Proceedings of the 41stmeeting of the Odisha Coastal Zone Management Authority held on 18.05.2022 at 11.00 am through Video Conferencing mode

The 41st meeting of OCZMA was held under the Chairmanship of Additional Chief Secretary, Forest, Environment & Climate Change Department through VC on 18.05.2022 at 11.00 am.

The list of members present is attached as Annexure-A.

A. Confirmation of the minutes of the 40th meeting of OCZMA held on 30.03.2022

The 40th meeting of OCZMA was held under the Chairmanship of Additional Chief Secretary, FE&CC Department through video conferencing mode on 30.3.2022. The minutes of the meeting were sent to all the members vide letter no 25/OCZMA Dt. 06.04.2022, since no response has been received, the minutes was treated as confirmed.

B. Compliance of the decision taken in the last OCZMA Meeting

SI.	Project / Project	Decision taken	Compliance
No.	Proponent		
1.	Beach Road development and Extension including Acharya Harihar Square redevelopment, construction of MLCP at Digabareni Chhak and Construction of on-ground parking at Jatrika and Sipasarubuli in the heritage city of Puri under ABADHA Scheme by Odisha Bridge & construction corporation Ltd. (OBCC), Puri.	Authority discussed the proposal and decided to grant CRZ Clearance to the project as per CRZ Notification, 2019 with the following conditions: 1. The guideline issued by Central Water Commission (CWC) shall be	Clearance order was issued vide letter No. OCZMA-1-2022-29 dt. 06.04.2022.
		referred to while implementing the coastal protection measures. 2. The guideline issued for Blue Flag Beach, Puri shall be followed for safety, water quality and Environmental Management Plan. 3. All the conditions mentioned in the	

- Annexure-III of the CRZ Notification, 2019 shall be followed.
- 4. No permanent structure is allowed in the beach area.
- 5. Minimal intervention in the beach area is suggested.
- 6. Watchtowers should not be installed in the sand dunes area.
- 7. Considering the sensitivity of Puri beach, for carrying out coastal protection measures, a proper modeling study suggested from National Institute like NIOT or NCCR to study the impact of the proposed interventions like the installation of gabions on the northern side of the coast based on the outcome of the study the proposed protection measures like gabion should be designed.
- 8. The recommendations of the shoreline management plan for the Puricoast prepared

		under the ICZM Project and the data generated under coastal process study shall be referred to while designing the erosion control structures. 9. The member of OCZMA, Dr. A. K. Patnaik and Dr. P.K. Mohanty to be consulted during the execution for ensuring the fragile surrounding ecosystem is not disturbed. The CRZ Clearance is subject to final plan approval of the Puri- Konark Development Authority.	
2	Rectification of CRZ Classification on CZMP Map No. OD 90 (Sheet No. F 45-P6/SW) under CRZ Notification, covering areas of Subarnarekha Port.	The Authority deliberated on the proposal and the observations made by the team in their report based on the field visit to the area and decided to recommend the proposal to National Centre for Sustainable Coastal Management (NCSCM) for further verification and ground-truthing as per the Annexure-IV Para (7) "revision of Coastal Zone Management Plan" of CRZ Notification, 2019.	The proposal was recommended to NCSCM vide Letter No. 27 Dt. 07.04.2022. NCSCM Vide letter no. NCSCM/NCZMA/22-0143/EDC Dt. 11.05.2022 has intimated that the site inspection will be taken up shortly.

A. Fresh Proposal

 Construction of a self-dwelling unit over plot no. 256, Khata No. 60 by Mrs. Purnima Pattnaik, Puri.

The Director Environment-cum Member Secretary, OCZMA made a presentation on the proposal before the Authority.

The Authority noted that the project is a self-dwelling unit proposed to be constructed over plot no. 256, Khata No-60. The kissam of the plot is gharabari. The total area of the plot is 2023 sq.mtr and the proposed built-up area is 715 sq.mt. The height of the building is 20m. The construction includes 7650 sq.ft liveable area. The power requirement will be sourced from the OPTCL supply. The land is under possession of the applicant as per the land documents submitted.

i. The CZMP approved CRZ Map no. 25 in 1:25000 scales indicate that the plot under reference falls under CRZ-II area of Puri and is about 20 m away from the HTL Line and located on the landward side of the existing road. The site is not falling in the hazard line as map prepared by NCSCM.

No Eco-sensitive area is present near the site.

ii. The proposed project is a permissible activity as per following clauses of CRZ Notification, 2019:

Para 5.2 (ii) "Construction of buildings for residential purposes, schools, hospitals, institutions, offices, public places, etc. shall be permitted only on the landward side of the existing road, or on the landward side of existing authorized fixed structures".

Para Para 5.2 CRZ-II (iii) "Buildings permitted as in (ii) above, shall be subject to the local town and country planning regulations as applicable from time to time, and the norms for the Floor Space Index (FSI) or Floor Area Ratio (FAR) prevailing as on the date of this Notification,"

Authority discussed the proposal and decided to grant CRZ Clearance to the project as per CRZ Notification, 2019with the following conditions:

- The solid waste and sewage should not be discharged on the coast or coastal water.
- II. Hazard line as demarcated in the CZMP map should be taken in to account for construction and approval of the proposed project.
- III. Local planning Authority shall imposeproper hazard precautionary measures while approving the building plan.

The CRZ Clearance is subject to the final approval of Puri-Konark Development Authority.

 Construction of a Residential Apartment over plot no. 564/2083, khata no. 379/641 in mouza Sipasarubuli, Puri sadar, Tahasil-Puri by Jitendra Narayan Panda.

The Director Environment-cum Member Secretary, OCZMA made a presentation on the proposal before the Authority.

The Authority noted that the proposed project is for construction of a residential Apartmentover plot no. 564/2083, Sabik plot no. 270(p), khata no. 379/641 in mouza Sipasarubuli, Puri sadar. As per the Khatiyan the kisam of the plot is Gharabadi. The total plot area over which construction is proposed is 930.61 sq.mt and the Project applicant is the owner of the land. The development involves construction of S+ 4 storied residential apartments. The total built up area is 3008.1 sq.m with a parking area of 612.21 sq.m. The FAR of the building is 2.53. The height of the building is 16.64 meter. The water requirement of 18 KLD will be met from the ground water supply and Permission from the groundwater authority has been accorded. Electricity demand of 120 KW will be sourced from the TP Central Odisha Distribution Limited (TPCOLD). For the treatment of sewerage one STP of 5m x 2.8m x 2.1m will be provided and the solid waste generated will be handed over to the solid waste collection agency. The project location falls under the area of local Town Planning authority e PuriKonark Development Authority. Project cost: 4.80 Crores.

- i. The GPS Co-ordinates of the project are 19° 47' 14.84"N, 85° 47 11.52"E, 19° 47' 14.43"N, 85° 47 11.93"E, 19° 47' 15.30"N, 85° 47 13.64"E & 19° 47' 14.84"N, 85° 47 13.94"E. The project proponent submitted the CRZ Map in 1:4000 scale prepared by IRS Anna University superimposing the project area in the map and demarcating other CRZ Zones which indicates that the project site under reference falls in CRZ-II area of Puri and is about 412 mtr. away from the HTL line. The site is located on the landward side of the existing road and many Authorised structures.
- ii. The proposed project is a permissible activity as per following clauses of CRZ Notification, 2019:

Para 5.2 (ii) Construction of buildings for residential purposes, schools, hospitals, institutions, offices, public places, etc. shall be permitted only on the landward side of the existing road, or on the landward side of existing authorized fixed structures. Para 5.2 CRZ-II (iii) Buildings permitted as in (ii) above, shall be subject to the local town and country planning regulations as applicable from time to time, and the norms for the Floor Space Index (FSI) or Floor Area Ratio (FAR) prevailing as on the date of this Notification,".

The project does not attract EIA Notification, 2006.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under CRZ Notification, 2019 with the following conditions:

- a) 30 % of the plot area should be used for greenery by way of plantation.
- b) 10% of the energy consumption should be through renewable energy sources.
- c) The solid waste and sewage should not be discharged on the coast or coastal water.

The CRZ Clearance is subject to the final approval of Puri-Konark Development Authority.

It was also decided that in all future proposals, the exact kisam of the project land will be mentioned for better appreciation.

 Construction of a residential Apartment over plot no. 1230, sabik plot no. 358, khata no. 390/10 in mouza-Sipasarubuli, Puri sadar, Tahasil-Puri by Mrs. Krishana Nayak.

The Director Environment-cum Member Secretary, OCZMA made a presentation on the proposal before the Authority.

i. The Authority noted that the project is for construction of a residential Apartment over plot no. 1230, sabik plot no. 358, khata no. 390/10 in mouza Sipasarubuli, Puri sadar, Tahasil-Puri. As per the Khatiyan the kissam of the plot is Gharabadi. The total plot area is 4046.86 sq.mt and under the possession of the Project applicant. The construction involves an S+5 storied residential apartment. The total built up area is 10599.01 sq.m with a parking area of 2687.5 sq.m. The FAR of the building is 1.998. The height of the building is 21.08 meter including stilt floor and stair. Project cost is 17.11 Crores.

The water requirement of 40KLD will be met from groundwater supply and Permission from the groundwater authority has been accorded in favour of the applicant. Electricity demand of 500 KW will be sourced from the TP Central Odisha Distribution Limited (TPCOLD). For the treatment of sewerage one STP of 10.35m x 5.1m x 2.8 m will be provided and as estimated about 500 kg of solid waste will be generated which will be handed over to the municipal solid waste collection agency.

- ii. The GPS Co-ordinates of the project are 19° 47' 21.28"N & 85° 48' 8.50"E, 19° 47' 23.75"N & 85° 48' 8.10"E, 19° 47' 24.25"N, 85° 48 10.06"E & 19° 47' 21.95"N, 85° 48' 10.38"E. The project proponent submitted the CZMP approved CRZ Map in 1:25000 scale and CRZ Map in 1:4000 scale prepared by IRS Anna University superimposing the project area in the map and demarcating other CRZ Zones which indicates that the project site is falling in CRZ-II area of Puri and is about 144 mtr landward sides from the HTL line. The project is located on the landward site of the existing road. No Eco-sensitive area is found near the project site.
- iii. The proposed project is a permissible activity as per following clauses of CRZ Notification, 2019:

Para 5.2 (ii) Construction of buildings for residential purposes, schools, hospitals, institutions, offices, public places, etc. shall be permitted only on the landward side of the existing road, or on the landward side of existing authorized fixed structures. Para Para 5.2 CRZ-II (iii) Buildings permitted as in (ii) above, shall be subject to the local town and country planning regulations as applicable from time to time, and the norms for the Floor Space Index (FSI) or Floor Area Ratio (FAR) prevailing as on the date of this Notification,".

The project does not attract the EIA Notification, 2006,

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under CRZ Notification, 2019 with the following conditions:

- a) 30 % of the plot area should be used for greenery by way of plantation.
- b) 10% of the energy consumption should be through renewable energy sources.
- c) The solid waste and sewage should not be discharged on the coast or coastal water.

The CRZ Clearance is subject to the final approval of Puri-Konark Development Authority.

4. Setting up of temporary beach shacks/tent house/tree huts at 5 beaches across Odisha by Department of Tourism, Govt. of Odisha.

The Director Environment-cum Member Secretary, OCZMA made a presentation on the proposal before the Authority.

The Authority noted that the proposed project is for setting up of temporary beach shacks/tent houses/tree huts at 5 beaches across Odisha to provide temporary tourism facilities to the tourist visiting the beach proposed by Department of Tourism, Govt. of Odisha.

Detail of the beach shacks and Location in CRZ Area

Proposed Beach area				No of shakes/tent house/tree huts	Location in CRZ Area
Udayapur-To District	alsari Bec	ich o	f Balasore	3	CRZ-IA (Sand dunes)
Patisonpur District	Beach	of	Ganjam	2	CRZ-IA (Sand dunes)
Paradip Jagarsinghp	Sea our Distric	Bea t	ch of	3	CRZ-II
Chandipur District	Beach	of	Balasore	2	CRZ-II
Gopalpur Beach of Ganjam District			m District	5	CRZ-II

The shacks/tent house/tree huts are completely temporary in nature built with eco-friendly materials like bamboo/wood/thatched palm leave roofing wood roof, fabricated structure with no closed walls. No RCC structure is proposed in the project. The total area for each shack is estimated to be 484 sq.m and the dimension of each shack is $15 \, \mathrm{m} \times 12 \, \mathrm{m} \times 5.5 \, \mathrm{m}$ i.e $180 \, \mathrm{m} 2$. The power requirement and the water requirement will be met from the nearest Panthanivas Building of OTDC. There will be provisions of bio-toilets for the tourists and solid waste generated will be collected separately and handed over to the Municipal waste collection agencies. The total project cost is $4.43 \, \mathrm{Cr.}$

i. The project site superimposed CRZ map in 1: 25000 scale shows that the project area of Paradip, Chandipur&Gopalpur falls in CRZ-II area and Udayapur-Talsari&Patisonpur site falls in CRZ-IA sand dunes area.

ii. Beach shacks are the permissible activities in CRZ-II & CRZ-IA area as per the provisions of CRZ Notification, 2019 under Clause under

Para 5.2 CRZ-II (vi) "temporary tourism activities shall be permissible in the beaches which shall only include **beach shacks**, toilets or washrooms, change rooms, shower panels, walkways constructed using interlocking paved blocks, drinking water facilities, seating arrangement seating arrangement etc."

Para 5.1.1-CRZ-IA (i) "eco-tourism activities such as mangrove walks **tree hits**, natural trails, etc in the identified stretches subject to such eco-tourism plan featuring in the approved CZMP as per this notification, framed with due consultative process, public hearing etc and further subject to environmental safeguards and precaution related to the ecologically sensitive areas as enlisted in the CZMP.

CRZ-IA- Annexure-I sub-Para 1.9 (i) Sand Dunes (b) "No developmental activities shall be permissible except for providing eco-friendly tourism activities on stilt such as walkways, tentsand like.

The Authority deliberated on the proposal and decided to grant clearance for setting up of temporary beach shacks/tents/tree huts at Paradip Sea Beach of Jagarsinghpur District, Chandipur Beach of Balasore District and Gopalpur Beach of Ganjam District as per the provisions of CRZ Notification, 2019 with the condition that the light pollution should be minimum at night during the breeding season of Olive Ridley sea turtle.

Regarding Udayapur-Talsari Beach of Balasore District and Patisonpur Beach of Ganjam District, Authority noted that as the two project sites are located in CRZ-IA Sand dunes area it requires a site inspection by the expert members of OCZMA to decide on the project and accordingly it was deferred to the next meeting.

 Establishment of a new Lighthouse at Chandinipal, Dhamra of Bhadrak district by the ministry of port shipping and waterways directorate of Lighthouse and Lightships.

The Director Environment-cum Member Secretary, OCZMA made a brief presentation on the proposal before the Authority.

The Authority noted that the proposal is for Construction of Lighthouse Tower and allied buildings at Chandinipal, Dhamra of Bhadrak district by Directorate of Lighthouse & Lightships, Ministry of Ports, Shipping and Waterways.

i. The project was earlier accorded CRZ Clearance from MoEF&CC as per the CRZ Notification 2011 vide letter No. 11-119/2008-IA-III on 26th October 2010 based on the recommendation of OCZMA. As per the condition mentioned in the clearance order the CRZ Clearance was valid up to 2019. The project could not start within the clearance validity period due to delay in diversion of forest land for the development. Now the project proponent accorded forest clearance from MoEF&CC, Eastern Regional Office on 24th July 2019 and Divisional Forest Officer, Bhadrak Wildlife Division, Bhadrak vide letter no. 96/3F-52/2013 Dt. 30.07.2021 hand over the land area of 0.332 Ha for the establishment of Lighthouse & other associated facilities are proposed.

ii. The development proposed over plot no.177 and Khata No.64. and construction involves a lighthouse tower, staff buildings, internal road, pathways, water supply and sanitary arrangements and a compound wall. The construction area of lighthouse tower includes 113 sq.mt. (12.0 m circular) with a height of 45 meter.

iii. Geographical location of lighthouse site is 20° 47′ 27.117″ & 86° 56′ 27.517″E and GPS Co-ordinates of the entire project area are 20° 47′ 27.919″ & 86° 56′ 25.339″E, 20° 47′ 27.709″ & 86° 56′ 28.097″E, 20° 47′ 26.412″ & 86° 56′ 27.985″E & 20° 47′ 26.622″ & 86° 56′ 25.227″ E.Institute of Remote Sensing Anna University Chennai has prepared the CZR Map in 1:4000 SCALE superimposing the project location indicates that the project area falls in CRZ-IA area i.e Reserve Forest area& CRZ-IB. Now forest clearance has been accorded in favour of the proposed project.

iv. The proposed project is an amendment to the already issued CRZ clearance and the activities are permissible activity as per the provisions of CRZ Notification, 2019 under Clause

Para 5.1.2-CRZ-IB(iii) "activities related to waterfront or directly needing foreshore facilities such as ports, harbours, jetties, quays, waver, erosion control measures, breakwater pipeline, lighthouse, navigational safety facilities, coastal police station, Indian coast guard station, and the like.

The project accorded NBWL Clearance vide letter NO. 6152/1WL-NBWL-04/2018 Dt.5thJuly 2018 and NOC from State Pollution Control Board on 11.8.2008.

The project is located in CRZ-I area, thus requires recommendation to MoEF&CC as per the provisions of CRZ Notification, 2019 under para 8 (ii) (b) "Coastal Zone Management Authority shall forward its recommendation to the ministry of environment and forest and climate change for the project or activities not covered in the EIA Notification, 2006 but attracting this notification, and located in CRZ-I or CRZ-IV area".

OCZMA discussed the proposal and decided to recommend the proposal to MoEF&CC for grant of CRZ clearance under CRZ Notification, 2019 with the condition that Light pollution should be minimum during the breeding season of Olive Ridley sea turtle.

6. Establishment of Fish landing Center at Kalupadaghat in Khurdha District Odishaby the Executive Engineer, Fisheries Engineering Division, Bhubaneswar

The Executive Engineer, Fisheries Engineering Division, Bhubaneswar made a brief presentation of the proposal "Establishment of Fish landing Center at Kalupadaghat in Khurdha District Odisha" before the Authority.

The Authority noted that at present an existing earthen jetty is present at Kalupadaghat which was constructed before 1990s by the state Govt. and now it was in dilapidated condition due to overuse and lack of maintenance. So the

fishermen are using the coast for landing and berthing of their fish /craft in the open coast in an unhygienic environment. To overcome the above issues the Fisheries and ARD Dept. has proposed for establishment of fish landing center at Kalupadaghat in Khurdha District Odisha and up-gradation of the existing jetties for hygienic handling of fish catch by the local fisherman, stockholders and vendors. The project has been sanctioned by Fisheries Infrastructure Development Fund (FIDF) of Govt. of India. The total project cost is Rs. 756.13 Lakhs.

i. The developmental facilities include up-gradation of the existing earthen jetties, landing quays of 96.5m and berthing quays of 190.5+ 77.8m, RCC framed Auction hall of (24x 10) m2, rain shelter, net mending shed, community toilets, septic tank, STP, an overhead tank of 20,000 Ltr capacity and compound wall etc. The quays are designed for landing & berthing of the fishing vessels on both the sides in low water in summer (+0.60m) and high water in rainy season (+2.0m) besides these, they also give shelter to the fishing vessels at the time of cyclonic storm. The capacity of the fish landing center is 7266 MT/Annum.

The total area acquired for the proposed project is 4.5 Ac. The power requirement of 5 KW will be met from the Tata Power Central Odisha Distribution Limited and the water requirement will be met from the existing bore well located beyond the CRZ area.

For the treatment of wastewater from the storage yard, an ETP of 5 KLD capacity is proposed.

- iii. The GPS Coordinates of the project is 19° 52′ 26.65″N & 85° 24′ 27.87″E. The CRZ Map in 1:4000 scale prepared by the Institute of Remote Sensing, Anna University Chennai superimposing the project location indicates that the Jetty & quays are located in CRZ –IVB area i.e. Chilika lagoon and all the all other activities proposed fall under CRZ-III (NDZ) area.
- iv. The proposed project activities are permissible as per the provisions of CRZ Notification, 2019 under Clause
 - 5.3-CRZ-III-NDZ (ii) & (e) "facilities required for local fishing communities such as fish drying yard, auction hall, net mending yard, boat building yard, ice plant, ice crushing units, fish curing units and like.

5.4-CRZ-IV (iii) "activities related to waterfront or directly needing foreshore facilities such as ports and harbours, **jetties**, quays, wharves, erosion control measures, breakwaters, pipelines, navigational safety facilities and the like.

The project required Clearance from OCZMA as per the decision taken by NCZMA in its 42nd meeting held on 23rd March, 2021.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under the provisions of CRZ Notification, 2019 with following conditions:

- a) The solid wastes and sewage should not be discharged to the coast or coastal water of Chilika.
- b) Regular hydrocarbon pollution monitoring near the jetty area should be done by Fishery department to minimise the pollution.
- 7. Establishment of Fish landing Center at Sorana in Khurdha District Odisha by the Executive Engineer, Fisheries Engineering Division, Bhubaneswar.

The Executive Engineer, Fisheries Engineering Division, Bhubaneswar made a brief presentation of the proposal before the Authority.

- i. The Authority noted that at present an existing earthen jetty is present at Sorana which was constructed before 1990s by the state Govt. and now it was in dilapidated condition. So the fishermen are using the coast for landing and berthing their fish catch/craft on the open coast in an unhygienic environment. To overcome the above issues the fisheries and ARD Dept. have proposed for establishment of fish landing centre at Sorana in Khurdha District Odisha and up-gradation of the existing jetties for hygienic handling of fish catch by the local fisherman, stockholders and vendors. The project has been sanctioned by FIDE (CSS) of Govt. of India. The project cost is Rs. 929.82 Lakhs.
- ii. The total area acquired for the proposed project is 5.0 Ac. The developmental facilities include up-gradation of the existing earthen jetties jetty of 126m, landing quays of 145m and berthing quays of 256+ 130m, RCC framed Auction hall of (24x 10) m2, rain shelter, net mending shed, community toilets, septic tank, STP, overhead tank and compound wall etc. The quays are designed for landing & berthing of the fishing vessels on both the sides in low water in summer (+0.60m) and high water in rainy season (+2.0m) besides these it is also give shelter to the fishing vessels at the time of cyclonic storm. The capacity of the fish landing centre is 4752 T/Annum.
- iii. The power requirement of 5 KW will be met from the Tata Power Central Odisha Distribution Limited and the water requirement will be met from the existing bore well located beyond the CRZ area. For the treatment of wastewater from the storage yard, an STP of 4 KLD capacity is proposed.
- iv. The GPS Coordinates of the project is 19° 50' 57.58"N & 85° 22' 50.55"E. The CRZ Map in 1:4000 scale prepared by the Institute of Remote Sensing, Anna University Chennai superimposing the project location indicates that the Jetty & quays are located in CRZ –IVB area i.eChilika lagoon and all the other activities proposed fall under CRZ-III (NDZ) area.
- v. The proposed project activities are permissible as per the provisions of CRZ Notification, 2019 under Clause
 - 5.3-CRZ-III-NDZ (ii) & (e) "facilities required for local fishing communities such as fish drying yard, auction hall, net mending yard, boat building yard, ice plant, ice crushing units, fish curing units and like.

5.4-CRZ-IV (iii) "activities related to the waterfront or directly needing foreshore facilities such as ports and harbours, **jetties**, quays, wharves, erosion control measures, breakwaters, pipelines, navigational safety facilities and the like.

The project required Clearance from OCZMA as per the decision taken by NCZMA in its 42nd meeting held on 23rd March, 2021.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under the provisions of CRZ Notification, 2019 with following conditions:

- a) The solid wastes and sewage should not be discharged to the coast or coastal water of Chilika and will be enforced strictly by the SPCB..
- b) Regular hydrocarbon pollution monitoring near the jetty area should be done by Fishery department to minimise the pollution.

8. Establishment of Fish landing Center at Kasia in Bhadrak District Odisha by the Executive Engineer, Fisheries Engineering Division, Bhubaneswar.

The Executive Engineer, Fisheries Engineering Division, Bhubaneswar made a brief presentation of the proposal before the Authority.

- i. The Authority noted that at present an existing earthen jetty is present at Kasia at Bhadrak district which was constructed before 1990s by the state Govt. and now it was in dilapidated condition. So the fishermen are using the coast for landing and berthing of their fish catch/craft in the open coast in an unhygienic environment. To overcome the above issues the fisheries and ARD Dept. have proposed for establishment of fish landing centre at Kasia in Bhadrak District Odisha and up-gradation of the existing jetties for hygienic handling of fish catch by the local fisherman, stockholders and vendors. The project has been sanctioned by FIDE (CSS) of Govt. of India. The capacity of the fish landing centre is 967 T/Annum. The project cost is Rs. 785.63 Lakhs.
- ii. Presently a fishing base is located on the right bank of Chudamani Vijaypatna coast canal which was overcrowded by the non-motorized crafts for regular fishing. The developmental facilities include the construction of landing quays and a RCC framed Auction hall of (123m x 6m) with properly ventilated sidewalls, a rain shelter, net mending shed of 24m x 10m, 2 nos of community toilets of 14m x 10m size, septic tank, STP, overhead tank and compound wall etc.
- iii. The total area acquired for the proposed project site is 9906.69 sqm and the power requirement of 5 KW will be met from the Tata Power Central Odisha Distribution Limited and the water requirement will be met from the existing bore well located beyond the CRZ area. For the treatment of wastewater from the storage yard, an STP of 5 KLD capacity is proposed.
- iv. The GPS Coordinates of the project is 21° 04′ 43″N & 86° 50′ 18″E. The CRZ Map in 1:4000 scale prepared by the Institute of Remote Sensing, Anna

University Chennai superimposing the project location indicates that auction hall and other associated activities fall under CRZ-III area.

v. The proposed project activities are permissible as per the provisions of CRZ Notification, 2019 under Clause

5.3-CRZ-III- (ii) & (e) "facilities required for local fishing communities such as fish drying yard, auction hall, net mending yard, boat building yard, ice plant, ice crushing units, fish curing units and like.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under the provisions of CRZ Notification, 2019 with following condition

- a) The solid wastes and sewage should not be discharged to the coast or coastal water of Chilika and will be enforced strictly by the SPCB.
- b) Regular hydrocarbon pollution monitoring near the jetty area should be done by Fishery department to minimise the pollution.

Operation of Water sports activities at Puri Beach by M/s Chetraj Marina Thrill Pvt. Ltd.

The Director Environment-cum Member Secretary, OCZMA made a brief presentation on the proposal before the Authority.

i. The Authority noted that the project is for operation of water sports activities and adventure tourism in Puri beach. The site is selected from the entrance of the sea beach near Balananda Tirthasharm to Puri Hotel. The total length is 130 m GPS Co-ordinates is 19° 47′ 42.07″N 85° 49′ 30.21″E to 19° 47′ 42.84″N 85° 49′ 32.74″E. The cost of the proposed project is Rs. 2.4 Cr.

The Proposed project will provide following items for beach tourism.

- 8 seater double tube banana boat -2 nos
- ATV Bike-5 nos
- Wave runner-4 nos.
- Parasailing boat-1
- Speed boat-2 nos
- ii. Necessary safety measures like life Jackets(adult/kids), Ring Buoy, Nylon roof, Rescue tube, Fire extinguishers, Speed boat for rescue, Trained lifeguards, Oxygen cylinders, crush Helmets will be provided to the tourists at the time of the ride. The activities will be operated under the surveillance of the experts & guides. First-aid kits and fire extinguisher and UHF/ GPS for communication will be provided.
- iii. The project location superimposing in the CZMP approved CRZ map in 1:25,000 scale indicated that the operation of the water sports area fall in

CRZ-I (B)CRZ-IV (A) Seawater body. The proposed activity will also operate in CRZ-I (B) (Intertidal area) for boarding and landing purpose. The proposed project is a temporary tourism activity where no temporary or RCC construction is proposed.

iv. The proposed activity is permissible as per the provisions of CRZ Notification, 2019 under Para 5.1.2 CRZ-IB (ii) **Activities related to the waterfront** or directly needing foreshore facilities such as ports and harbours, jetties, quays, wharves, erosion control measures, breakwaters, pipelines, lighthouses, navigational safety facilities, coastal police stations, Indian coast guard stations and the like.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under CRZ Notification, 2019 subject to the following conditions:

- 1. Construction of any permanent structures is strictly prohibited.
- 2. There should not be any conflict of interest between local fisher communities and the proponent.
- Operation of proposed water sports activities shall not be allowed along the coastal stretches of main berthing area of the tourist. The district administration is to decide such area of operation indicating the latitude and longitude of it.
- 4. Operation of water sport activities is allowed only in day time and as decided by the District administration.
- 5. No such activities shall be allowed in sanctuary area.
- 6. Adequate safety measures shall be taken at the time of boarding and de-boarding.
- 7. Discharge of fuel to sea is strictly prohibited.
- 8. Littering of polythene carry bags and such other materials banned by the state Government in to the sea is will be strictly enforced by the proponent.
- Project specific Hazard management plans need to be prepared in consultation with the reputed agencies working in the specific field and approved by the District authority.
- 10. The District Administration shall develop a common safety plan for the operation of coastal water sports activity.
- 10. Laying of pipeline over the existing pipe bridge over Santra Creek for proposed Ethylene Recovery Unit (ERU)/Mono Ethylene Glycol Unit/and BS-VI facilities with proposed aviation gasoline of 6 TMPTA with the existing refinery complex.

The Director Environment-cum Member Secretary, OCZMA made a brief presentation on the proposal based on the documents submitted by the project proponent before the Authority.

 Authority noted that IOCL Paradip Refinery obtained environmental clearance & CRZ Clearance from MoEF& CC in 2018 for laying of 9 nos. of pipeline over Santra creek for setting up of Mono Ethylene Glycol (MEG) & BS-VI motor spirit/high-Speed Diesel project at Paradip refinery on the recommendation of OCZMA.

Now IOCL planned to produce Aviation gasoline at Paradip Refinery to cater to the demand in Indian market through Atmanirvar Bharat Initiative of Govt. of India. Aviation gasoline is a specialized product used in piston engine aircraft and has been imported so far. Aviation gasoline project is the extension of the Mono Ethylene Glycol (MEG) unit within the existing premises. Under this project, a 2-inch dia Hydrocarbon pipeline will be laid over Santra creek via the existing pipe bridge using the space available for the BS-VI project as out of the 9 pipelines only 2 nos of pipelines are installed. IOCL also intimated that after laying of one no of AV pipeline total no. of pipelines crossing the Santra Creek will not exceed the approved no of pipelines under the BS-VI project. The project cost is 0.26 Cr.

- ii. As per the approved CZMP map and 1:4000 scale CRZ map prepared by the Institute of remote sensing Anna University Chennai, The laying of the AV-Gasoline pipeline falls in CRZ-IA (Mangroves), CRZ-III, & CRZ-IVB (Santra creek) area. Storage is not proposed in any CRZ area. The distance from the water level to the pipeline is appx. 6.77 meters during the highest flood period. The total length of the pipeline crossing the bridge is appx. 126m.
- iii. The proposed activity is permissible as per the provisions of CRZ Notification, 2019 under Para

Para 5.1.1 (ii)-CRZ-IA " in the mangrove buffer only such facilities shall be permitted **like laying of pipeline**, transmission lines, conveyance system or mechanisms, construction of a road on stilts, etc that are required for public utilities".

Para 5.1.2(xv)-CRZ-IB "pipeline, transmission lines, conveyance system"

Para 5.3(i)-CRZ-III "Activities as permitted in CRZ-IB shall also be permitted in CRZ-III in so far as applicable"

Para 5.4(xiii) -CRZ-IV "pipeline, transmission lines, conveyance system"

iv. The project required EC amendment from MoEF&CC. The project proponent has applied to MoEF&CC for the amendment to the existing CRZ Clearance obtained in favour of the project Mono Ethylene Glycol (MEG) & BS-VI motor spirit/high-Speed Diesel project vide Letter F. No.-J-11011/121/2017-IA-II (I) which was appraised by the Expert Appraisal Committee in its 50th meeting held on 21.02.2022 and recommended for EC amendment for the proposed aviation gasoline of 6 TMPTA with the existing refinery complex.

OCZMA discussed the proposal and decided torecommend the proposal to MoEF&CC for grant of CRZ clearance to the aforesaid project under CRZ Notification, 2019.

11. Construction of Floating Jetty for the operation of House Boat at Chilika by Vikash Eco Resort Pvt. Ltd, Bhubaneswar.

The Director Environment-cum Member Secretary, OCZMA made a brief presentation on the proposal based on the documents submitted by the project proponent before the Authority.

- Authority noted that the proposal is for setting up of a floating jetty in Chilika for operation of House Boat to enhance tourism activities in chilika. The area selected for the project is near Yatri Nivas, Satapada. Total project coast is Rs. 3.5 lakhs.
- ii. The length of the floating jetty is 100' with a width of 8'. The jetty will be tied with a deck of size 12' x 20'. The size of the house boat is proposed to be 94 feet long and 22ft. width and will be made up of steel body. There will be 3 bed rooms with attached toilet, one suit room, lounge for 50 person capacity and kitchen. A maintenance yard for the boat is also proposed in this project. The water depth required for the project is minimum 900mm.

The boat shall be designed with Naval architect as per Kerala Inland Vessels Act 2010/2015 considering the safety features to minimize the risk. Boat will be in low height and wide to increase the stability. The other structures include one STP Pump house, STP, One DG room, transformer and one temporary rest room.

- iii. The waste water from the house boat will be pumped to the STP of 5 KLD for treatment and the treated water will be reused in the plantation area. The solid waste mostly the domestic waste both Biodegradable and Non degradable will be collected separately and disposed in the Municipal bins.
- iv. The project accorded single window clearance from Dept. of Tourism vide Letter No. 782/TSM-29/2020 Dt. 25.01.2021 and Permission from Chilika Development Authority vide letter no. 1714/CDA Dt. 09.11.2021 on route clearance for operation of House Boat.
- v. As per CZR Map in 1:25000 the proposed project site falls in CRZ-IVB, CRZ-III. The floating jetty falls on CRZ-IVB area. The STP Pump house, DG room and transformer fall in CRZ-III (NDZ) area. The sitting hall & STP are located outside the CRZ area. Geographical location of light house site is 20° 47′ 27.117″ & 86° 56′ 27.517″E.
- vi. The proposed activities are permissible under CRZ Notification, 2019 as per Para 5.4 CRZ-IV (ii) (a) "foreshore facilities like ports, harbour, jetties, wharves, quays, slipways, bridge, sea link and hover ports for coast guard etc.

Para 5.3-CRZ-III (ii) (c) "Construction of dispensaries, schools public rain shelter, community toilets, bridges, roads, provisions 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 Coastal Zone Management Authority"

Para 5.3-CRZ-III (ii) (d) "construction of Units or auxiliary there to for domestic sewage, treatment and disposal with the prior approval of the concerned Pollution Control Board or Committee".

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under the provisions of CRZ Notification, 2019 with the following conditions:

- Solid waste or sewage should not be discharge to the Chilika Lake in any manner.
- 2. Regular monitoring of oil pollution should be done by the project proponent.
- 12. Setting up of a Floating Jetty for the operation of water-sports activities and development of Gopalpur Children's Park providing River Crossing Zip Line, Giant Swing, Air Gun Game, Cricket net, Restaurant, Toilet Facilities and other activates inside Gopalpur Children's Prak, Gopalpur, Ganjam.

The Director Environment-cum Member Secretary, OCZMA made a brief presentation on the proposal based on the documents submitted by the project proponent before the Authority.

- i. Authority noted that the proposal is for setting up of a floating jetty in Haripur Creek for operation of water sports activities and development of existing Biju Adventure Park formerly known as Gopalpur Children Park for which Gopalur NAC has been issued the work order on lease basis for 10 years for adventure cum water sports Park on build-own-operate (BOO) Model. The tourism activities include two Zip line Tower on both sides of the Creek for operation of Ropeway, Two Giant Swing, One air gun game zone, ATV, Bungee trampoline ,UTV, bull ride etc. The base of the towers will be RCC structure and the towers will be made up of Steel structures. The length of the floating jetty is 50' with a width of 8'. The jetty will be tied with a deck of size 12' x 20'. The other structures include construction of one restaurant of size 48 ft x 46 ft, one open food court of size 95 ft x 15ft and two toilets each for ladies and gents within the park premises.
- ii. The water requirement of 7 KLD will be met from municipality supply and electricity requirement of 15 KW and will be sourced from Tata Power Supply. Waste water generated will be treated through septic tank. The solid waste generated will be collected separately and disposed in the Municipal agency.
- iii. The GPS Co-ordinates of the activities are (i) Floating Jetty-19° 15' 39.11" N 84° 54' 41.03"E (ii) Zip line Tower 1-19° 15' 38.64" N 84° 54' 41.28"E (iii) Zip line Tower 1-19° 15' 45.22" N 84° 54' 36.68"E (iv) Giant Swing Tower-1-19° 15' 38.12" N 84° 54' 41.24"E (v) Giant Swing Tower-2-19° 15' 38.11" N 84° 54' 40.81"E (vi) Air gun-19° 15' 38.29" N 84° 54' 40.53"E (vii) Restaurant & food court- 19° 15' 36.54" N 84° 54' 38.81"E.

The CRZ Map in 1:25000 scale and 1:4000 scale shows that the floating jetty and water sports activities falls in CRZ-IVB area and all other activities proposed in the project falls in CRZ-II area of Gopalpur and is located about 100 m away from the HTL from sea side and 15 m from HTL of the Haripur Creek. All the activities are located on the landward side of the Existing Road.

iv. The proposed activities are permissible under CRZ Notification, 2019 as per: Para 5.4 CRZ-IV (ii) (a) "foreshore facilities like ports, harbour, jetties, wharves, quays, slipways, bridge, sea link and hover ports for coast guard etc.

Para 5.2-CRZ-III (v) "development of vacant plots in designated areas for construction of beach resorts or hotels or tourism development projects subject to the conditions or guidelines as Annexure-III of the CRZ Notifiaction, 2019.

OCZMA discussed the proposal and decided to grant CRZ clearance to the aforesaid project under the provisions of CRZ Notification, 2019.

- 1. There should not be any conflict of interest between local fisher communities and proponent.
- 2. Operation of proposed water sports activities shall not be allowed along the coastal stretches of main berthing area of the tourist.
- 3. Operation of water sport activities is allowed only in day time and as decided by the District administration.
- 4. No such activities shall be allowed in sanctuary area.
- 5. Adequate safety measures shall be taken at the time of boarding and de-boarding.
- 6. Discharge of fuel to sea is strictly prohibited.
- 7. Littering of polythene carry bags and such other materials banned by the state Government in to the sea is punishable under the relevant Notification of the Government from Time to time.
- 8. Project specific Hazard management plans need to be prepared in consultation with the reputed agencies working in the specific field.
- 9. The District Administration shall develop a common safety plan for the operation of coastal water sports activity.

The CRZ Clearance is subject to the final approval of Berhampur Development Authority.

13. Establishment of Fishing Harbour at Chandipur (Balaramgadi) in Balasore District, Odisha by Fishery Engineering Division, Bhubaneswar.

The Executive Engineer, Fisheries Engineering Division, Bhubaneswar made a brief presentation of the proposal before the Authority.

I. The Authority noted that the proposal is for establishment of Fishing Harbour at Chandipur (Balaramgadi) in the eastern bank of Budhabalanga River in

- Balasore District to provide safe landing and berthing facilities to the fisherman of Chandipur and surrounding villages.
- II. The proposal accorded EC & CRZ Clearance from MoEF& CC Vide letter no. 10-12/2008.1.A-III Dt. 02.06.2009, but could not be implemented and the validity of the EC & CRZ clearance was expired in 2016. Now as per the condition of EC & CRZ clearance the applicant applied for a fresh CRZ clearance under CRZ Amendment as per CRZ Notification, 2019.
- III. The proposed project envisages accommodating 550 nos. of mechanised fishing vessels, 100 nos. of motorised craft, 150 nos of 12.0 m trawlers & 300 nos of 14.0 m trawlers. The fish handling capacity of the harbour is about 23.400 MT/Annum. Total project cost is Rs. 49.94 Cr
- IV. The total land area acquired for the Harbour development is 55.01 Ac but for the proposed development only 17.11 Ac. will be used. The components of the fishing harbours are RCC Diaphragm wall including returning wall of 340m, RC Ramp, internal asphalt road, fish landing centre & auction hall, two nos. of net mending sheds of total plinth area of 413.90 sq.m, fishermen gear shed of plinth area of 161.30 m², rest shed for fisherman, one restaurant of 235.20 sq.m plinth area, Radio communication centre, electrical substation, STP, ETP, drainage, sewerage, boat parking yard, fishery administrative office of 181.64 sq.m. The water side facilities includes 140 metre landing quays, 44 m outfitting quays, 30m repair quays and 136 metre Idle berthing quays. For providing the land based facilities an area of about 69,250 sq.m is to be levelled to +4.5m behind the wharf from the average ground level of +3.30m. The reclamation will be under taken by selected earth brought from outside as well as from dredged material from dredging of berthing area and approach channel. The revetment is proposed all around the reclamation area with 50m thick stone pitching in two layers to protect the area from Flood.
 - Power requirement will be met from the Electric Power supply for general lightning and 11 KV electric substations will be installed for all other uses.
- V. The project attracts EIA Notification, 2006 and is classified under Scheduled 7 (e) "Ports & Harbour" categories and comes under category B project and required Environmental Clearance from State Environmental Impact Assessment Authority (SEIAA). Public hearing was conducted on 30.03.2022 by State Pollution Control Board, Odisha.
- VI. The EIA study was carried out by ABC Techno Labs India Pvt. Ltd. and reported that Balaramgadi & Chandipur sites are the nesting ground of Horseshoe Crabs an ecologically sensitive fauna species as demarcated in the CRZ Notification, 2019 and is located within 7 km radius of the project site. However the proposed project site is free from any Eco Sensitive as per the map prepared by Institute of remote sensing Chennai an authorised agency of MoEF& CC.
- VII. Earlier a field inspection was carried out by the Principal Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Odisha as per the decision of the Authority in its 12th meeting and opined that the activities will not affect the Horseshow crab habitat. (Extracted from the proceedings of 12th meeting of OCZMA).

VIII. The GP-Coordinates of the sites are-(i) 21° 28' 21.310" N, 87° 2' 46.423"E, (ii) 21° 28' 21.191" N, 87° 2' 54.404"E (iii) 21° 28' 9.360" N, 87° 2' 53.017"E (iv) 21° 28' 10.018" N, 87° 2' 49.837"E (v) 21° 28' 10.609" N, 87° 2' 44.669"E.

The Institute of Remote Sensing (IRS) Anna University, Chennai carried out the CRZ study and prepared the CRZ map in 1:4000 scale with reference to the CZMP map sheet no. 85. As per the reports and maps the entire project site falls in CRZ-IB area and CRZ-II, CRZ-IVB area.

The details of the project area falling in different CRZ zone:

CRZ Zone	Area in Sq.m.
CRZ-IB	24997.19
CRZ-II	17768.64
CRZ-IVB	20128.45
Outside CRZ Area	6355.72
Total	69250.00

IX. The proposed activities are permissible under CRZ Notification, 2019 as under

CRZ-IB-Clause 5.1.2(i) (a) "foreshore facilities like ports, harbours, jetties, wharves, quays, slipway, bridges, hover ports for coast guard, sea link etc".

CRZ-II-Clause 5.2(i) " Activities as permitted in CRZ-IB Shall also be permissible in CRZ-II in so far as Applicable".

CRZ-IVB Clause 5.4(ii)(a) "foreshore facilities like ports, harbours, jetties, wharves, quays, slipway, bridges, sea link and hover ports for coast guard, etc."

OCZMA discussed the proposal and decided to recommend the proposal to MoEF&CC, Govt. of India for CRZ clearance under the provisions of CRZ Notification, 2019. The CRZ recommendation is subject to the following conditions:

- 1. Plantation should be done on the right side of the Budhabalanga river bank near the project site for the stability of the River bank.
- 2. Project proponent should take special care for the safety of the Horse shoe-crab.
- 3. Mangroves shall not be destroyed in any manner.
- 4. SEIAA will take due diligence oh hydrodynamics of the river near the project site while granting EC.

14. "Dredging at Jatadhari Muhan at Kathuapaka of Jagatsinghpur for easy discharge of excess rain water to avoid flood in the catchment area.

The Superintending Engineer, Drainage Division, made a presentation on the proposal before the Authority.

I. As per the report, Hansua Drainage channel originated from Kandarpur and outfall in the Bay of Bengal through Jatadhari Muhan near Kathupaka of

Jagatsinghpur District. Along with Hansua Mahanga Nalla, Tigiria and Basulei nallah jointly outfall to the sea through JatadhariMuhan. Due to siltation, lack of maintenance, weeds growth and encroachments, the drainage channel decreases its carrying capacity and leads to water logging in the catchment area during rainy season every year.

At present due to the sand deposition by coastal wind and low water pressure of the river the River Muhan has gradually shifted to IOCL site.

To overcome the above problem the present proposal is envisages for Dredging of Hansua Drainage Channel from RD 00 km to 0.45Km for a total length of 450 mtr and a width of 100 m at Jatadhari Muhan, Kathuapaka for easy discharge of excess rain water to avoid flood/water logging in the catchment area of 66210 Ha. and about 365 Ha. of Agricultural land.

- II. The project was approved by the Technical Advisory Committee for State Flood Control Board Department of Water Resource on 18.11.2017 and sanctioned an amount of Rs. 547.73 Lakhs for the project.
- III. Total dredging area is 31500 sqm. & apprx. 206235.50 cum of dredged material will be generated. The excavated sand will be dumped at private land as desired the land owners. Consent of the individual land owners is being taken.
- IV. The Geographical co-ordinate of the project site is: Latitude 20° 11' 56.99" N & Longitude 86° 33' 17.71" E. Institute of Remote Sensing carried out the CRZ study and prepared the CRZ Map in 1:4000 scale. The project location superimposed map shows that dredging area falls in CRZ-III (NDZ), CRZ-IVB & CRZ-IVA. No sand dunes are present in the project area.

Area of proposed dredging sites in different CRZ Zones

Description	Zonation	Area (sq.m.)
Proposed dredging	CRZ-III(NDZ)	11356.96
area	CRZ-IB	43457.20
	CRZ-IVA	65263.07
	CRZ-IVB	32733.23
Total Area		152810.47

- V. The proposed project is a permissibility activity as per CRZ Notification,2019 under Para 5.1.2 CRZ-IB (i) (e) "maintenance and clearing of waterways, channels, ports and hover ports for coast guard.
 5.4 CRZ-IV (ii) (d) "maintenance and clearing of waterways, channels, ports"
- VI. The project does not attract EIA Notification, 2006. The project require recommendation to MoEF&CC, Govt. of India as per CRZ Notification, 2019 under clause 7 (ii) "All development activities or projects in CRZ-I &CRZ-IV areas which are regulated or permissible as per this notification shall be dealt with by

Ministry of Environment Forest and Climate Change for CRZ clearance, based on the recommendation of the concerned Coastal Zone Management Authority.

Para 8 (ii) (b) "Coastal Zone Management Authority shall forward its recommendation to the Ministry of Environment Forest and Climate Change for the projects or activities not covered in the EIA Notification, 2006 but attracting this notification and located in CRZ-I and IV area.

OCZMA discussed the proposal in detail and decided that before taking any decision in this matter, the EIA/DPR Report prepared for this project needs to be shared with the members of the Authority for their necessary inputs. Accordingly, the matter was deferred to the next meeting of OCZMA.

The meeting ended with vote of thanks to the chair and the members present.

har Sharne

Additional Chief Secretary to Govt., Forest, Environment and CC Department and Chairman, OCZMA

41st meeting of the Odisha Coastal Zone Management Authority

Venue: - Virtual Mode (Ms Team)



Date: 18th May, 2022 Time: 11:00 AM

SI. No.	Participants				
1.	Addl. Chief Secretary to Govt. Forest & Environment Department Government of Odisha	CHAIRMAN			
2.	Principal Chief Conservator of Forest (WL) and Chief Wildlife Warden, Odisha				
3.	Commissioner-cum-Secretary to Govt., Fisheries & ARD Department				
4.	Additional Secretary to Govt., H&UD Department				
5.	Director Environment-cum-Special Secretary to Govt., F&E Department and Member Secretary, OCZMA				
6.	Member Secretary, Odisha State Pollution Control Board				
7.	Dr. K.V. Thomas Former Director, National Centre for Earth Science Studies (NCESS)				
8.	Representative of CCF, Regional Office, MoEF&CC, Bhubaneswar				
9.	HoD, Marine Science Berhampur University				
10.	M/s. Action for Protection of Wild Animals (APOWA), Kendrapada				