

**MINUTES OF THE 5th CPDAC MEETING
HELD AT MANGALORE (KARNATAKA) ON 26TH SEPTEMBER 2002.**

The 5th Meeting of the "Coastal Protection and Development Advisory Committee" (CPDAC) was held at Mangalore in Karnataka on 26-9-2002, under the Chairmanship of Shri S.K. Das, Member (River Management), CWC and ex-officio Additional Secretary, Govt. of India.

Sh. S. K. Das, Chairman, CPDAC, Shri G. C. Tallur, Secretary, PWD, Govt. of Karnataka, Dy. Chairman, NMPT, Shri S. K. Sengupta, Member Secretary, CPDAC and Capt. R. Mohan, Director, Ports & IWT, inaugurated the meet by lighting the lamp. At the outset, Shri G.C. Tallur, Secretary, PWD, Govt. of Karnataka, welcomed the participants to the 5th CPDAC meeting and read the speech of Shri Vasanth V. Salian, Hon'ble Minister for Ports & Fisheries, Govt. of Karnataka. Chairman, CPDAC, Shri S.K. Das, addressed the CPDAC members and other participants and emphasized upon the immediate need for addressing the various issues pertaining to Coastal Protection & Development by the various States/UTs. Chairman, CPDAC, thereafter asked Shri S. K. Sengupta, Member Secretary, CPDAC to take up item-wise agenda for discussion.

5.1 CONFIRMATION OF THE MINUTES OF THE 4th MEETING

Minutes of the 4th meeting of CPDAC held on 4th April 2000, at Alibag, Maharashtra, were confirmed in view of the follow-up actions taken by the CPDAC Secretariat.

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

Chairman, CPDAC, observed that there is a marked difference in the length of coast indicated by the office of Chief Hydrographer, Govt. of India, Dehradun, and the respective States. Chairman, CPDAC, requested maritime States to approach National Hydrographic Office (NHO) and reconcile the issue of variation in coastal length. In this connection, Deputy Hydrographer (Representative of Chief Hydrographer, NHO), informed that the hydrographic surveys in the country are carried out by National Hydrographic Office following the laid down International Hydrographic Organisation's rules and procedures for measuring the coastline and then compared with the topographic maps prepared by Survey of India.

Secretary, PWD, Govt. of Karnataka requested Dy. Hydrographer to give guidelines for measuring the coastline. Deputy Hydrographer informed that the office of Chief Hydrographer could also take up the task of measuring the coastline on payment basis, if required. Deputy Hydrographer requested maritime States to produce basis of measurement of coastline in their respective States for reconciliation and sorting out the inconsistency.

Chairman, CPDAC, suggested maritime States to interact with the Chief Hydrographer to sort out inconsistencies in the coastal length. Chairman, CPDAC, also suggested CPDAC Secretariat to obtain guidelines for measuring coastline from NHO and circulate to maritime States/UTs.

(Action: Maritime States & UTs/Chief Hydrographer/CPDAC Secretariat)

5.3 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.

Jt. Director, CW&PRS, Pune, informed that some data has been received from Tamil Nadu State and no other State has sent any data so far. Data, which was received from Tamil Nadu Govt. also do not conform to the format and is also very sketchy. CEO, MMB, Maharashtra suggested to arrange a training programme on data collection. Director, CW&PRS, informed, seminar/workshop could be held for the officers of maritime States for this purpose at CWPRS, Pune. The duration of the seminar can be minimum one week, so that exhaustive training relating to data collection can be imparted to the participants.

Deputy Hydrographer informed that they are having about 8-9 models for east & west coast. Sr, Jt. Commissioner (ER), MOWR told that data collection is not a one-time job. In reply, Deputy Hydrographer informed that they can provide coastal data at regular intervals as well. When Deputy Hydrographer was asked to explore the possibilities of sharing the coastal data available with their department, he informed that he will check up the formalities involved.

Director, Beach Erosion Directorate, informed that the first format already circulated for data collection is complicated and requires sophisticated instruments, which are not available with the States. The second format also needs improvement. He informed that some of the States are collecting data on their own format. Chairman requested CWPRS to evolve simplified and uniform format for data collection by maritime States/UTs.

Chairman, CPDAC requested Karnataka Govt. to re-nominate nodal officer appointed for data collection since coastal works have been transferred from Minor Irrigation to Communication and Buildings Department of PWD in Karnataka.

(Action: Maritime States & UTs/CWPRS/ CPDAC Secretariat/NHO)

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

5.4.1 RESEARCH PROPOSALS.

Shri B.S. Rao, Senior Professor KREC, Surathkal suggested that the Research and Development Works in the field of Coastal Engineering may also be assigned to academic institutions. Chairman, CPDAC, encouraged the academic institutions to submit R&D proposals for funding.

Member States were again requested to prepare research proposals for consideration and funding from INCH, INCOH, etc.

(Action: Maritime States & UTs)

5.4.2 SATELLITE IMAGERIES TO MONITOR SHORELINE CHANGES.

Chairman, in the last meeting had requested that monitoring of shoreline changes may be studied by using available IRS data and for this purpose assistance from Space Application Centre, Ahmedabad, or other State/Central agencies engaged in remote sensing will be available. Shri A.S. Rajawat, Space Application Centre, Ahmedabad, informed that they can provide Coastal Data, but for obtaining Satellite imageries NRSA may be approached.

Member States may approach Space Application Centre for obtaining coastal data and NRSA for Satellite Imageries to monitor the shoreline changes.

(Action: Maritime States & UTs)

5.4.3 COASTAL ATLAS

Shri A.S. Rajawat, Space Application Centre, Ahmedabad, representing Dr. Shailesh Nayak, Scientist (SG), SAC, Ahmedabad, and Convener of the sub-committee for preparation of Coastal Atlas, intimated that National Coastal Land Use Maps/Atlas has been brought out by them. States/UTs may approach SAC Ahmedabad for obtaining above maps/atlas.

Director, Beach Erosion Dte., CWC, Cochin informed that the sub-committee on Coastal Atlas met in New Delhi on 23.4.2001 where representative from MOEF and MOS were also invited. He also informed that the sub-committee decided to utilize the existing land use/land forms/land cover/shore line change maps (1:50,000 scale), prepared using satellite data of base year 1990, available at Space Application Centre, Ahmedabad for preparation of the National Coastal Atlas on A-3 size. The Atlas will include relevant information pertaining to coastal protection and development. The data on status of coastal protection in the States/UTs would be collected and provided by

CWC with the co-operation of the maritime states/UTs. The sub-committee suggested that Ministry of Water Resources should sponsor and support the work of preparation of Coastal Atlas. All the members agreed with the proposal.

Sr. Jt. Commissioner (ER) MOWR informed that preparation of Coastal Atlas can be funded by MOWR provided it is suitably included in some Central Sector Scheme. Member Secretary, CPDAC preferred preparation of the Atlas with the database of year 2002. Chairman, CPDAC requested SAC representative to submit the estimated cost for preparations of the Atlas with 2002 satellite data to CPDAC Secretariat. Meanwhile Director, Beach Erosion Dte., CWC, may approach States/UTs for collection of the inputs required for inclusion in the Coastal Atlas. Chairman suggested that CPDAC Secretariat may explore funding of preparation of Coastal Atlas through Centrally Sponsored Scheme.

(Action: SAC, Ahmedabad / Beach Erosion Dte./ CPDAC Secretariat)

5.4.4 STRENGTHENING THE FACILITIES FOR COASTAL ENGINEERING BY THE STATES.

The list of mathematical models useful in coastal studies, as received from Chief Engineer (C&SRO), Central Water Commission, Coimbatore, was enclosed with agenda note for 5th CPDAC meeting for discussion. In this connection, Director, CWPRS, informed that this list of mathematical models needs to be updated. Chairman asked CWPRS to furnish supplemented list of mathematical models for benefit of the member States.

(Action: CWPRS)

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

The member from Kerala State was not present. Member Secretary, CPDAC highlighted the results of the four experimental design walls constructed by Kerala State using coir mat filter and sand filled rubberized coir bags. Keeping in view the results of the above study, which is not encouraging, CPDAC decided that the research proposal on application of Coir Bhoovastra for coastal erosion control need not be taken up.

(Action: CPDAC Secretariat/ Beach Erosion Dte.)

5.6 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.

5.6.1 MODIFICATION IN THE DESIGN OF SEA WALL.

A performance report was received on an experimental sea wall executed in Kollam district for a length of 450 metres. Member from Kerala State was not available to apprise and discuss the matter in the meeting for the benefit of other members. Member from West Bengal was also not available to apprise the status of experimental works carried out in West Bengal. The member from Karnataka informed that the coastal protection works carried out at Ullal using PVC coated gabion was washed away within a year time.

Chairman, CPDAC and Secretary, PWD, Karnataka advocated the adoption of latest technologies in the field of coastal engineering. Secretary, PWD, Karnataka expressed the necessity of evolving coastal protection works to be provided in case of emergent conditions. Chairman requested members to intimate CPDAC of the latest technologies adopted for coastal protection works.

CWPRS presented the work done by them for control of Beach Erosion at Udwada village in Gujarat. CWPRS further added that the alternatives reported by them for Udwada village cannot be generalized, but these are site-specific cases. CWPRS also presented the case study of protection of Swami Narayan Temple in Gujarat using nylon gabions. Chairman, CPDAC requested CWPRS to submit a report on the same for benefit of other members.

(Action: CWPRS, Members States & UTs)

5.6.2 PREPARATION OF INDIAN SHORE PROTECTION MANUAL.

Part I to IV and Appendix A of Coastal Engineering Manual (CEM) have been released by the Coastal & Hydraulic Laboratory, US Army Corp of Engineers in May 2002 and Parts V & VI are scheduled to be released later in 2002. At present, chapters 1, 2, 3, 4 & 5 of Part V and chapters 2, 3, 4, 5 & 6 of Part VI are available. These parts/chapters of CEM are available on website <http://bigfoot.wes.army.mil/cem001.html>.

Chairman, CPDAC requested CPDAC members to go through Coastal Engineering Manual (CEM) released by the Coastal & Hydraulic Laboratory, US Army Corp of Engineers in May 2002 and give their comments on the necessity of preparation of Indian Shore Protection Manual.

(Action: CPDAC Members)

5.7 NATIONAL COASTAL PROTECTION PROJECT (NCPP) FOR SEEKING EXTERNAL ASSISTANCE.

Member-Secretary CPDAC, informed the Committee that the National Coastal Protection Project (Phase-I), estimated to cost Rs. 623.702 crores, has been prepared and submitted to Ministry of Water Resources in July 2002, incorporating proposals of the States of Karnataka, Maharashtra, West Bengal and UT of Pondicherry. Sr. Jt. Commissioner (ER), MOWR, informed that in a meeting held in August 2002, CWPRS has been asked to examine the designs of coastal protection works proposed by Maritime States/UT in the National Coastal Protection Project (Phase-I) and submit its

report within a period of two months. Director, CWPRS, assured to submit report within time schedule.

Member-Secretary, CPDAC, requested the remaining maritime States/UTs to expedite finalization of their NCPP proposal so that consolidated National Coastal Protection Project (Phase-II) can be prepared.

(Action: Maritime States)

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

5.8.1 TRAINING

Jt. Director, CWPRS, informed that two training courses have been conducted by CWPRS, in Maharashtra and Tamil Nadu. He further added that they can arrange training programme for ten to fifteen people on demand by States/UTs at CWPRS as well as in the maritime states/UTs. Director, Beach Erosion Directorate informed that one year full time P.G. programme on Coastal Zone Management has been started by Cochin University of Science & Technology.

All the 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.

(Action: Maritime States)

5.9 NEW ACTIVITIES ASSIGNED TO THE CPDAC

Member-Secretary, CPDAC, informed that the Ministry of Environment & Forests (MoEF) was requested to inform whether any integrated Master Plan for sustainable development of coastal zone had already been prepared/available in MoEF. If so, MoEF was requested to furnish copy of the same; otherwise suggestion of MoEF in respect of contents of the Master Plan as well as agencies to be involved in preparation of Master Plans may be communicated so that the matter can be discussed elaborately in the next meeting of CPDAC. The reply is awaited from MoEF.

Members States are requested to send their suggestions about contents of integrated Master Plan for sustainable development of coastal zone.

Member-Secretary, CPDAC, informed that while deciding the contents/functions of the Master Plan, matter of overlapping of the functions of the above Master Plan and the National Coastal Zone Management Authority as well as Coastal Zone Management Authorities in the Maritime States/UTs may also be taken care of.

Secretary, PWD, Govt. of Karnataka sought the clarification of CPDAC on the necessity or otherwise of obtaining prior permission from the Karnataka State Coastal Zone Management Authority for the Coastal Protection proposals against sea erosion to be implemented in the coastal Area. The Govt. of Karnataka may correspond with the CPDAC for further necessary action in this regard. Chairman, CPDAC however asked the members to strictly follow the MOEF notification of Feb 1991 on Coastal Regulation Zone alongwith all the subsequent amendments while submitting the proposals to CWC.

(Action: CPDAC Secretariat/Maritime States)

5.10 COMPOSITION OF CPDAC

For preparation of a panel for selecting the non-official members, bio-data of seven officers were received only from the States of Tamil Nadu and Kerala. Other States/UTs are also requested to send bio-data of experts for inclusion in the panel for selecting the non-official members of CPDAC in the next meeting.

(Action: Maritime States & UTs)

5.11 STATUS OF COASTAL PROTECTION WORKS IN MARITIME STATES

Member-Secretary said that the States may send present status on coastal protection works to the CPDAC Secretariat in the prescribed format circulated by the CPDAC Secretariat.

(Action: Member States & UTs)

5.12 SCOPE FOR MANGROVE PLANTATION

Chairman, CPDAC, asked CW&PRS, to provide more information on mangrove plantation, so that its utility in different areas can be known and adopted.

(Action: CWPRS)

5.13 CREATION OF SEPARATE COASTAL ENGINEERING DIVISION

Secretary, PWD, Karnataka highlighted the problems relating to creation of separate coastal engineering division. He, however, suggested that if NCPP comes up and the money sanctioned to the maritime States, then the State would be able to create separate coastal engineering departments. Other Member States also agreed with the views of Secretary, PWD, Karnataka. As such creation of separate coastal engineering division can be taken up as and when project is sanctioned.

(Action: Maritime States)

5.14 GABION PROPOSED BY M/S. MECCAFERRI IN RIVER TRAINING & WATER RESOURCES STRUCTURE.

Sri B.B. Karajagi, representative of Meccafferri, Italy, was requested to arrange the presentation on use of PVC coated gabions for coastal protection during the meeting. However, he did not turn up. Therefore, this item may be dropped.

5.15 STABIPLAGE TECHNOLOGY

Mr. Vaidyanathan of M/s CONSEPTS (representative of French firm in India) gave a presentation on Stabiplate Technology during the meeting. After presentation, Chairman requested member States/UTs to take up pilot project. Member from Karnataka requested M/s CONSEPTS to offer pilot project with an attractive package.

(Action: CPDAC Secretariat)

5.16 VENUE OF THE NEXT MEETING

Chairman, CPDAC, requested members present from the States to volunteer for next meeting of CPDAC. S.E., PWD, Pondicherry, representing Chief Engineer, PWD, Member, CPDAC, agreed for taking the matter with the Govt. of Pondicherry and host the next meeting in Pondicherry. CPDAC Secretariat may fix a date of next meeting after consulting Pondicherry member.

(Action: CPDAC Secretariat/Pondicherry)

5.17 Other Presentations

Shri Ajay Pradhan (DHI), New Delhi, gave a presentation on use of mathematical models in coastal engineering. Sh. Srinivasan, Garware, Chennai gave a presentation on gabions. Representatives of the companies were asked to be in touch with the maritime States for introduction of their products, if found suitable.

5.18 Any Other Item

With the permission of Chair, Shri S.K. Sinha, Member, Planning, GFCC, Patna, requested that out of the recommendations made by National Flood Commission, the items pertaining to cyclones and sea erosion may be circulated to States/UTs for comments and may be taken up in the next meeting for discussion.

(Action: CPDAC Secretariat)

In the end, Chairman, CPDAC, and other members thanked Shri G.C. Tallur, Secretary, PWD, Govt. of Karnataka, and Capt. R. Mohan, Director (Ports), Karnataka, and his team of dedicated officers and staff for hosting the 5th CPDAC meeting at

Mangalore, and making excellent arrangements for the participants. Member-Secretary, CPDAC, also thanked all the participants for their valuable contributions in making this meeting successful.

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

Site Visit:

As part of the 5th CPDAC meeting, all participants visited Ullal & Mukkacheri sites near Mangalore, Karnataka in the forenoon of 27th September 2002 to have on the spot observation of the sea-erosion problems in that area. During the site visit, it was observed that a vast portion of land had been eroded due to severe wave action. All the Committee members were of the view that suitable measures may be taken up by the Govt. of Karnataka to arrest further erosion. If suitable, Stabiplate may be tried for protecting the sites from sea erosion,

List of participants of 5th CPDAC Meeting is given at Annex-I.

**No.4/5/2002-CED/
Government of India
Central Water Commission
Coastal Erosion Directorate**

806(N), Sewa Bhavan,
R.K. Puram, New Delhi-110 066
Dated the October, 2002

**Subject: 5th Meeting of Coastal Protection & Development Advisory Committee
(CPDAC) – Forwarding of Minutes – reg.**

The undersigned is directed to enclose a copy of minutes of the 5th meeting of Coastal Protection And Development Advisory Committee (CPDAC) held on 26th September 2002, at Mangalore (Karnataka). 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.

If no comments are received from your side by 30-11-2002, the minutes of the 5th CPDAC meeting will be assumed as confirmed.

Encls : As above.

(Devendra Sharma)
Director
Tel.No.6195513
Fax No.6102267/6195290

Copy to CPDAC members and other participants.

1	Member (R M) C.W.C., 2 nd floor, Sewa Bhawan, R.K.Puram, New Delhi-66.	2	Chief Engineer (P&D), C.W.C., 815(N), Sewa Bhawan, R.K. Puram, New Delhi-66.
3	Commissioner (ER), MOWR, Block No. 11, 8 th floor, CGO Complex, Lodhi Road, New Delhi.	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 Surface Transport, 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., CORPORATE, Community Hall/ Kamrajpuram/R.S.Puram P.O. Coimbatore-641002 Chennai (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, 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. (Maharashtra)	16	Engineer-in-Chief (Water Resources), Secha Sadan, Govt. of Orissa, Bhubaneshwar - 751001. (Orissa)
17	Deputy Director General, Geological Survey of India, OME&MG Wing, Ratnakar Building, 4-Chowrangi Lane, Calcutta - 700016 (West Bengal)	18	Secretary, Irrigation & Waterways Deptt., Govt. of West Bengal, Jalsampad Bhawan, Salt Lake, Calcutta- 700091. (West Bengal)
19	Shri Shailesh Nayak, Head, Marine and Water Resources Division, Space Application Center, Ahmedabad -380053.	20	Chief Hydrographer, National Hydrographic Office, 17 A, Rajpur Road Dehradun-248001
21	Chief Engineer, APWD, Andaman & Nicobar Administration, Port Blair-744101	22	Superintending Engineer, Lakshadweep, PWD, Kavaratti, Lakshadweep-682555
23	Chief Engineer, PWD, 34, Lal Bahadur Shastri Street, Pondicherry-605001	24	Member (Planning), Ganga Flood Control Commission, Sinchai Bhawan 3 rd Floor, Patna – 800015.
25	Director (Ports & I.W.T.), Baithkol, Uttara Kannada, Karwar – 581302 Karnataka.	26	Secretary to Govt. of Karnataka, Public Works Department, 610, M.S. Building, Dr. B.R. Ambedkar Road, Bangalore - 560 001 (Karnataka)
27	Director, Beach Erosion Directorate, Central Water Commission, "Jaladhara", 27/1927-A, Kasturba Nagar, Kochu-Kadavanthra, P.O.Kadavanthra, Cochin - 682 020	28	Chief Engineer, Design Research and Construction Support, PWD, WRO, Cheppakkam, Chennai - 600 005.
29	Director, Coastal Erosion Directorate, CWC, New Delhi	30	Jt. Advisor (WR), Planning Commission Yojna Bhawan, Sansad Marg New Delhi

31	Sr. Jt. Commissioner (ER), MOWR, Block No.11, 8 th floor, CGO Complex, Lodhi Road, New Delhi-110003	32	I.Z.Poonawala, Jt. Director, CW&PRS, P.O.Khadakwasla, Pune-411024
33	Cdr. G.S. Inda, Dy. Hydrographer, West Block –IV, Wing –5, R.K.Puram, Naval Headquarters, New Delhi	34	A.S. Rajawat, Principal Investigator, Coastal Process Project, MNRD Space Application Center, Ahmedabad.
35	R.Sunder Raju, Superintending Engineer, Circle-II, PWD, Pondicherry-605001	36	Bhawani Shankar Rao, Sr. Professor, Karnataka Regional Engineering College, Surathkal, Karnataka.

To
All the Maritime States
(As per list)

Sub: Follow Up action on the various items of the 5th CPDAC meeting.

Ref: This Office letter no. 4(5)/2002-CED /570-605 dated 25/10/2002.

Sir,

Kindly refer to the above cited letter, where in the minutes of 5th. meeting of the Coastal Protection and Advisory Committee which was held on 26th. Sep'2002 at Mangalore (Karnataka) was sent to all the Members of CPDAC and participants of the meeting.

The following items pertaining to the State Govt. were discussed in the meeting and various actions to be taken by the State Govt. discussions were finalized there on as given under each item.

5.2 TO SORT OUT INCONSISTENCIES IN COASTAL LENGTHS FROM VARIES SOURCES.

- to approach Chief Hydrographer, National Hydrographic Office, 107-A, Rajpur Road, Post Box No.75. Dehradun- 248001 to reconcile the difference in the length of coast as given by the Chief Hydrographer and the State

5.3 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.

- to approach Chief Hydrographer, National Hydrographic Office, 107-A, Rajpur Road, Post Box No.75. Dehradun- 248001 to work out the modalities of sharing available data with NHO.
- As requested by the Dy. Hydrographer, New Delhi, para 2 of the item 5.3 of minutes of the 5th. CPDAC meeting has been amended as follows.

“Deputy Hydrographer informed that as part of hydrographic survey, Survey Ships collect hydrographic/ Oceanographic data and these are available at National Hydrographic Office (NHO), Dehradun. Sr. Jt. Commissioner (ER), MOWR, told that data collection is not a one time job. Deputy Hydrographer informed that NHO can provide coastal data at regular interval as well. When Deputy Hydrographer was asked to explore the possibilities of sharing the coastal data available with their department, he informed that modalities of sharing of available data can be worked out with NHO, Dehradun by CPDAC/Coastal States.”

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

5.4.1 RESEARCH PROPOSALS

- To prepare research proposals for consideration and funding from INCH, INCOH, etc.

5.4.2 SATELLITE IMAGERIES TO MONITER SHORELINE CHANGES.

- To approach Space Application Center for obtaining the coastal and National Remote Sensing Agency (NRSA) for satellite imageries to monitor the shoreline changes.
- As requested by the Director CW&PRS Pune the following may be added in the above item of the minutes of the 5th. CPDAC meeting for the benefit of the maritime states.

“ that CW&PRS Pune has established a full-fledged Remote Sensing Centre equipped with silicon graphics workstation and RS & GIS softwares such as EASIPACE and GEOMATICA. CW&PRS has already carried out projects for Coastal erosion and shoreline changes at Dahej, Mumbai, Kudankulam, etc. using satellite data. As such Member States may also approach CWPRS for solving coastal erosion problems using satellite imageries.”

5.6 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.

5.6.1 MODIFICATION IN DESIGN OF SEA WALL.

- To intimate CPDAC of the latest technologies for the coastal protection works.

5.6.2 PREPARATION OF INDIAN SHORE PROTECTION MANUAL.

- To go through Coastal Engineering Manual (CEM) released by the Coastal & Hydraulic Laboratory, US Army Corps of Engineers in May 2002 and give their comments on the necessity of preparation of Indian Shore Protection Manual.

5.7 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 has been prepared and submitted to MOWR in Dec 2002, incorporating proposals of the states of Karnataka, Maharastra, West Bengal, Tamil Nadu, Orissa and UT of Pondicherry .

- Remaining Maritime States/UTs to expedite finalization of their NCPP Proposal so that Consolidated National Coastal Protection Project (Phase-II) can be prepared.

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

5.8.1 TRAINING .

- To arrange training courses for their officers on coastal process, protection measures etc. either through CW&PRS, Pune or through some academic institutions or through any other Central/ State agencies. CW&PRS, has conducted a one day workshop in this regard on 26 Nov '2003 and send the report to all the participants with a copy to this office from which it is understood that twenty two participants from the states of Goa, Gujarat, Maharastra, Tamilnadu and U.Ts A&N Islands and Lakshadweep attended the workshop.
- Remaining states other than the above should also need to attend such workshops whenever CWPRS arranges.

5.9 NEW ACTIVITIES ASSIGNED TO THE CPDAC.

- to send the suggestions of the all the Member States about the contents of the integrated master plan for sustainable development of coastal zone as discussed,

5.10 COMPOSITION OF CPDAC

- to send the Bio-data of the experts for inclusion in the panel for selecting the non official members of CPDAC (except the States Kerala and Tamilnadu)in the next meeting,

5.11 STATUS OF COASTAL PROTECTION WORKS IN MARITIME STATES

- to send the present status on coastal protection works to the CPDAC secretariat in the prescribed format circulated by the CPDAC secretariat.