

**MINUTES OF 8th MEETING
OF
COASTAL PROTECTION & DEVELOPMENT ADVISORY COMMITTEE (CPDAC)**

The 8TH meeting of the Coastal Protection & Development Advisory Committee (CPDAC) was held at Bhubaneswar (Orissa) on 17th June 2005, under the Chairmanship of Shri M.K. Sharma, Member (River Management), CWC, and ex-officio Additional Secretary to the Govt. of India. List of participants is enclosed at Annexure-I.

The meeting was preceded by lighting of traditional sacred lamp and inaugural function. In his welcome address, Sh. Aurobindo Behera, IAS, Commissioner-cum-Secretary, Govt. of Orissa, thanked Chairman and Member-Secretary, CPDAC, to have chosen Bhubaneswar as a venue for this important meeting. He informed that Orissa state has a long coastline and its coast is also vulnerable to high cyclones and waves. It was affected by the worst cyclone in the year 1999. He emphasized the importance of coastal zone management and coastal protection activities. He said that CPDAC with its rich experience and the technical expertise is extremely important.

Chief Guest, Dr. R.N. Bohidar, IAS, APC-cum-Additional Chief Secretary, Govt. of Orissa, welcomed participants of the 8th CPDAC meeting. He expressed gratitude for giving the opportunity to host the meeting at Bhubaneswar. He informed that in general coastal areas face the problem like beach erosion, floods, cyclones, storm surges, and now of course, threat of tsunami and there is need to deliberate on this aspect. He said that Orissa Govt. has submitted proposal for protection works costing Rs. 500 crores. He desired that the concerned authority would allocate funds liberally since long-term plans need to be taken up.

Shri S. C. Awasthy, Member-Secretary, CPDAC thanked Govt. of Orissa for hosting the 8th CPDAC meeting. He gave background of erstwhile Beach Erosion Board, renamed as Coastal Protection & Development Advisory Committee (CPDAC). He informed that this Committee is represented by all the maritime States/UTs and other Central departments. Some of the functions of CPDAC were mentioned along with other important matters, such as National Coastal Protection Project (NCP), Centrally Sponsored Scheme (CSS), updating of design manual, preparation of Coastal Atlas by the SAC, Ahmedabad, pilot project for beach nourishment, CPDAC Website created in CWC.

Shri M. K. Sharma, Chairman, CPDAC, thanked Dr. R. N. Bohidar, APC-cum-Additional Chief Secretary, Shri Aurobindo Behera, Commissioner-cum-Secretary, Shri R.C. Acharya, Engineer-in-Chief (WR), Sh. Sridhar Behera, Chief Engineer & Basin Manager, Lower Mahanadi Basin, for hosting the 8th CPDAC meeting at Bhubaneswar. He informed the Committee that almost all the maritime States/UTs are facing coastal erosion problem due to sea erosion. Coastal erosion in India has resulted in the loss of valuable beaches and adjacent coastal land used for habitation, agriculture, etc. He said that protection of coastal areas requires careful planning, engineering, management, training and exposure to advanced technology. The remedial measures should be selected after proper investigation and model studies. He informed that Orissa State is one of the beneficiaries of the Centrally Sponsored Scheme. The progress achieved and the works carried out with Central assistance need to be reviewed and discussed during this meeting. He said that coastal States of Tamil Nadu, Kerala, A.P., UT of Pondicherry and A&N Islands were recently hit by the tsunami. Future course of action to tackle such disasters are also required to be discussed in this meeting.

Sh. R.C. Acharya, Engineer-in-Chief, Water Resources, Govt. of Orissa, proposed vote of thanks.

Before taking up the agenda items of the 8th CPDAC meeting, Deptt. of Water Resources, Orissa, gave a presentation of coastal protection measures adopted in their State showing the severe floods during the last 20 years which damaged the river banks and super cyclone of 1999, which posed serious treat to the life and property of people. Protection measures have been executed during the last 20 years, but due to paucity of funds, many works could not be completed/taken up.

Sh. S.C. Awasthy, Member-Secretary, CPDAC, took up the agenda items for detailed discussions in the meeting.

8.1 CONFIRMATION OF THE MINUTES OF 7th MEETING

Sh. I.Z. Poonawala, Jt. Director, CW&PRS, Pune, informed that in point 7.6.1 of the minutes, it is mentioned that representative from CW&PRS informed that tetrapods were successfully used in Paradeep Port. Tetrapods were used at Nariman Point, Mumbai not at Paradip Port. This was noted. Since there was no other change, the minutes of the 7th CPDAC meeting held at Surat (Gujarat) on 19th October 2004, were confirmed.

8.2 TO SORT OUT INCONSISTENCIES IN COASTAL LENGTHS FROM VARIOUS SOURCES.

Sh. D.H. Patel, SE, CDO, Gujarat, informed the Committee that due to some other pressing works, the Gujarat Govt. officers could not visit NHO, Dehradun, but soon they will be visiting NHO for discussion to sort out inconsistency in their coastal length. Capt. G.S. Inda, NHO, Dehradun, asked Shri B.S. Sarkar, Secretary, Irr. & Waterways Deptt., West Bengal, that their officers could visit NHO office, and may discuss the discrepancy in their coastal length. Since no officer from Govt. of Maharashtra attended the meeting, action taken in this regard by them so far was not known.

Chairman, CPDAC, requested the representatives of Gujarat and West Bengal Govt. to sort out inconsistency in their coastal lengths with the NHO, Govt. of India.

(Action: Gujarat, Maharashtra, West Bengal States)

8.3 TO ORGANISE A COORDINATED PROGRAMME OF COLLECTION, COMPILATION, EVALUATION AND PUBLICATION OF DATA RELATING TO VARIOUS NATURAL PHENOMENON AND COASTAL PROCESSES, WHICH AFFECT THE COASTLINE.

Sh. I.Z. Poonawala, Jt. Director, CW&PRS, Pune, informed the Committee that the format for collection of data has already been circulated to all the states for the National Coastal Data Bank, but CW&PRS has not received data from most of the states. Member, CPDAC, from West Bengal, informed that they have not received the format. A copy of the format for collection of data sent by the CW&PRS, Pune, was circulated to the members present in the 8th CPDAC meeting for taking necessary action. In view of

importance of data bank, Chairman, CPDAC, once again requested all the members to expedite collection and sending data to CW&PRS early.

(Action: Maritime States/UTs)

8.4 TO ORGANISE GENERAL INVESTIGATION, STUDIES AND RESEARCH WITH THE HELP OF CENTRAL AND STATE ENGINEERING RESEARCH INSTITUTIONS.

8.4.1 RESEARCH PROPOSALS

Matter of submission of the research proposals by the States to funding agencies was discussed in the meeting. Representative of IHH, Poondi, Govt. of Tamilnadu informed that they have already submitted a proposal to INCH for funding, which has not been funded by the INCH so far. Chairman, CPDAC, said that the matter will be taken up with INCH. Shri A. K. Valsalan, Director, Coastal Erosion Dte., CWC, said that the research proposals may be sent to INCH with a copy to CPDAC Secretariat for follow up.

Chairman, CPDAC, informed the members that the work of creation of CPDAC website has been taken up in the Central Water Commission by the CPDAC Secretariat. The partially made portal was shown to members during the meeting to invite the views of the members. Chairman CPDAC requested CPDAC members to give information available with them for inclusion in the website. CPDAC members suggested to include pages on Information Update, General information on Indian coastline, Information on Source/availability of Coastal Data, Bibliography, etc.

(Action: States/UTs/CPDAC Secretariat)

8.4.2 COASTAL ATLAS

Member-Secretary, CPDAC, informed the members that Space Application Centre, Ahmedabad, was requested in the last meeting to give the break-up of the expenditure to be borne by the SAC and CWC separately for the work of preparation of Coastal Atlas. This information has not yet been received. Since representative from SAC could not attend the 8th CPDAC meeting, action taken so far by the SAC is not known. Chairman, CPDAC, wanted that the work of preparation of Coastal Atlas must be taken up early.

Capt. G. S. Inda, NHO, informed the Committee that some similar work is also to be taken in the Ministry of Environment & Forests. He therefore requested CPDAC to be in touch with MoEF so that there is no duplication of work.

(Action: SAC/CPDAC Secretariat)

8.4.3 STRENGTHENING THE FACILITIES FOR COASTAL ENGINEERING BY THE STATES.

Representative from Tamil Nadu informed that they have a division exclusively for the work of collection of data. Dr. T.G. Antony Balan, Chief Engineer, CWC, informed that Kerala and Tamil Nadu have divisions for doing this particular types of work. Sh.

Poonawala, CW&PRS, informed that since this work is done by the PWD, Irrigation departments, and the matter is related with data collection and execution of works it is important that a separate division should be created to avoid frequent transfers of officers of PWD/Irrigation departments. Chairman, CPDAC, expressed the view that since it is very difficult to create new posts, there should be at least a few officers engaged in such type of works, so that if someone is transferred, at least some other experienced officers can handle the work to maintain continuity.

(Action: Maritime States/UTs)

8.4 TO LAY DOWN PRINCIPLES IN CONSTRUCTION TECHNIQUES OF COASTAL PROTECTION MEASURES FOR THE GUIDANCE OF STATE AUTHORITIES.

Member-Secretary, CPDAC, informed the members about the construction techniques of coastal protection measures. He said that the work of preparation of the manual for execution of coastal protection works is very important for the guidance of officers involved in this work. Notification was issued to various agencies to submit EOI for this work. CW&PRS/WAPCOS made presentation jointly to prepare this manual. WAPCOS was requested to submit detailed break-up of financial bid corresponding to the number of domain experts involved and their period of work in terms of man-months for preparation of this manual. The reply is awaited from WAPCOS. Keeping in mind budget constraints, Chairman, CPDAC, suggested that some chapters can be reduced. He also requested CW&PRS to contribute some of the chapters. Dr. N.L.N.S. Prasad, Addl. Director, MoEF, Bhubaneswar regional office, suggested that Jadavpur University, West Bengal can also be approached for some information. Chairman, CPDAC suggested that instead of going for a very detailed manual, it is more important that a manual covering at least some important topics is prepared. CPDAC Secretariat may approach WAPCOS to expedite submission of the detailed break-up of financial bid for preparation of the manual.

(Action: CPDAC Secretariat)

8.5 TO REVIEW THE PERFORMANCE OF THE WORKS CARRIED OUT BY THE STATES AND EVOLVE IMPROVED DESIGN TECHNIQUES BASED ON SUCH EXPERIENCE FROM TIME TO TIME.

The convener of the sub committee for performance evaluation, Chief Engineer (C&SR), CWC, Coimbatore, made a presentation giving details of the visit of sub-committee for performance evaluation of coastal protection works at Mangalore on 4th & 5th May 2005. The sub-committee visited the sites at Dakshina Kannada, Udupi District. Seawalls built by the minor irrigation department at Kaup were shown where there was no proper formation and slope. Damaged seawalls at Sasihithlu were shown. The sub-committee observed that construction was done long back and there was no maintenance. It is essential to carry out periodic survey of sea walls to assess the damages and attend to repairs. Dr. P.C. Basu, Director, Marine Wing, GSI, Kolkata, suggested that coastal morphology of the area also need to be studied. Multi-disciplinary types of studies are required to be carried out. Representative from CW&PRS welcomed his suggestions. Chairman, CPDAC, asked Shri Poonawala to inform the members about the studies, which can be taken up. Shri Poonawala informed that there is no standard design for coastal protection works and it varies depending upon site conditions. Therefore, each site has to be specifically studied.

8.6.1 MODIFICATION IN THE DESIGN OF SEA WALL.

Capt. R. Mohan, Director (Ports), Karnataka, informed the Committee that Surathkal Engineering College, Karnataka, has done some studies on the design of seawalls and they will be in touch with them for getting this information. Representative from GSI said that in view of complicated nature of studies, it may be difficult for Surathkal Engineering College to take up these type of studies. Director (Ports), Karnataka, may be in touch with the office of Deputy Director General, GSI, Kolkata, for any additional information, which can be supplied by them.

Chairman, CPDAC, suggested that it may be left to the State Governments to take a decision on design of seawalls depending upon site specific conditions, since they are carrying out the works. Designs of seawalls should be got approved from the CW&PRS, Pune. In case of any change in the design of seawall, approval of CW&PRS must be taken before starting the work. Chairman, CPDAC, further sought the opinion of the committee as to whether the height of the seawall could be determined depending upon the degree of protection to be provided to a particular site. The members agreed to this.

8.6.2 PREPARATION OF INDIAN SHORE PROTECTION MANUAL.

In pursuance of the decision taken in the 6th meeting of Coastal Protection and Development Advisory Committee (CPDAC) held at Pondicherry on 7th April 2004, the proposal, estimated to cost Rs. 9.476 lakhs plus service tax & education cess, for updating and printing 100 copies of the manual on Protection and Control of Coastal Erosion in India, submitted by National Institute of Oceanography (NIO), Goa was accepted.

First meeting of the steering committee, constituted to review updating of the manual, Protection and Control of Coastal Erosion in India, was held at CWC Headquarter, New Delhi on 25/01/2005 to examine the inception report regarding updating the manual submitted by NIO, Goa. The steering committee discussed the inception report in detail and finalized the contents of the manual. The steering committee recommended release of payment of first installment of Rs. 1.00 lakh to NIO, Goa. First installment of Rs. 1.04 lakhs was released to NIO, Goa, in March 2005.

Dr. V. Sanil Kumar, Scientist, NIO, Goa, made a brief presentation on the proposed chapters of the manual. He informed that the work on updating the manual is being carried out. He further informed that NIO has requested all nodal officers of maritime States to submit the required information to be included in the updated manual. But no information has been received so far. Secretary, Irrigation & Waterways Deptt, West Bengal, intimated that they have not received any request from NIO. Dr. Kumar clarified that they have written to Chief Engineer-II, Irrigation & Waterways Deptt, West Bengal. The copy of the letter requesting maritime States to submit requisite information was given to all the State representatives present in the meeting for early action.

(Action: NIO/CPDAC Secretariat)

8.7 NATIONAL COASTAL PROTECTION PROJECT (NCP) FOR SEEKING EXTERNAL ASSISTANCE.

The consolidated report for the National Coastal Protection Project (Phase-I), estimated to cost 1095.911 crores, was prepared and submitted to Ministry of Water Resources in December 2002, incorporating proposals of the states of Karnataka, Maharashtra, West Bengal, Tamil Nadu, Orissa and UT of Pondicherry. At that time, the proposals of other States/ UTs could not be included in the National Coastal Protection Project due to non-compliance of the CWC comments.

Ministry of Water Resources has decided to reformulate the National Coastal Protection Project covering all maritime States. The National Coastal Protection Project (NCP) covering all maritime States/UTs is under formulation in CWC.

The compliance to CWC comments has been received from Andhra Pradesh recently; however, State TAC approval for the proposal is still awaited from A.P. Government. Dy. Chief Engineer, Irrigation Department, A.P., informed the report of TAC would be sent soon. The States of Goa, Gujarat, Kerala and UTs of Andaman & Nicobar Islands & Lakshadweep are requested to expedite compliance of CWC comments/submission of the NCP proposal. Since Andaman & Nicobar Administration has not yet submitted their proposal, Chief Engineer, PWD, who was present in the meeting was once again requested to send their proposal without any further delay. Chief Engineer, PWD, A&N Islands wanted assistance from CW&PRS in preparation of their NCP. CW&PRS representative said that it is not possible for them to prepare the NCP proposal for A&N Islands, but they can assist and provide some data for preparation of their NCP. Chief Engineer, PWD, A&N Islands assured that they would soon submit NCP proposal. Chairman, CPDAC, suggested that the CPDAC Secretariat and CW&PRS may be contacted for any assistance in making the proposal. Chairman, CPDAC, also pointed out that since submission of NCP to the Ministry of Water Resources has already taken a long time, it is important that reply to the comments of CWC from the remaining States/UTs and submission of proposal of A&N Islands is immediately sent to CWC for further necessary action on top priority basis.

(Action: AP/Gujarat/Goa/ Kerala/ A&N/Lakshadweep)

8.8 TO INTERACT WITH NATIONAL/INTERNATIONAL AGENCIES ENGAGED IN THE WORK OF COASTAL PROTECTION AND TECHNOLOGY TRANSFER IN THE FIELD OF COASTAL PROTECTION.

In the last meeting, Chief Research Officer, CW&PRS made presentation on recent techniques in coastal protection works. Chairman, CPDAC, requested representative of CW&PRS to share information relating to the new technologies or latest developments taking place in the field of coastal engineering.

Sh. Poonawala, Jt. Director, CW&PRS, made a presentation on some of the new technologies, like multipurpose reefs developed by ASR Ltd (New Zealand), construction in Australia and in other places. He informed that CW&PRS is proposing to take up new coastal protection work in Kerala. Shri Poonawala also referred to the paper by Dr. Baba, CESS, Trivandrum, circulated to all members for their views in this regard. He said that terrafix bags are helpful in creating beaches, which can promote tourism and recreation alongwith coastal protection. Floating Articulated Wave Attenuator (USA) dissipate waves,

it is to be anchored. X block . A new Armour (UK) can be used for breakwater construction. He further informed that US Army Corps of Engineers, USA have also taken up shore protection measures. Details of pilot project for beach nourishment at INS, Hamla and cliff protection at INS, Dwaraka, Okha, were also shown to the members.

8.9 TRAINING

During the last meeting, all member States were requested to arrange training courses for their officers on coastal processes, protection measures, etc., either through CW&PRS, Pune, or through some academic institutions or through any other Central/State agencies from time to time. During the last meeting, CW&PRS representative informed that they have made provision for training the officers of maritime States/UTs.

Sh. Poonawala, CW&PRS, informed the Committee that the training was provided to the officers of Maharashtra, Gujarat, Tamil Nadu and Karnataka at Pune. Training courses for the officers from other States in batches of 20-25 officers can also be arranged. Secretary, Irr. & Waterways, Govt. of West Bengal, informed that it may not be possible for them to send 20-25 officers at a stretch. They can send 4-5 officers for getting training on basics of coastal engineering, coastal processes, etc. CWPRS representative informed that next training course for the officers of West Bengal, A&N Islands and Orissa can be started somewhere in November 2005.

(Action: Maritime States/UTs/CW&PRS)

8.10 NEW ACTIVITIES ASSIGNED TO THE CPDAC

In the last meeting, maritime States/UTs were requested to submit master plan of State/UT for coastal protection for review by the sub-committee constituted by the CPDAC. Chairman, CPDAC, again requested all the maritime States/UTs to send the master plans of their states/UTs at the earliest.

(Action: Maritime states/UTs)

8.11 COMPOSITION OF CPDAC

Member-Secretary, CPDAC, informed the Committee that the names of three persons, short-listed out of the panel for selecting non-official members, have been recommended to the MoWR for inclusion in CPDAC as non-official members. Approval of Ministry of Water Resources is awaited. MOWR has been requested to expedite the matter.

(Action: CPDAC Secretariat)

8.12 STATUS OF COASTAL PROTECTION WORKS IN MARITIME STATES

In the last meeting, the status note of coastal protection works was submitted by the States of Karnataka, Orissa and Maharashtra. However, information furnished by these States was incomplete. A simple format for the status of coastal protection works in tabular form was enclosed to the agenda note as Annexure-I.

The maritime States/UTs were requested to forward the latest status of coastal protection works as per the enclosed format. This information is required for replying to Parliament Questions/VIP References, etc.

(Action: Maritime States/UTs)

8.13 SCOPE FOR MANGROVE PLANTATION

In the last meeting, it was decided to put information on %Mangroves in India+ received from CWPRS, Pune on proposed website on CPDAC. In this regard it was informed that the development of website on CPDAC was in progress and the information on %Mangroves in India+ would be inserted in the CPDAC website subsequently.

(Action: CPDAC Secretariat)

8.14 CREATION OF SEPARATE COASTAL ENGINEERING DIVISION

In the last meeting, the representative of Maharashtra, Orissa, Gujarat, Karnataka, informed that they have separate division to take up coastal protection works. Other maritime States/UTs were again requested to create separate circle/engineering division in their States/UTs so as to develop expertise in the field of coastal engineering.

(Action: Maritime States/UTs)

8.15 REVIEW OF PROGRESS OF CENTRALLY SPONSORED SCHEME

The Centrally Sponsored Scheme (CSS) %Critical anti-erosion works in coastal and other than Ganga basin States+ is under implementation. Ministry of Water Resources released first installment of Rs. 50 lakhs each to Karnataka, Kerala and Orissa States during the financial year 2003-2004. The first installment of Rs. 1.00 crore has been released each to the States of Maharashtra, Tamilnadu and UT of Pondicherry. The utilization certificates have been received from Pondicherry and Orissa. Ministry of Water Resources has been requested to release the second installment to Pondicherry and Orissa. The utilization certificate is awaited from the State of Kerala, Karnataka, Maharashtra and Tamilnadu. The state governments of Kerala, Karnataka, Maharashtra and Tamilnadu were requested expedite the utilization certificates for further action by the CPDAC Secretariat

Pilot project on beach nourishment

The committee was apprised about the status of the pilot project on beach nourishment during the meeting. It was informed that during the second meeting of the committee, to implement pilot project on beach nourishment, held on 25th January, 2005 at CWC Headquarter, Sewa Bhawan, New Delhi, the proposal of %Beach Nourishment at Malad (INS Hamla) Beach, Mumbai+ was selected for implementation and recommended to MoWR to release Rs. 40 lacs for the pilot project. Rs. 40 lacs have been released to the Govt. of Maharashtra in March 2005 for implementation of Beach Nourishment pilot project at INS Hamla, Mumbai. Since representative of Maharashtra State was not there in the meeting to inform the latest status of implementation of Beach Nourishment pilot

project at INS Hamla, Mumbai, CPDAC Secretariat was asked to be in touch with the concerned agency to expedite implementation of pilot project on beach nourishment.

(Action: CPDAC Secretariat)

8.16 IMPACT OF TSUNAMI ON INDIAN COASTLINE

Chief Engineer (C&SRO), CWC has prepared a paper titled %Recent Tsunami Impact on Indian Coastline (Mainland) and Performance of Coastal Protection Works+ for World Water Forum. Chief Engineer (C&SRO), CWC made a presentation of his paper. Sh. J. C. Iyer, Director, CWC, made a presentation before the committee highlighting the havoc created by the Tsunami in the states of Tamil Nadu, Kerala, UT of Pondicherry and Andaman & Nicobar islands. Chairman, CPDAC, opined that the design practices of construction of buildings/houses near the shore need review. Lot of research work, mathematical modeling for protection and forecast of Tsunami is necessary.

Capt. G.S. Inda, NHO, also gave a presentation on Tsunami in A&N Islands. He informed that survey ships were deployed for relief operations, checking harbours, initial tidal observations in A&N Islands at some places and to observe movement of epicenter, changes in shoreline, impact on nautical charts, damage assessment.

8.17 ANY OTHER ITEM WITH THE PERMISSION OF CHAIR

No other new point was raised in the meeting.

8.18 VENUE OF THE NEXT MEETING

Chairman, CPDAC, suggested that the 9th meeting of CPDAC could be held in A&N Islands, particularly in view of recent tsunami that hit the A&N Islands, and it would be appropriate that CPDAC, an expert Committee consisting of experts from all maritime States/UTs and other Central departments meet there and see the damages and protection works carried out there. Chief Engineer, PWD, A&N Islands, who was present in the meeting, was requested to host the 9th CPDAC meeting. He agreed to take up the matter with the higher authorities and confirm.

(Action: UT of A&N Islands/CPDAC Secretariat)

Presentation by Netlon India

After the meeting, M/s Netlon India gave presentation of their product Tuflex Geosynthetics solutions for civil engineering applications. Netlon representative informed that their company is producing this product for more than 20 years and it is very cost effective keeping in mind the quality & performance of their product. Geomembrane, gabions non-woven geotextiles have been used at Bharuch, Kutch (Gujarat). Tubular gabions have also been used in UP, HP, West Bengal, Dabhol Power project, ONGC Mindola river project, Gujarat. Chairman, CPDAC, thanked them for the presentation and extending co-operation for the meeting.

The meeting ended with a vote of thanks to the chair.

Site Visit

Govt. of Orissa arranged a site visit for the participants on 18th June 2005, to Musadiha, near Paradeep. Right bank of river Mahanadi, 7 km from river mouth was visited where zinc PVC coated gabions have been used for right bank protection. Total length of protection works is 402 meters in three stretches at a cost of rupees 4.10 crores. Gabion boxes filled with hard granite stone have been used.

After seeing the right protection works of river Mahanadi, participants were taken to Paradeep port, one of the biggest and modern ports in India. Sh. Subrata Tripathy, IAS, acting Chairman, Paradeep Port Trust & Sh. U.C. Jena, Chief Engineer, Paradeep Port with their team of officers welcomed Chairman, Member-Secretary, CPDAC, and other members of CPDAC and took them around the Port. A brief presentation was made by them explaining brief history of Paradeep Port, type of harbour, Master Plan, etc. It was informed that Paradeep port is subjected to intense littoral drifts. There was erosion on the northern side and the team was taken to see the protection works (seawall). The team was also taken in a mechanized launch to see the port facilities and the northern and southern breakwaters.

Chairman, CPDAC, thanked Sh. Subrata Tripathy, acting Chairman, Paradeep Port Trust and his officers for accompanying the CPDAC team for site visit.

Participants of 8th CPDAC Meeting

Sl.No.	Name & Designation
1.	S/Shri M.K. Sharma, Member(RM), CWC & Chairman, CPDAC
2.	S.C. Awasthy, Chief Engineer (P&D), CWC & Member-Secretary, CPDAC
3.	Dr. T.G. Antony Balan, Chief Engineer, CWC, Coimbatore
4.	Ravinder Singh, Chief Engineer, CWC, New Delhi
5.	A. K. Valsalan, Director, Coastal Erosion Dte., CWC, New Delhi
6.	J. C. Iyer, Director, CWC, New Delhi
7.	R. Devasahayam, Director, CWC, Coimbatore
8.	Srikant Boxi, Superintending Engineer, CWC, Bhubaneswar
9.	K.A. Ouseph, Deputy Director, Beach Erosion Directorate, CWC, Kochi
10.	A.R. Rao, Development Advisor(Ports), M/O Shipping, Road Transport & Highways, Govt. of India, New Delhi
11.	I. Z. Poonawala, Jt. Director, CW&PRS, Pune
12.	Capt. G. S. Inda, Director, Dte. of Hydrography, NHO, Govt. of India
13.	Dr. V. Sanil Kumar, Scientist, NIO, Goa
14.	Dr. P.C. Basu, Director, Marine Wing, GSI, Kolkata
15.	Dr. N.L.N.S. Prasad, Additional Director, MoEF, Govt. of India, Bhubaneswar Regional Office.
16.	Sh. R. C. Acharya, Engineer-in-Chief (Water Resources), Govt. of Orissa, Bhubaneswar
17.	Ananda Subudhi, Engineer-in-Chief, Planning & Design, Orissa
18.	Sridhar Behera, Chief Engineer & Basin Manager, Lower Mahanadi Basin, Orissa, Bhubaneswar
19.	B. Sarkar, Secretary Irr. & Waterways Deptt, West Bengal
20.	T. K. Sasi, Chief Engineer (Irr & Admn), Kerala
21.	T. Rameshanachari, Dy. Chief Engineer, Kerala
22.	D. H. Patel, Superintending Engineer, CDO, Gujarat,
23.	M. Viswanath, Dy. Chief Engineer, Major Irr & CAD Deptt, A.P.
24.	Captain R. Mohan, Director (Ports & Inland Water Transport), Karnataka
25.	G. C. Khattar, Chief Engineer, PWD, UT of Andaman & Nicobar Islands
26.	M. Jayapalan, Dy. Director, IHH, Poondi, Tamil Nadu
27.	D. Panneerselvam, Asstt Director, IHH, Poondi, Tamil Nadu
28.	P.. Suresh, Assistant Director, IHH, Poondi, Tamil Nadu

No.4/5/2005-CED/516-552
Government of India
Central Water Commission
Coastal Erosion Directorate

806(N), Sewa Bhavan,
R.K. Puram, New Delhi-110 066

Dated: 4th July 2005

To

As per list.

Subject: 8th Meeting of Coastal Protection & Development Advisory Committee (CPDAC) – Forwarding of Minutes – reg.

The undersigned is directed to enclose a copy of the minutes of the 8th meeting of Coastal Protection And Development Advisory Committee (CPDAC) held on 17th June 2005 at Bhubaneswar (Orissa).

Your comments, if any, may kindly be communicated at the earliest. It is also requested to take follow-up action on the items concerning your State/Department and send a report in this regard to this office at the earliest.

Yours faithfully,

Encls : As above.

(A. K. Valsalan)
Director
Tel. No. 26195513
Fax No. 26175862

Copy to:

- | | |
|---|--|
| 1 Member (R M), CWC
& Chairman, CPDAC
2 nd floor, Sewa Bhawan,
R.K.Puram, New Delhi-66. | 2 Chief Engineer (P&D), CWC,
& Member- Secretary, CPDAC
815(N), Sewa Bhavan,
R.K. Puram, New Delhi-66. |
| 3 Commissioner (PP),
Ministry of Water Resources,
Shram Shakti Bhawan, Rafi Marg,
New Delhi-110001 | 4 Advisor (I & CAD),
Planning Commission,
Yojna Bhawan, Sansad Marg,
New Delhi-110001. |
| 5 Advisor/Joint Secretary
(Impact Assessment)
Ministry of Environment & Forests,
6 th Floor, Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi-110003. | 6 Development Advisor (Ports),
537,Transport Bhawan,
Ministry of Shipping, Road Transport &
Highways,
1, Parliament Street,
New Delhi- 110011. |
| 7 Engineer-in-Chief (Irrigation)
Irrigation & CAD Department,
Errum Manzil,
Hyderabad - 500 082
(Andhra Pradesh) | 8 Member Agriculture,
State Planning Commission,
Govt. of Tamil Nadu,
Ezhilagam, Chepauk,
Chennai - 600005. |
| 9 Chief Engineer (C&SR),
C.W.C.,
Sangamam,
Gandhimaanagar, Peelamedu P.O.,
Coimbatore . 641 004
(Tamil Nadu) | 10 Chief Engineer (Irrigation),
2 nd Floor, Junta House,
Annexe, Panaji- 403001.
(Goa). |
| 11 Director,
National Institute of Oceanography,
Dauna-Paula,
Goa- 403001. | 12 Secretary,
Narmada, Water Resources &
Water Supply Department,
Govt. of Gujarat,
Block No. 9, Sardar Bhawan,
New Sachivalaya,
Gandhinagar- 382010.
(Gujarat) |
| 13 Chief Engineer,
Irrigation&Admn.,
Govt. of Kerala,
Thiruvananthapuram- 695033
(Kerala) | 14 Director,
Central Water & Power Research
Station (CWPRS),
P.O. Khadakwasla,
Pune - 411024.
(Maharashtra) |
| 15 The Chief Executive Officer, (Commissioner,
Water Transport)
Maharashtra Maritime Board,
Indian Mercantile Chamber (3 rd Floor)
Ramajibhai Kamani Marg,
Ballard Estate,
Mumbai - 400 038. | 16 Engineer-in-Chief (Water Resources),
Secha Sadan, Govt. of Orissa,
Bhubaneshwar - 751001.
(Orissa) |

- | | |
|--|--|
| <p>17 Deputy Director General,
Geological Survey of India,
Marine Wing,
Bhu Vigyan Bhavan, DK-6, Sector-2,
Salt Lake City,
Calcutta - 700091
(West Bengal)</p> | <p>18 Secretary,
Irrigation & Waterways Deptt.,
Govt. of West Bengal,
Jalsampad Bhawan, Salt Lake,
Calcutta- 700091.
(West Bengal)</p> |
| <p>19 Shri Shailesh Nayak,
Head, Marine and Water Resources Division,
Space Application Center,
Ambawadi Vistar P.O.,
Ahmedabad . 380015</p> | <p>20 Chief Hydrographer,
National Hydrographic Office,
17 A, Rajpur Road
Dehradun-248001</p> |
| <p>21 Chief Engineer, APWD,
Andaman & Nicobar Administration,
Port Blair-744101</p> | <p>22 Superintending Engineer,
Lakshadweep, PWD,
Kavaratti, Lakshadweep-682555</p> |
| <p>23 Chief Engineer, PWD,
34, Lal Bahadur Shastri Street,
Pondicherry-605001</p> | <p>24 Member (Planning),
Ganga Flood Control Commission,
Sinchai Bhawan 3rd Floor,
Patna . 800015.</p> |
| <p>25 Director (Ports & I.W.T.),
Baithkol, Uttara Kannada,
Karwar . 581302
Karnataka.</p> | <p>26 Sri Sridhar Behera,
Chief Engineer & Basin Manager,
Lower Mahanadi Basin,
Bhubaneswar
Office of the Engineer-in-Chief,
Water Resources, Secha Sadan,
Bhubaneswar-751 001</p> |
| <p>27 Chief Engineer,
Mahanadi & Eastern Rivers Organisation,
Central Water Commission,
Plot No.655, Sahid Nagar,
Bhubaneswar-751007
(Orissa)</p> | <p>28 Director,
Beach Erosion Directorate,
Central Water Commission,
"Jaladhara", 27/1927-A,
Kasturba Nagar, Kochu-Kadavanthra,
P.O.Kadavanthra,
Cochin - 682 020</p> |
| <p>29 Chief Engineer,
Design Research and Construction Support,
PWD, WRO,
Cheppakkam, Chennai - 600 005.</p> | <p>30. Capt G.S. Inda,
Director,
Directorate of Hydrography,
Ministry of Defence,
West Block No. IV, Wing No.5,
R.K. Puram, New Delhi-110 066</p> |
| <p>31. Dr. N.L.N.S. Prasad,
Additional Director (S),
Eastern Region,
A/3, Chandrasekharapur,
Bhubaneswar-751 023
(Orissa)</p> | <p>32. Sh. D.H. Patel,
Superintending Engineer (CDO),
Govt. of Gujarat,
Dr. Jivraj Mehta Bhavan,
Block No.9, 2nd Floor,
Old Sachivalya,
Gandhinagar (Gujarat)</p> |

- | | |
|---|--|
| 33. Sh. M. Viswanath,
Dy. Chief Engineer,
(Irr. & CAD),
Jalasoudha Building, Errum Manzil,
Hyderabad-500 082 (A.P.) | 34. Sh. M. Jayapalan,
Deputy Director,
Institute of Hydraulics & Hydrology
(IHH),
Poondi, Thiruvallur Distt,
(Tamil Nadu) |
| 35. Dr. P.C. Basu,
Director, Marine Wing,
Geological Survey of India
Bhu Vigyan Bhavan, DK-6, Sector-2,
Salt Lake City,
Kolkata-700 091
(West Bengal) | 36. Dr. V. Sanil Kumar, Scientist,
National Institute of Oceanography,
Dona Paula,
Goa-403 004 |

Copy for kind information to: PPS to Chairman, CWC, New Delhi.