

\*38 - substituted vide notification S.O. 3085 (E) dated 28<sup>th</sup> November, 2014.

(j) [construction of memorials/ monuments and allied facilities by the concerned State Government in CRZ-IV (A) areas in exceptional cases, with adequate environmental safeguards, subject to the following, namely:-

(A) The concerned State Government shall submit justification for locating the project in CRZ area along with details of alternate sites considered and weightage matrix on various parameters including environmental parameters to State CZMA who will examine the project and make recommendation to the Central Government (MoEF) for grant of Terms of Reference (ToRs) for preparation of an environmental impact assessment report by the State Government;

(B) on grant of ToRs by the Central Government, the concerned State Government shall submit the draft Environmental Impact Assessment report (EIA) with Environmental Management Plan (EMP), draft Risk Assessment Report with Disaster Management Plan (DMP) including on-site and off-site emergency plan and evacuation plan during emergency, to the State Pollution Board for conduct of public hearing for the proposed project in accordance with the procedure laid down under the Environment Impact Assessment notification;

(C) (C) The concerned State Government shall submit final EIA, EMP, Risk Assessment and DMP after addressing the relevant issues raised by the public during the public hearing, to State CZMA for their examination and recommendation to MoEF.

**Note: Construction of memorials / monuments would generally discouraged in CRZ-IV areas and the same would be allowed only in exceptional cases with adequate environmental safeguards.]\*<sup>43</sup>**

4.2 Procedure for clearance of permissible activities.- All projects attracting this notification shall be considered for CRZ clearance as per the following procedure, namely:-

- (i) The project proponents shall apply with the following documents seeking prior clearance under CRZ notification to the concerned State or the Union territory Coastal Zone Management Authority,-
  - (a) Form-1 (Annexure-IV of the notification);
  - (b) Rapid EIA Report including marine and terrestrial component except for construction projects listed under 4(c) and (d)
  - (c) Comprehensive EIA with cumulative studies for projects in the stretches classified as low and medium eroding by MoEF based on scientific studies and in consultation with the State Governments and Union territory Administration;
  - (d) Disaster Management Report, Risk Assessment Report and Management Plan;
  - (e) CRZ map indicating HTL and LTL demarcated by one of the authorized agency (as indicated in para 2) in 1:4000 scale;
  - (f) Project layout superimposed on the above map indicated at (e) above;

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\*43 - inserted vide notification S.O. 556 (E) dated 17.02.2015.

- (g) The CRZ map normally covering 7km radius around the project site.
- (h) The CRZ map indicating the CRZ-I, II, III and IV areas including other notified ecologically sensitive areas;
- (i) No Objection Certificate from the concerned State Pollution Control Boards or Union territory Pollution Control Committees for the projects involving discharge of effluents, solid wastes, sewage and the like.;
- (ii) The concerned CZMA shall examine the above documents in accordance with the approved CZMP and in compliance with CRZ notification and make recommendations within a period of sixty days from date of receipt of complete application,-
- (a) MoEF or State Environmental Impact Assessment Authority (hereinafter referred to as the SEIAA) as the case may be for the project attracting EIA notification, 2006;
- (b) MoEF for the projects not covered in the EIA notification, 2006 but attracting para 4(ii) of the CRZ notification;
- [(c) SEIAA, for the projects specified under paragraph 4 (i) (except with respect to item (d) thereof relating to building projects with less than 20,000 sq.mts of built up area) and for the projects not attracting EIA Notification 2006]\*<sup>39</sup>**
- (iii) MoEF or SEIAA shall consider such projects for clearance based on the recommendations of the concerned CZMA within a period of sixty days.

[(iv)]\*<sup>11</sup> The clearance accorded to the projects under the CRZ notification shall be valid for the period of five years from the date of issue of the clearance for commencement of construction and operation.

(v) For Post clearance monitoring – (a) it shall be mandatory for the project proponent to submit half-yearly compliance reports in respect of the stipulated terms and conditions of the environmental clearance in hard and soft copies to the regulatory authority(s) concerned, on 1<sup>st</sup> June and 31<sup>st</sup> December of each calendar year and all such compliance reports submitted by the project proponent shall be published in public domain and its copies shall be given to any person on application to the concerned CZMA.

(b) the compliance report shall also be displayed on the website of the concerned regulatory authority.

(vi) To maintain transparency in the working of the CZMAs it shall be the responsibility of the CZMA to create a dedicated website and post the agenda, minutes, decisions taken, clearance letters, violations, action taken on the violations and court matters including the Orders of the Hon'ble Court as also the approved CZMPs of the respective State Government or Union territory.

#### 5. Preparation of Coastal Zone Management Plans.

- (i) The MoEF may obtain the CZMPs prepared through the respective State Government or Union territory;
- (ii) The CZMPs may be prepared by the coastal State Government or Union territory by engaging reputed and experienced scientific institution(s) or the agencies including the National Centre for Sustainable Coastal Management (hereinafter referred to as the NCSCM) of MoEF and in consultation with the concerned stakeholders;
- (iii) The hazard line shall be mapped by MoEF through SoI all along the coastline of the country and the hazard line shall be demarcated taking into account, tide, waves, sea level

\*11 - Substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*39 - substituted vide notification S.O. 3085 (E) dated 28<sup>th</sup> November, 2014.

rise and shoreline changes;

- (iv) For the purpose of depicting the flooding due to tides, waves and sea level rise in the next fifty and hundred years, the contour mapping of the coastline shall be carried out at 0.5m interval normally upto 7km from HTL on the landward side, and the shoreline changes shall be demarcated based on historical data by comparing the previous satellite imageries with the recent satellite imageries;
- (v) Mapping of the hazard line shall be carried out in 1:25,000 scale for macro level planning and 1:10,000 scale or cadastral scale for micro level mapping and the hazard line shall be taken into consideration while preparing the land use plan of the coastal areas;
- (vi) The coastal States and Union Territory will prepare within a period of twenty four months from the date of issue this notification, draft CZMPs in 1:25,000 scale map identifying and classifying the CRZ areas within the respective territories in accordance with the guidelines given in Annexure-I of the notification, which involve public consultation;
- (vii) The draft CZMPs shall be submitted by the State Government or Union territory to the concerned CZMA for appraisal, including appropriate consultations, and recommendations in accordance with the procedure(s) laid down in the Environment (Protection) Act, 1986;
- (viii) **[The Coastal Zone Management Authority of a State or of a Union Territory shall submit the draft Coastal Zone Management Plan along with its recommendations to the Ministry of Environment, Forest and Climate Change, after incorporating the suggestions and objections received from the stakeholders] \*44**
- (ix) MoEF shall thereafter consider and approve the CZMPs within a period of four months from the date of receipt of the CZMPs complete in all respects;
- (x) All developmental activities listed in this notification shall be regulated by the State Government, Union Territory Administration, the local authority or the concerned CZMA within the framework of such approved CZMPs as the case may be in accordance with provisions of this notification;
- (xi) The CZMPs shall not normally be revised before a period of five years after which, the concerned State Government or the Union territory may consider undertaking revision of the maps following the above procedures;
- (xii) **[The Coastal Zone Management Plans as already approved by the Ministry of Environment and Forests shall be valid up to the 31<sup>st</sup> day of January, 2017 or till such time as the approval is given by that Ministry to the fresh Coastal Zone Management Plans made under the said notification, whichever is earlier.]\*45**

#### 6. Enforcement of the CRZ, notification, 2011-

- (a) For the purpose of implementation and enforcement of the provisions [of]\*12 this notification and compliance with conditions stipulated thereunder, the powers either original or delegated are available under Environment (Protection) Act, 1986 with the MoEF, State Government[s]\*13 or the Union territory Administration[s]\*14 NCZMA and SCZMA s;
- (b) The composition, tenure and mandate of NCZMA and State Government or the Union territory CZMA s have already been notified by MoEF in terms of Orders of Hon'ble

\*12, \*13 and \*14 - Inserted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*44 and \*45\*46 - Substituted vide Corrigendum S.O. 938(E) dated 31.03.2015 & 1212 (E) dated 22.03.2016.

Supreme Court in Writ Petition 664 of 1993;

- (c) the State Government or the Union territory CZMAs shall primarily be responsible for enforcing and monitoring of this notification and to assist in this task, the State Government and the Union territory shall constitute district level Committees under the Chairmanship of the District Magistrate concerned containing atleast three representatives of local traditional coastal communities [**especially**]<sup>\*15</sup> from fisherfolk;
- (d) The dwelling units of the traditional coastal communities [**especially**]<sup>\*16</sup> fisherfolk, tribals as were permissible under the provisions of the CRZ notification, 1991, but which have not obtained formal approval from concerned authorities under the aforesaid notification shall be considered by the respective Union territory CZMAs and the dwelling units shall be regularized subject to the following condition, namely-
- (i) these are not used for any commercial activity
  - (ii) these are not sold or transferred to non-traditional coastal community.

7. 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 mts, a buffer of 50meters 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 Reserve [**as enumerated in para V(4)(b)**]<sup>\*17</sup>
- (f) Salt Marshes;
- (g) Turtle nesting grounds;
- (h) Horse shoe crabs habitats;
- (i) Sea grass beds;
- (j) Nesting grounds of birds;
- (k) Areas or structures of archaeological importance and heritage sites.

B. The area between Low Tide Line and High Tide Line;

(ii) CRZ-II,-

The areas that have been developed upto or close to the shoreline.

*Explanation.-* [**For the purposes of the**]<sup>\*18</sup> ~~deleted~~ expression “developed area” is referred to as that area within the existing municipal limits or in other existing legally designated urban areas which are substantially built-up and has been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains;

\*15 and \*16 - substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*17 - Inserted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*18 - deleted vide Corrigendum S.O.651(E) dated 29.03.2011.

- (a) exploration and extraction of natural gas;
- (b) construction of dispensaries, schools, public rainsHELTER, community toilets, bridges, roads, jetties, [erosion control measures]\*<sup>40</sup> water supply, drainage, sewerage which are required for traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA.
- (c) necessary safety measure shall be incorporated while permitting such developmental activities in the area falling in the hazard zone;
- (d) salt harvesting by solar evaporation of seawater; (e) desalination plants;
- (f) storage of non-hazardous cargo such as edible oil, fertilizers and food grain within notified ports;
- (g) construction of trans harbour sea links, roads on stilts or pillars without affecting the tidal flow of water.

## II. CRZ-II,-

- (i) buildings shall be permitted only on the landward side of the existing road, or on the landward side of existing authorized structures;
- (ii) **[buildings permitted on the landward side of the existing and proposed roads or existing authorised structures shall be subject to the existing local town and country planning regulations as modified from time to time, except the Floor Space Index or Floor Area Ratio, which shall be as per 1991 level :  
Provided that no permission for construction of buildings shall be given on landward side of any new roads which are constructed on the seaward side of an existing road :  
Provided further that the construction in CRZ-II area of Goa, Kerala and Mumbai shall be governed by the provisions of Clause V of paragraph 8.]**\*<sup>47</sup>
- (iii) reconstruction of authorized building to be permitted subject with the existing FloorSpace Index or Floor Area Ratio Norms and without change in present use;
- (iv) facilities for receipt and storage of petroleum products and liquefied natural gas as specified in Annexure-II appended to this notification and facilities for regasification of Liquefied Natural Gas subject to the conditions as mentioned in sub-paragraph (ii) of paragraph 3;
- (v) desalination plants and associated facilities;
- (vi) storage of non-hazardous cargo, such as edible oil, fertilizers and food grain in notified ports;
- (vii) facilities for generating power by non-conventional power sources and associated facilities;

## III. CRZ-III,-

A. Area upto 200mts from HTL on the landward side in case of seafront and 100mts along tidal influenced water bodies or width of the creek whichever is less is to be earmarked as "No Development Zone (NDZ)",-

- (i) the NDZ shall not be applicable in such area falling within any notified port limits;
- (ii) No construction shall be permitted within NDZ except for repairs or reconstruction of existing authorized structure not exceeding existing Floor Space Index, existing plinth area and existing density and for permissible activities under the notification [**especially**]\*<sup>21</sup> facilities essential for activities; Construction/reconstruction of dwelling units of traditional coastal communities including fisherfolk may be permitted between 100 and 200 metres from the HTL along the seafront in accordance with a comprehensive plan prepared by the State Government or the Union territory in consultation with the traditional coastal communities [**especially**]\*<sup>22</sup> fisherfolk and

\*21 and \*22 - substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*40 - inserted vide notification S.O. 3085 (E) dated 28<sup>th</sup> November, 2014.

\*47 - substituted vide notification S.O. 1599 (E) dated 16<sup>th</sup> June 2015.

## (iii) CRZ-III,-

Areas that are relatively undisturbed and those do not belong to either CRZ-I or II which include coastal zone in the rural areas (developed and undeveloped) and also areas within municipal limits or in other legally designated urban areas, which are not substantially built up.

## (iv.) CRZ-IV,-

A. the water area from the Low Tide Line to twelve nautical miles on the seaward side;

B. shall include the water area of the tidal influenced water body from the mouth of the water body at the sea upto the influence of tide which is measured as five parts per thousand during the driest season of the year.

(v) Areas requiring special consideration for the purpose of protecting the critical coastal environment and difficulties faced by local communities,-

- A. (i) CRZ area falling within municipal limits of Greater Mumbai;  
 (ii) the CRZ areas of Kerala including the backwaters and backwater islands;  
 (iii) CRZ areas of Goa.

B. Critically Vulnerable Coastal Areas (CVCA) such as Sunderbans region of West Bengal and other ecologically sensitive areas identified as under Environment (Protection) Act, 1986 and managed with the involvement of coastal communities including fisherfolk.

## 8. Norms for regulation of activities permissible under this notification,-

(i) The development or construction activities in different categories of CRZ shall be regulated by the concerned CZMA in accordance with the following norms, namely:-

Note:- {The word [existing, used]\*<sup>19</sup> hereinafter in relation to existence of various features or existence of regularisation or norms shall mean existence of these features or regularisation or norms as on 19.2.1991 [when the CRZ notification, 1991]\*<sup>20</sup> was notified.}\*<sup>46</sup> ~~(deleted)~~

## I. CRZ-I,-

(i) no new construction shall be permitted in CRZ-I except,-

- (a) projects relating to Department of Atomic Energy;  
 (b) pipelines, conveying systems including transmission lines;  
 (c) facilities that are essential for activities permissible under CRZ-I;  
 (d) installation of weather radar for monitoring of cyclones movement and prediction by Indian Meteorological Department;  
 (e) construction of trans harbour sea link and without affecting the tidal flow of water, between LTL and HTL.  
 (f) development of green field airport already approved at only Navi Mumbai;

(ii) Areas between LTL and HTL which are not ecologically sensitive, necessary safety measures will be incorporated while permitting the following, namely:-

\*19 and \*20 – substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

\*46 – deleted vide notification S.O. 1599 (E) dated 16<sup>th</sup> June 2015.

incorporating the necessary disaster management provision, sanitation and recommended by the concerned State or the Union territory CZMA to NCZMA for approval by MoEF;

(iii) however, the following activities may be permitted in NDZ –

- (a) agriculture, horticulture, gardens, pasture, parks, play field, and forestry;
- (b) projects relating to Department of Atomic Energy;
- (c) mining of rare minerals;
- (d) salt manufacture from seawater;
- (e) facilities for receipt and storage of petroleum products and liquefied natural gas as specified in Annexure-II;
- (f) facilities for regasification of liquefied natural gas subject to conditions as mentioned in subparagraph (ii) of paragraph 3;
- (g) facilities for generating power by non conventional energy sources;
- (h) Foreshore facilities for desalination plants and associated facilities;
- (i) weather radars;
- (j) construction of dispensaries, schools, public rain shelter, community toilets, bridges, roads, provision of facilities for water supply, drainage, sewerage, crematoria, cemeteries and electric sub-station which are required for the local inhabitants may be permitted on a case to case basis by CZMA;
- (k) construction of units or auxiliary thereto for domestic sewage, treatment and disposal with the prior approval of the concerned Pollution Control Board or Committee;
- (l) facilities required for local fishing communities such as fish drying yards, auction halls, net mending yards, traditional boat building yards, ice plant, ice crushing units, fish curing facilities and the like;
- (m) development of green field airport already permitted only at Navi Mumbai.

B. Area between 200mts to 500mts,-

The following activities shall be permissible in the above areas;

- (i) development of vacant plot in designated areas for construction of hotels or beach resorts for tourists or visitors subject to the conditions as specified in the guidelines at Annexure-III ;
- (ii) facilities for receipt and storage of petroleum products and liquefied natural gas as specified in Annexure-II;
- (iii) facilities for regasification of liquefied natural gas subject to conditions as mentioned in sub-paragraph (ii) of paragraph 3;
- (iv) storage of non-hazardous cargo such as, edible oil, fertilizers, food grain in notified ports;
- (v) foreshore facilities for desalination plants and associated facilities;
- (vi) facilities for generating power by non-conventional energy sources;
- (vii) construction or reconstruction of dwelling units so long it is within the ambit of traditional rights and customary uses such as existing fishing villages and goathans. Building permission for such construction or reconstruction will be subject to local town and country planning rules with overall height of construction not exceeding 9mts with two floors (ground + one floor);
- (viii) Construction of public rain shelters, community toilets, water supply drainage, sewerage, roads and bridges by CZMA who may also permit construction of

schools and dispensaries for local inhabitants of the area for those panchayats, the major part of which falls within CRZ if no other area is available for construction of such facilities;

- (ix) reconstruction or alteration of existing authorised building subject to sub-paragraph (vii), (viii);
- (x) development of green field airport already permitted only at Navi Mumbai.

(IV) In CRZ-IV areas,-

The activities [impinging]\*<sup>23</sup> on the sea and tidal influenced water bodies will be regulated except for traditional fishing and related activities undertaken by local communities as follows:-

- (a) No untreated sewage, effluents, ballast water, ship washes, fly ash or solid waste from all activities including from aquaculture operations shall be let off or dumped. A comprehensive plan for treatment of sewage generating from the coastal towns and cities shall be formulated within a period of one year in consultation with stakeholders including traditional coastal communities, traditional fisherfolk and implemented;
- (b) Pollution from oil and gas exploration and drilling, mining, boat house and shipping;
- (c) There shall be no restriction on the traditional fishing and allied activities undertaken by local communities.

Areas requiring special consideration,-

1. CRZ areas falling within municipal limits of the Greater Mumbai.

- (i) Developmental activities in the CRZ area of the Greater Mumbai because of the environmental issues, relating to degradation of mangroves, pollution of creeks and coastal waters, due to discharge of untreated effluents and disposal of solid waste, the need to provide decent housing to the poor section of society and lack of suitable alternatives in the inter connected islands of Greater Mumbai shall be regulated as follows, namely:-

A. Construction of roads - In CRZ-I areas indicated at sub-paragraph (i) of paragraph 7 of the notification the following activities only can be taken up:-

- (a) Construction of roads, approach roads and missing link roads approved in the Developmental Plan of Greater Mumbai on stilts ensuring that the free flow of tidal water is not affected, without any benefit of CRZ-II accruing on the landward side of such constructed roads or approach roads subject to the following conditions:-

- (i) All mangrove areas shall be mapped and notified as protected forest and necessary protection and conservation measures for the identified mangrove areas shall be initiated.

- (ii) Five times the number of mangroves destroyed/cut during the construction process shall be replanted.

B. Solid waste disposal sites shall be identified outside the CRZ area and thereafter within two years the existing conventional solid waste sites shall be relocated outside the CRZ area.

[(ii)]\*<sup>24</sup> In CRZ-II areas-

- (a) The development or redevelopment shall continue to be undertaken in accordance with the norms laid down in the Town and Country Planning Regulations as they existed on the date of issue of the notification dated the 19<sup>th</sup> February, 1991, unless specified

\*23 and \*24 - substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

otherwise in this notification.

(b) SLUM REHABILITATION SCHEMES,-

1. In the Greater Mumbai area there are large slum clusters with lakhs of families residing therein and the living conditions in these slums are deplorable and the civic agencies are not able to provide basic infrastructure such as drinking water, electricity, roads, drainage and the like because the slums come up in an unplanned and congested manner and the slums in the coastal area are at great risk in the event of cyclones, storm surges or tsunamis, in view of the difficulties in providing rescue, relief and evacuation.
2. To provide a safe and decent dwelling to the slum dwellers, the State Government may implement slum redevelopment schemes as identified as on the date of issue of this notification directly or through its parastatal agencies like Maharashtra Housing and Area Development Authority (MHADA), Shivshahi Punarvasan Prakalp Limited (SPPL), Mumbai Metropolitan Region Development Authority (MMRDA) and the like.:

Provided that,-

- (i) such redevelopment schemes shall be undertaken directly or through joint ventures or through public private partnerships or other similar models ensuring that the stake of the State Government or its parastatal entities shall be not less than 51%;
- (ii) the Floor Space Index or Floor Area Ratio for such redevelopment schemes shall be in accordance with the Town and Country Planning Regulations prevailing as on [6<sup>th</sup> January, 2011]\*<sup>25</sup>
- (iii) it shall be the duty of the project proponent undertaking the redevelopment through conditions (i) (2) above along with the State Government to ensure that all legally regularized tenants are provided houses in situ or as per norms laid down by the State Government in this regard.

(c) REDEVELOPMENT OF DILAPIDATED, CESSSED AND UNSAFE BUILDINGS:

1. In the Greater Mumbai, there are, also a large number of old and dilapidated, cessed and unsafe buildings in the CRZ areas and due to their age these structures are extremely vulnerable and disaster prone and therefore there is an urgent need for the redevelopment or reconstruction of these identified buildings.
2. These projects shall be taken up subject to the following conditions and safeguards:
  - (i) such redevelopment or reconstruction projects as identified on the date of issue of this notification shall be allowed to be taken up involving the owners of these buildings either above or with private developers in accordance with the prevailing Regulation, directly or through joint ventures or through other similar models.
  - (ii) the Floor Space Index or Floor Area Ratio for such redevelopment schemes shall be in accordance with the Town and Country Planning Regulations prevailing as on [6<sup>th</sup> January, 2011]\*<sup>26</sup>
  - (iii) suitable accommodation to the original tenants of the specified buildings shall be

\*25 and \*26 – substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

ensured during the course of redevelopment or reconstruction of the buildings by the project proponents, undertaking the redevelopment through condition 2(i) above.

(d) Notwithstanding anything contained in this notification, the developmental activities for slums and for dilapidated, cessed and unsafe buildings as specified at paras (b) and (c) above shall be carried out in an accountable and transparent manner by the project proponents mentioned therein which shall include the following pre-condition measures, wherever applicable:-

1. (i) applicability of the Right to Information Act, 2005 to all redevelopment or reconstruction projects granted clearance by the Competent Authorities;
  - (ii) MoEF shall issue an order constituting the CPIO and the first Appellate Authority of appropriate ranks in consultation with Government of Maharashtra;
  - (iii) details of the Slum Rehabilitation Scheme, including the complete proposal and the names of the eligible slum dwellers will be declared suo-moto as a requirement of Section 4 of compliance of the Right to Information Act, 2005 by the appropriate authority in the Government of Maharashtra in one month before approving it;
  - (iv) the implementing or executing agency at the State Government with regard to projects indicated at sub-item (b) and (c) of item (iii) of sub-paragraph V shall display on a large notice boards at the site and at the office of the implementing or executing agency the names of the eligible builders, total number of tenements being made, names of eligible slum dwellers who are to be provided the dwelling units and the extra area available for free sale.
  - (v) Projects being developed under sub-items (b) and (c) of item (iii) of sub-paragraph V shall be given permission only if the project proponent agree to be covered under the Right to Information Act, 2005.
2. MoEF may appoint statutory auditors, who are empanelled by the Comptroller and auditor General (hereinafter referred to as the C&AG) to undertake performance and fiscal audit in respect of the projects relating to redevelopment of dilapidated, cessed and unsafe buildings and the projects relating to Slum Rehabilitation Scheme shall be audited by C&AG.
  3. A High Level Oversight Committee may be set up by the Government of Maharashtra for periodic review of implementation of V(iii)(b) and (c) which shall include eminent representatives of various Stakeholders, like Architects, Urban Planner, Engineers, and Civil Society, besides the local urban bodies, the State Government and the Central Government.
  4. The individual projects under V(iii)(b) and (c) shall be undertaken only after public consultation in which views of only the legally entitled slum dweller or the legally entitled tenant of the dilapidated or cessed buildings shall be obtained in accordance with the procedures laid down in EIA notification, 2006.
- (e) In order to protect and preserve the 'green lung' of the Greater Mumbai area, all open spaces, parks, gardens, playgrounds indicated in development plans within CRZ-II shall be categorized as CRZ-III, that is, 'no development zone'.
- (f) the Floor Space Index upto 15% shall be allowed only for construction of civic amenities, stadium and gymnasium meant for recreational or sports related activities and the residential or commercial use of such open spaces shall not be permissible.

- (g) Koliwada namely, fishing settlement areas as identified in the Development Plan of 1981 or relevant records of the Government of Maharashtra, shall be mapped and declared as CRZ-III so that any development, including construction and reconstruction of dwelling units within these settlements shall be undertaken in accordance with applicable as per local Town and Country Planning Regulations.
- (h) Reconstruction and repair works of the dwelling units, belonging to fisher communities and other local communities identified by the State Government, shall be considered and granted permission by the Competent Authorities on a priority basis, in accordance with the applicable Town and Country Planning Regulations.

## 2. CRZ for Kerala

In view of the unique coastal systems of backwater and backwater islands alongwith space limitation present in the coastal stretches of the State of Kerala, the following activities in CRZ shall be regulated as follows, namely:-

- (i) all the islands in the backwaters of Kerala shall be covered under the CRZ notification;
- (ii) the islands within the backwaters shall have 50mts width from the High Tide Line on the landward side as the CRZ area;
- (iii) within 50mts from the HTL of these backwater islands existing dwelling units of local communities may be repaired or reconstructed [, however, ]\*<sup>27</sup> no new construction shall be permitted;
- (iv) beyond 50mts from the HTL on the landward side of backwater islands, dwelling units of local communities may be constructed with the prior permission of the Gram panchayat;
- (v) foreshore facilities such as fishing jetty, fish drying yards, net mending yard, fishing processing by traditional methods, boat building yards, ice plant, boat repairs and the like, may be taken up within 50mts width from HTL of these backwater islands.

## 3. CRZ of Goa.-

In view of the peculiar circumstances of the State Goa including past history and other developments, the specific activities shall be regulated and various measures shall be undertaken as follows:-

- (i) the Government of Goa shall notify the fishing villages wherein all foreshore facilities required for fishing and fishery allied activities such as traditional fish processing yards, boat building or repair yards, net mending yards, ice plants, ice storage, auction hall, jetties may be permitted by [Gram Panchayat]\*<sup>28</sup> in the CRZ area;
- (ii) reconstruction, repair works of the structures of local communities including fishermen community shall be permissible in CRZ;
- (iii) purely temporary and seasonal structures customarily put up between the months of September to May;
- (iv) the eco sensitive low lying areas which are influenced by tidal action known as khazan lands shall be mapped;
- (v) the mangroves along such as khazan land shall be protected and a management plan for the khazan land prepared and no developmental activities shall be permitted in the khazan land;
- (vi) sand dunes, beach stretches along the bays and creeks shall be surveyed and mapped. No activity shall be permitted on such sand dune areas;
- (vii) the beaches such as Mandrem, Morjim, Galgiba and Agonda [have]\*<sup>29</sup> been

\*27, \*28 and \*29 – substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

designated as turtle nesting sites and protected under the Wildlife Protection Act, 1972 and these areas shall be surveyed and management plan prepared for protection of these turtle nesting sites;

(viii) no developmental activities shall be permitted in the turtle breeding areas referred to in sub-paragraph (vii).

4. (a) Critical Vulnerable Coastal Areas (CVCA) which includes Sunderbans and other identified ecological sensitive areas **[which]\*<sup>30</sup>** shall be managed with the involvement of the local coastal communities including the fisher folk;-
- (b) the entire Sunderbans mangrove area and other identified ecologically important areas such as Gulf of Khambat and Gulf of Kutch in Gujarat, Malvan, **[Achra in Ratnagiri]\*<sup>31</sup>** in Maharashtra, Karwar and Coondapur in Karnataka, Vembanad in Kerala, Gulf of Mannar in Tamil Nadu, Bhitarkanika in Orissa, Coringa, East Godavari and Krishna in Andhra Pradesh shall be declared as Critical Vulnerable Coastal Areas (CVCA) through a process of consultation with local **[fisher folk]\*<sup>32</sup>** and other communities inhabiting the area and depend on its resources for their livelihood with the objective of promoting conservation and sustainable use of coastal resources and habitats;
- (c) the process of identifying planning, notifying and implementing CVCA shall be detailed in the guideline which will be developed and notified by MoEF in consultations with the stakeholders like the State Government, local coastal communities and fisherfolk and the like inhabiting the area;
- (d) the Integrated Management Plans (IMPs) prepared for such CVCA shall inter alia keep in view the conservation and management of mangroves, needs of local communities such as, dispensaries, schools, public rain shelter, community toilets, bridges, roads, jetties, water supply, drainage, sewerage and the impact of sea level rise and other natural disasters and the IMPs will be prepared in line with the para 5 above for preparation of Coastal Zone Management Plans;
- (e) till such time the IMPs are approved and notified, construction of dispensaries, schools, public rain shelters, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants shall be permitted on a case to case basis, by the CZMA with due regards to the views of coastal communities including fisherfolk.

[F.No.11-83/2005-IA-III]  
J. M. MAUSKAR, Addl. Secy.

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\*30, \*31 and \*32 – substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

ANNEXURE IGUIDELINES FOR PREPARATION OF COASTAL ZONE MANAGEMENT PLANSI. A. Demarcation of High Tide Line

1. Demarcation of High Tide Line (HTL) and Low Tide Line (LTL) shall be carried out by one of the agencies authorised by MoEF based on the recommendations of the National Centre for Sustainable Coastal Management (NCSCM).
2. Demarcation of the High Tide Line or LTL shall be made on the Coastal Zone Management (CZM) Maps of scale 1:25,000 prepared by the agencies identified by the MoEF.
3. Local level CZM Maps shall be prepared for use of officials of local bodies for determination of the CRZ.
4. The local level CZM Maps shall be prepared on a Cadastral scale in accordance with the CZM Maps approved by the Central Government.

B. Preparation of CZM Maps

5. Base Maps of 1:25,000 scale shall be acquired from the Survey of India (SOI) and wherever 1:25,000 maps are not available, 1:50,000 maps shall be enlarged to 1:25,000 for the purpose of base map preparation and these maps will be of the standard specification given below:
 

Unit	:	7.5 minutes X 7.5minutes
Numbering	:	Survey of India Sheet Numbering System
Horizontal Datum	:	Everest or WGS 84
Vertical Datum	:	Mean Sea Level (MSL)
Topography	:	Topography in the SOI maps will be updated using latest satellite imageries or aerial photographs
6. The High Water Level (HWL) and Low Water Level (LWL) marked on the Base maps will be transferred to the CZM maps.
7. Coastal geomorphological signatures in the field or satellite imageries or aerial photographs will be used for appropriate adjustment, in the HWL or LWL for demarcating HTL or LTL in accordance with the CRZ notification.
8. The following geomorphological features shall be considered while demarcating in HTL or LTL:
  - Landward (monsoonal) berm crest in the case of sandy beaches
  - Rocks, Headlands, Cliffs
  - Seawalls or revetments or embankments
9. 500 meter and 200 metre lines will be demarcated with respect of HTL.
10. HTL (as defined in the CRZ notification) and LTL shall also be demarcated in the CZM maps along the banks of tidal influenced inland water bodies with the help of the geomorphological signatures or features.
11. Classification of different coastal zones shall be done as per the CRZ notification
12. Standard national or international colour codes shall be used to highlight sub-classification of data.

C. Local level CZM Maps

Local level CZM Maps are for the use of local bodies and other agencies to facilitate implementation of the Coastal Zone Management Plans

13. Cadastral (village) maps in 1:3960 or the nearest scale, shall be used as the base maps.

14. These maps are available with revenue Authorities and are prepared as per standard norms.
15. HTL (as defined in the CRZ notification) and LTL will be demarcated in the cadastral map based on detailed physical verification using coastal geomorphological signatures or features in accordance with the CZM Maps approved by the Central Government.
16. 500metre and 200metre lines shall be demarcated with respect to the HTL thus marked.
17. HTL (as defined in the CRZ notification, 1991) and LTL will also be demarcated along the banks of tidal influenced inland water bodies with the help of geomorphological signatures or features.
18. Classifications shall be transferred into local level CZM maps from the CZM Plans.
19. Symbols will be adopted from CZM Maps.
20. Colour codes as given in CZM Maps shall be used.
21. Demarcation of cadastral maps will be done by local agencies approved by the Central Government. The local agencies shall work under the guidance of the concerned State Government or Union Territory Coastal Zone Management Authorities.

D. Hazard mapping:-

II. Classification of CRZ areas

1. The CZM Maps shall be prepared in accordance with para 5 of the CRZ notification demarcating CRZ I, II, III, IV and V.
2. The CZM Maps shall clearly demarcate the land use plan of the area and lists out the CRZ-I areas. All the CRZ-I areas listed under para 7(I)A and B shall be clearly demarcated and colour codes given so that each of the CRZ-I areas can be clearly identified.
3. Buffer zone along mangrove areas of more than 1000sq mts shall be stipulated with a different colour distinguishing from the mangrove area.
4. The buffer zone shall also be classified as CRZ-I area.
5. The hazard line to be drawn up by MoEF shall be superimposed on the CZM maps in 1:25,000 scale and also on the cadastral scale maps.
6. The CRZ-II areas shall be those areas which have been substantially built-up with a ratio of built-up plots to that of total plots is more than 50%.
7. In the CRZ areas, the fishing villages, common properties of the fishermen communities, fishing jetties, ice plants, fish drying platforms or areas infrastructure facilities of fishing and local communities such as dispensaries, roads, schools, and the like, shall be indicated on the cadastral scale maps. States shall prepare detailed plans for long term housing needs of coastal fisher communities in view of expansion and other needs, provisions of basic services including sanitation, safety, and disaster preparedness.
8. No developmental activities other than those listed above shall be permitted in the areas between the hazard line and 500mts or 100mts or width of the creek on the landward side. The dwelling unit of the local communities including that of the fishers will not be relocated if the dwelling units are located on the seaward side of the hazard line. The State Government will provide necessary safeguards from natural disaster to such dwelling units of local communities.
9. The water areas of CRZ IV shall be demarcated and clearly demarcated if the water body is sea, lagoon, backwater, creek, bay, estuary and for such classification of the water bodies the terminology used by Naval Hydrographic Office shall be relied upon.
10. The fishing Zones in the water bodies and the fish breeding areas shall be clearly marked.
11. The water area shall be demarcated indicating the pollution levels as per Central Pollution Control Board standards on water quality.
12. In the CRZ V areas the land use maps shall be superimposed on the Coastal Zone Management Plan and clearly demarcating the CRZ I, II, III, IV.
13. The existing authorized developments on the sea ward side shall be clearly demarcated.

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

III. CZMPs approved by MoEF in accordance with CRZ notification, 1991

1. While preparing the CZMPs under CRZ notification, 2011, the CZMPs that have been approved under the CRZ Notification, 1991 shall be compared. A justification shall be provided by the concerned CZMA in case the CZMPs prepared under CRZ notification, 2011 varies with respect to the approved CZMP prepared under CRZ notification, 1991.

IV. Public Views on the CZMP.

- a) The draft CZMPs prepared shall be given wide publicity and suggestions and objections received in accordance with the Environment (Protection) Act, 1986. Public hearing on the draft CZMPs shall be held at district level by the concerned CZMAs.
- b) Based on the suggestions and objections received the CZMPs shall be revised and approval of MoEF shall be obtained.
- c) The approved CZMP shall be put up on the website of MoEF, concerned website of the State, Union Territory CZMA and hard copy made available in the panchayat office, District collector office and the like.

V. Revision of Coastal Zone Management Plans

1. Whenever there is a doubt the concerned State or Union territory Coastal Zone Management Authority shall refer the matter to the National Centre for Sustainable Coastal Management who shall verify the CZMP based on latest satellite imagery and ground truthing.
2. The rectified map would be submitted to MoEF for its record.

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List of petroleum and chemical products permitted for storage in [CRZ except CRZ-I(A)]

- (i) Crude oil;
- (ii) Liquefied Petroleum Gas;
- (iii) Motor spirit;
- (iv) Kerosene;
- (v) Aviation fuel;
- (vi) High speed diesel;
- (vii) Lubricating oil;
- (viii) Butane;
- (ix) Propane;
- (x) Compressed Natural Gas;
- (xi) Naphtha;
- (xii) Furnace oil;
- (xiii) Low Sulphur Heavy Stock;
- (xiv) Liquefied Natural Gas;
- (xv) Fertilizers and raw materials for manufacture of fertilizers.

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Annexure-III**Guidelines for development of beach resorts or hotels in the designated areas of CRZ-III and CRZ-II for occupation of tourist or visitors with prior approval of the Ministry of Environment and Forests**

- I. Construction of beach resorts or hotels with prior approval of MoEF in designated areas of CRZ-II and III for occupation of tourist or visitors shall be subject to the following conditions, namely:-
- (a) The project proponent shall not undertake any construction within 200 metres in the landward side of High Tide Line and within the area between Low Tide Line and High Tide Line [in CRZ - III]<sup>\*33</sup>;
  - (b) The proposed constructions shall be beyond the hazard line or 200mts from the High Tide Line whichever is more;
  - (c) live fencing and barbed wire fencing with vegetative cover may be allowed around private properties subject to the condition that such fencing shall in no way hamper public access to the beach;
  - (d) no flattening of sand dunes shall be carried out;
  - (e) no permanent structures for sports facilities shall be permitted except construction of goal posts, net posts and lamp posts;
  - (f) Construction of basement may be allowed subject to the condition that no objection certification is obtained from the State Ground Water Authority to the effect that such construction will not adversely affect the flow of groundwater in that area;
  - (g) the State Ground Water Authority shall take into consideration the guidelines issued by Central Government before granting such no objection certificate;
  - (h) though no construction is allowed in the no development zone for the purposes of calculation of Floor Space Index, the area of entire plot including the portion which falls within the no development zone shall be taken into account;
  - (i) the total plot size shall not be less than 0.4 hectares and the total covered area on all floors shall not exceed 33 percent of the plot size i.e., the Floor Space Index shall not exceed 0.33 and the open area shall be suitably landscaped with appropriate vegetative cover;
  - (j) the construction shall be consistent with the surrounding landscape and local architectural style;
  - (k) the overall height of construction upto the highest ridge of the roof, shall not exceed 9metres and the construction shall not be more than two floors (ground floor plus one upper floor);
  - (l) groundwater shall not be tapped within 200metre of the High Tide Line; within the 200metre 500metre zone it can be tapped only with the concurrence of the Central or State Ground Water Board;

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\*33 - substituted vide Corrigendum S.O.651(E) dated 29.03.2011.

- (m) extraction of sand, leveling or digging of sandy stretches except for structural foundation of building, swimming pool shall not be permitted within 500metres of the High Tide Line;
  - (n) the quality of treated effluents, solid wastes, emissions and noise levels and the like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986;
  - (o) necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that the untreated effluents and solid wastes are not discharged into the water or on the beach; and no effluent or solid waste shall be discharged on the beach;
  - (p) to allow public access to the beach, atleast a gap of 20metres width shall be provided between any two hotels or beach resorts; and in no case shall gaps be less than 500metres apart; and
  - (q) if the project involves diversion of forestland for non-forest purposes, clearance as required under the Forest (Conservation) Act, 1980 shall be obtained and the requirements of other Central and State laws as applicable to the project shall be met with; and
  - (r) approval of the State or Union territory Tourism Department shall be obtained.
- II. In ecologically sensitive areas (such as marine parks, mangroves, coral reefs, breeding and spawning grounds of fish, wildlife habitats and such other area as may be notified by the Central or State Government Union territories) construction of beach resorts or hotels shall not be permitted.

**["Note: For the development of beach resorts or hotels in the CRZ-II area, the guidelines at sub-items ( c ), (d), (e), (f), (g), (n), (o), (q), ® of Item I and at item II shall be applicable."]\*<sup>34</sup>**

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\*34 - inserted vide notification S.O. 383 (E) dated 04<sup>th</sup> February, 2015.

**Form-I for seeking clearance for project attracting CRZ notification**

Basic information:

Name of the Project:-

Location or site alternatives under consideration:-

Size of the project (in terms of total area) :-

CRZ classification of the area :-

Expected cost of the project:-

Contact Information:-

**(II) Activity**

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, and the like)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
1.2	Details of CRZ classification as per the approved Coastal Zone Management Plan?		
1.3	Whether located in CRZ-I area?		
1.4	The distance from the CRZ-I areas.		
1.5	Whether located within the hazard zone as mapped by Ministry of Environment and Forests/National Disaster Management Authority?		
1.6	Whether the area is prone to cyclone, tsunami, tidal surge, subduction, earthquake etc.?		
1.7	Whether the area is prone for saltwater ingress?		
1.8	Clearance of existing land, vegetation and buildings?		
1.9	Creation of new land uses?		
1.10	Pre-construction investigations e.g. bore hole, soil testing?		
1.11	Construction works?		

1.12	Demolition works?		
1.13	Temporary sites used for construction works or housing of construction workers?		
1.14	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations		
1.15	Underground works including mining or tunneling?		
1.16	Reclamation works?		
1.17	Dredging/reclamation/land filling/disposal of dredged material etc.?		
1.18	Offshore structures?		
1.19	Production and manufacturing processes?		
1.20	Facilities for storage of goods or materials?		
1.21	Facilities for treatment or disposal of solid waste or liquid effluents?		
1.22	Facilities for long term housing of operational workers?		
1.23	New road, rail or sea traffic during construction or operation?		
1.24	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?		
1.25	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?		
1.26	New or diverted transmission lines or pipelines?		
1.27	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.28	Stream and river crossings?		
1.29	Abstraction or transfers of water form ground or surface waters?		
1.30	Changes in water bodies or the land surface affecting drainage or run-off?		
1.31	Transport of personnel or materials for construction, operation or decommissioning?		
1.32	Long-term dismantling or decommissioning or restoration works?		
1.33	Ongoing activity during decommissioning which could have an impact on the environment?		
1.34	Influx of people to an area in either temporarily or permanently?		
1.35	Introduction of alien species?		
1.36	Loss of native species or genetic diversity?		
1.37	Any other actions?		

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S. No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)		
2.2	Water (expected source & competing users) unit: KLD		
2.3	Minerals (MT)		
2.4	Construction material – stone, aggregates, sand/soil (expected source – MT)		
2.5	Forests and timber (source – MT)		
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		
2.7	Any other natural resources (use appropriate standard units)		

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)		
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)		
3.3	Affect the welfare of people e.g. by changing living conditions?		
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,		
3.5	Any other causes, that would affect local communities, fisherfolk, their livelihood, dwelling units of traditional local communities etc		

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data

4.1	Spoil, overburden or mine wastes		
4.2	Municipal waste (domestic and or commercial wastes)		
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)		
4.4	Other industrial process wastes		
4.5	Surplus product		
4.6	Sewage sludge or other sludge from effluent treatment		
4.7	Construction or demolition wastes		
4.8	Redundant machinery or equipment		
4.9	Contaminated soils or other materials		
4.10	Agricultural wastes		
4.11	Other solid wastes		

#### 5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources		
5.2	Emissions from production processes		
5.3	Emissions from materials handling including storage or transport		
5.4	Emissions from construction activities including plant and equipment		
5.5	Dust or odours from handling of materials including construction materials, sewage and waste		
5.6	Emissions from incineration of waste		
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)		
5.8	Emissions from any other sources		

#### 6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers		
6.2	From industrial or similar processes		
6.3	From construction or demolition		
6.4	From blasting or piling		
6.5	From construction or operational traffic		
6.6	From lighting or cooling systems		

6.7	From any other sources		
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7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)		
7.3	By deposition of pollutants emitted to air into the land or into water		
7.4	From any other sources		
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?		

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances		
8.2	From any other causes		
8.3	Could the project be affected by natural disasters causing environmental damage (e.g., floods, earthquakes, landslides, cloudburst etc)?		

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:  Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)		

	housing development extractive industries supply industries other		
9.2	Lead to after-use of the site, which could have an impact on the environment		
9.3	Set a precedent for later developments		
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects		

### III. Environmental Sensitivity

S. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration		
4	Inland, coastal, marine or underground waters		
5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defence installations		
8	Densely populated or built-up area		
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)		
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)		
11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)		
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)		

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