

No. 4/5/2012-CED/85-119  
भारत सरकार /Government of India  
केन्द्रीय जल आयोग /Central Water Commission  
तटीय अपरदन निदेशालय/Coastal Erosion Directorate

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कक्ष संख्या 906 (द०), सेवा भवन,  
राम कृष्ण पुरम, नई दिल्ली 110606  
Room No.906 (S), Sewa Bhawan,  
R.K. Puram, New Delhi-110606  
दिनांक/dated 27<sup>th</sup> January, 2012

To  
CPDAC Members/Invitees  
(as per list attached)

**Subject:** Agenda for 13th meeting of Coastal Protection and Development Advisory Committee (CPDAC) to be held at Mangalore, Karnataka during 9-10<sup>th</sup> February, 2012.

Sir,

Please find enclosed agenda note for the 13th CPDAC meeting scheduled to be held on 9<sup>th</sup> February, 2012 at Mangalore in Karnataka followed by field visit on 10<sup>th</sup> February, 2012. The follow up action taken by the maritime states /UTs/ Departments on the minutes of 12th meeting of CPDAC held at Bhubaneswar (Odisha) during 3-4<sup>th</sup> March, 2011 may kindly be communicated. Suggestion of new agenda items, if any, is invited from all the members/invitees. The venue and the particulars of contact / liaison officer for the meeting are as under.

**Venue:**

Goldfinch Hotel  
# 236/2A1, Bunts Hostel Road  
Mangalore-575003, Karnataka  
Tel: 0824-4245678

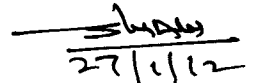
**Contact/Liaison Officer:**

Mr. Shanth Kumar, Joint Director (Technical )  
Sustainable Coastal Protection & Management Project  
Old Port Building, Bunder, Mangalore -575001  
Mobile: 09448166743 Fax: 08242-420374 e-mail: jdpmu@gmail.com

Kindly make it convenient to attend the meeting. It is also requested to intimate your exact time of arrival /departure to contact officer well in advance under intimation to this office.

**Encl: As above**

Yours faithfully,

  
27/1/12

०८ निदेशक/Director  
टेलीफोन/Tel. 011-26195513  
फैक्स/ Fax 011-26175862  
ई - मेल/E-mail: [cedte@nic.in](mailto:cedte@nic.in)

## **List of CPDAC Member/Invitees**

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|---|--|
| <p>1 Member (R M) &amp; Chairman, CPDAC<br/>Central Water Commission ,<br/>2<sup>nd</sup> floor, Sewa Bhawan,<br/>R.K.Puram, New Delhi-66.</p>  | <p>2 Chief Engineer (FM) ,<br/>Central Water Commission,<br/>901(S), Sewa Bhawan,<br/>R.K. Puram, New Delhi-66.</p>  |
| <p>3 Commissioner (Ganga),<br/>Ministry of Water Resources,<br/>8<sup>th</sup> Floor, Block -11<br/>CGO Complex, Lodhi Road,<br/>New Delhi-111003.</p>  | <p>4 Advisor (WR),<br/>Planning Commission,<br/>Yojna Bhawan, Sansad Marg,<br/>New Delhi-111001.</p>   |
| <p>5 Joint Secretary/ Advisor<br/>(Impact Assessment)<br/>Ministry of Environment &amp; Forests,<br/>6<sup>th</sup> Floor, Paryavaran Bhawan,<br/>CGO Complex, Lodhi Road,<br/>New Delhi-111003.</p>                          | <p>6 Development Advisor (Ports),<br/>537,Transport Bhawan,<br/>Ministry of Shipping,<br/>1, Parliament Street,<br/>New Delhi- 111011.</p>                                       |
| <p>7 Engineer-in-Chief (Irrigation)<br/>Irrigation &amp; CAD Department,<br/>Errum Manzil,<br/>Hyderabad - 500 082<br/>(Andhra Pradesh)</p>   | <p>8 Member (Agriculture)<br/>State Planning Commission,<br/>Govt. of Tamil Nadu,<br/>Ezhilagam, Chepauk,<br/>Chennai - 600005.</p>  |
| <p>9 Chief Engineer (C&amp;SR),<br/>Central Water Commission,<br/>Sangamam,<br/>Gandhimaanagar, Peelamedu P.O.,<br/>Coimbatore – 641 004</p>  | <p>11 Chief Engineer (Irrigation)/WR,<br/>2<sup>nd</sup> Floor, Junta House,<br/>Annexe, Panaji- 403001.<br/>(Goa).</p>  |
| <p>11 Director,<br/>National Institute of Oceanography,<br/>Dauna-Paula,<br/>Goa- 403001.</p>   | <p>12 Secretary,<br/>Narmada, Water Resources &amp;<br/>Water Supply Department,<br/>Govt. of Gujarat,<br/>Block No. 9, Sardar Bhawan,<br/>Sachivalaya, Gandhinagar- 382011.</p> |
| <p>13 Chief Engineer,<br/>Irrigation&amp;Admn.,<br/>Govt. of Kerala,<br/>Thiruvananthapuram- 695033</p>   | <p>14 Director,<br/>Central Water &amp; Power Research Station<br/>(CWPRS),<br/>P.O. Khadakwasla,Pune - 411124.</p>  |
| <p>15 Chief Executive Officer, (Commissioner, Water<br/>Transport)<br/>Maharashtra Maritime Board,<br/>Indian Mercantile Chamber (3<sup>rd</sup> Floor)<br/>Ramajibhai Kamani Marg,<br/>Ballard Estate, Mumbai - 400 001.</p> | <p>16 Engineer-in-Chief (Water Resources),<br/>Secha Sadan, Govt. of Orissa,<br/>Bhubaneshwar - 751101.<br/>(Orissa)</p>   |
| <p>17 Deputy Director General,<br/>Geological Survey of India,<br/>Marine Wing,<br/>Bhu Vigyan Bhavan, DK-6, Sector-2,<br/>Salt Lake City, Kolkata - 700091</p>   | <p>18 Secretary,<br/>Irrigation &amp; Waterways Deptt.,<br/>Govt. of West Bengal,<br/>Jalsampad Bhawan, Salt Lake,<br/>Kolkata- 700091.</p>                                      |

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| <p>19 Head, Marine and Water Resources Division,<br/>Space Application Center,<br/>Ambawadi Vistar P.O.,<br/>Ahmedabad –380015</p> <p>21 Chief Engineer, APWD,<br/>Andaman &amp; Nicobar Administration,<br/>Port Blair-744111</p> <p>23 Chief Engineer, PWD,<br/>34, Lal Bahadur Shastri Street,<br/>Pondicherry-605001</p> <p>25 Director (Ports &amp; I.W.T.),<br/>Baithkol, Uttara Kannada,<br/>Karwar – 581302<br/>Karnataka.</p> <p>27 Dr. Vallam Sundar<br/>Professor, IIT Madras<br/>Ocean Engineering Department<br/>C-6-13, Second Link Road, IIT Madras, Chennai -<br/>600 036</p> | <p>20 Chief Hydrographer to the Govt. of India,<br/>Directorate of Hydrography<br/>West Block IV, Wing -5, R.K. Puram, Sec-1<br/>New Delhi-110 066</p> <p>22 Superintending Engineer,<br/>Lakshadweep, PWD,<br/>Kavaratti, Lakshadweep-682555</p> <p>24 Member (Planning),<br/>Ganga Flood Control Commission,<br/>Sinchai Bhawan 3<sup>rd</sup> Floor,<br/>Patna – 800015.</p> <p>26 Shri M.M. Kamath<br/>Chief Engineer (Retd.)<br/>Chairman, T.E.C. Anti-sea Erosion Works in<br/>Karnataka<br/>Mizar, Ramakrishna Pai Compound<br/>Mannagudda, Mangalore-575 003</p> <p>28 Shri D.K. Maiti<br/>BJ-95, 2nd Floor<br/>Sector-2, Salt Lake<br/>Kolkata-700091</p> |
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**Permanent /Special Invitees:**

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|---|---|
| <p>29 Economic Adviser<br/>Ministry of Water Resources<br/>Room No. 7, B Wing<br/>Shashtri Bhawan<br/>New Delhi – 110001</p> <p>31 Director,<br/>Centre for Earth Science Studies,<br/>Akkulam,<br/>Thiruvananthapuram - 695 031<br/>(Kerala)</p> <p>33 Director,<br/>Beach Erosion Directorate,CWC<br/>"Jaladhara", 27/1927-A,<br/>Kasturba Nagar, Kochu-Kadavanthra,<br/>P.O.Kadavanthra, Kochi - 682 020.</p> <p>35 Director,<br/>National Institute of Ocean Technology, NIOT<br/>Campus, Velachery – Tambaram Main<br/>Road,Narayanapuram, Pallikaranai,<br/>Chennai – 600 100</p> | <p>30 Chief Engineer,<br/>Design Research and Construction Support,<br/>Water Resources Organization,<br/>Public Works Department<br/>Cheppakkam, Chennai - 600 005</p> <p>32 Project Director &amp; Sci G<br/>ICMAM Project Directorate<br/>NIOT Campus,<br/>Velachery-Tambaram Main Road,<br/>Pallikaranai,<br/>Chennai – 601 302</p> <p>34 Director,<br/>Indian National Centre for Ocean Information<br/>Services(INCOIS),<br/>"Ocean Valley" Pragathi Nagar (BO),<br/>Nizampet (SO) ,Hyderabad - 500 090</p> |
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**AGENDA NOTE for 13<sup>th</sup> CPDAC MEETING**  
(9-10<sup>th</sup> February, 2012 at Mangalore, Karnataka)

**13.1 CONFIRMATION OF THE MINUTES OF 12TH MEETING**

The draft minutes of 12<sup>th</sup> Coastal Protection Development Advisory Committee meeting, held at Bhubaneswar (Orissa) during 3-4<sup>th</sup> March, 2011 were circulated to all the members of CPDAC vide letter no. 4/5/2011-CED/ 213-46 dated 1<sup>st</sup> April, 2011. Development Adviser (Ports), Ministry of Shipping, Joint Director, CW&PRS and Chief Engineer & Basin Manager, Water Resources Department, Govt. of Odisha has sent observations on Para 12.11, 12.5.2 and Annexure II of the draft minutes respectively as below. This may be considered by the Committee:

Existing Text / Para of Minutes	Comments /Suggested Changes
<p><b><u>2<sup>nd</sup> Sentence of Para 12.11</u></b></p> <p>"He told that Ministry of Shipping is concerned with policy issue only and has no control over construction of smaller ports."</p>	<p><b><u>Change suggested by Development Advisor (Ports), Ministry of Shipping</u></b></p> <p>"He informed that Ministry of Shipping is concerned with the development of 12 Major Ports, 6 on the east coast and 6 on the west coast and the policy issues of entire Port sector. Maritime State Governments are responsible for development of Minor Ports located in the territory".</p>
<p><b><u>Para 12.5.2 : MANUAL ON CONSTRUCTION TECHNIQUES OF COASTAL PROTECTION WORKS</u></b></p> <p>CW&amp;PRS entrusted with the job was not represented in the meeting. Technical Memorandum on "Guidelines for Design and Construction Technique of Sea Wall" submitted to the CPDAC secretariat by CW&amp;PRS was circulated to the members. Chairman, CPDAC observed that the circulated Technical Memorandum cannot be considered as a guideline and requested the members for suggesting material with subject matter that need to be added for use as guideline.</p>	<p><b><u>Comments of Joint Director, CW&amp;PRS</u></b></p> <p>The "Guidelines for Design and Construction of Sea Walls" have been prepared by CWPRS as Technical Memorandum and that would suffice as a reference manual for execution of Coastal Protection works. In the memorandum, practical aspects in designing and execution of the coastal protection works are discussed in detail. Hence, it can be considered as guidelines for design and construction of the seawalls. However, inputs from the state government agencies, if any, can be circulated in the next meeting of CPDAC for discussion.</p>
<p><b><u>Annexure-II SESSION -1: PRESENTATIONS</u></b></p> <p><b><u>2. Orissa</u></b></p> <p>Protection at Puri is being proposed under JNNURM. It was also indicated that other protection measures may be considered for funding under "Flood Management Programme"</p>	<p><b><u>Suggestions of Chief Engineer &amp; Basin Manager, Lower Mahanadi Basin, Water Resource Dept., Govt. of Odisha</u></b></p> <p>Protection to coast near Puri town is being proposed under JNNURM. In case of coastal protection in other areas north of Puri and near Gopalpur, possibility of funding under Flood Management Programme (FMP) is being explored. Assured funding is very much necessary for taking up the protection measures in the selected coastal areas.</p>

With above changes , the minutes of 12<sup>th</sup> CPDAC meeting may be confirmed. Updated minutes will be uploaded on the CPDAC Website after issuing necessary corrigendum.

## **13.2 STATE WISE COASTAL LENGTH AND COASTAL ATLAS**

### **13.2.1 STATEWISE COASTAL LENGTH**

In the 11th meeting, representative from NHO informed the committee that a comprehensive exercise of re-evaluating coastal length is being taken up in the wake of methodological changes based on Survey of India maps. NHO was requested to document the standardized procedure for evaluating / determining the coastal length and methodology adopted. No progress was noted on the same during 12<sup>th</sup> CPDAC meeting. Further information has not been received from NHO on this aspect.

**Progress on this aspect may be informed by NHO representative to the committee during the meeting.**

As decided in 12th CPDAC meeting, SAC, Ahmedabad was requested to provide an interim report of coastal length based on satellite imageries. Information on the same has not been received from SAC, Ahmedabad.

**Progress on this aspect may be informed by SAC, Ahmedabad representative to the committee during the meeting.**

### **13.2.2 SHORELINE CHANGE ATLAS OF INDIA**

The 2nd meeting of the reconstituted **Sub-committee of CPDAC on Coastal Atlas** was organized on 23rd September, 2011 at CWC, HQ, New Delhi to monitor the overall progress and suggest midterm correction, if any. It is informed that SAC, Ahmedabad was authorized to incur expenditure upto Rs. 24 lakh in Nov, 2010 for preparation of Shoreline Change Atlas of India. During the meeting, it was informed by SAC, Ahmedabad that though funds could not be utilized in FY 2010-11, physical progress has been made. While elaborating upon the physical progress, it was informed that works have already been completed for the states of Tamil Nadu, Maharashtra and Gujarat as per prioritization agreed to in the first meeting of sub-committee. During the 2nd meeting, work for States of Andhra Pradesh, Orissa and Kerala were prioritized. As demanded by SAC Ahmedabad, authorization to incur expenditure upto Rs. 20 lakh during FY 2011-12 has been issued by MoWR in November, 2011.

**SAC, Ahmedabad may give a presentation on physical/financial progress of the work. Draft maps may be made available to CPDAC members for their observation/suggestions. Future fund requirements may also be indicated.**

One of the proposed outcomes of Shoreline Change Atlas of India will be to display the already existing coastal protection works. In this regard, respective CPDAC members from maritime States/UTs have been requested frequently to provide the information on location of existing coastal protection works in spatial domain (either in map form or latitude/longitude) for incorporation in the atlas. However, till date information in respect of **Goa, Gujarat, Lakshadweep, Kerala** (in map form) and **Andhra Pradesh** has been received and forwarded to SAC, Ahmedabad for incorporation in the Atlas.

Since the data received from **Tamil Nadu** appeared to be incomplete, the concerned State Govt. agency has been requested to confirm the completeness of furnished data for entire coastline in the State. Information received from Maharashtra is insufficient as it is not in spatial domain/complete. Respective State Govt. agencies have been requested to provide complete information. No information has been received from **West Bengal, Orissa, Karnataka, Puducherry and A&N Islands**.

**Respective States/UTs who have yet to provide the complete information on existing coastal protection works may kindly submit the same urgently so that the work of Shoreline Change Atlas of India may be completed in time i.e. by April, 2012.**

### **13.3 DATA COLLECTION, COMPILATION ANALYSIS AND PUBLICATION**

During 12<sup>th</sup> CPDAC meeting, Chairman, CPDAC emphasized the importance of interaction with the concerned organization like CW&PRS, Integrated Coastal and Marine Area Management, Project Directorate (ICMAM-PD), Indian Nation Centre for Ocean Information System (INCOIS) etc. in connection with data collection and stated that a separate meeting can be organized on this issue before the next meeting of CPDAC. In pursuance of this, a meeting of concerned agencies was organized on 16<sup>th</sup> December, 2011 in CWC, HQ. Representatives from CWC, Centre for Earth Sciences Studies (CESS), ICMAM-PD, National Hydrographic Office (NHO), Institute of Hydraulics and Hydrology (IHH), Poondi and Indian Nation Centre for Ocean Information System (INCOIS) participated in the meeting. Participating institutes briefed about the current data collection programme and future plan as well. In this meeting, it was decided to identify the type of data needs, prepare national status report on data availability, sharing of future plan prepared by various agencies for data collection to avoid duplication, use of latest instrumentation for data collection to enable it for using modeling purposes and establishing a capacity building programme for training personnel engaged in data collection activity.

Now it is proposed to constitute a **Sub-committee of CPDAC on Coastal Data Collection**. The proposed composition and terms of references (as given below) may be discussed and finalized during the meeting.

#### **Proposed composition of sub-committee**

- |    |   |                  |
|----|---|------------------|
| 1. | Chief Engineer (FM),CWC                                 | Chairman         |
| 2. | Representatives from INCOIS, NIO, NHO, MoEF, CESS, NIOT | Member           |
| 3. | Project Director (ICMAM)                                | Member           |
| 4. | Director(Beach Erosion), CWC                            | Member           |
| 5. | Joint Director, CW&PRS                                  | Member           |
| 6. | One State/UT each from East Coast & West Coast of India | Member           |
| 7. | Director (Coastal Erosion), CWC                         | Member-Secretary |

## **Proposed ToR of the sub-committee**

### **Prepare a report and submit to CPDAC including followings:**

1. Status of the coastal data being collected at national level by various agencies and its inventory
2. Uniform format for data collection to be followed by each agency
3. Plan for data collection and requirement including instrumentation for entire coastline for the country addressing the priority areas
4. Utility of such data for planning of coastal protection and shoreline management initiatives
5. Future strategy/Guidelines for Coastal Data Collection, compilation and publication of same considering relevant security guidelines, if any.

## **13.4 RESEARCH AND DEVELOPMENT**

### **13.4.1 RESEARCH PROPOSALS**

In 12<sup>th</sup> CPDAC meeting, Chief Engineer (DR&CS), Govt. of Tamil Nadu informed that four research proposals submitted to INCH secretariat have not been sanctioned. Status of the same may be discussed.

Representative from CW&PRS may present the relevant guidelines to State/UT agencies for submission of the research proposal to INCH-secretariat at CW&PRS, Pune and same may be discussed during the meeting. Institutes such as CESS, CW&PRS, ICMAM and NIO may co-ordinate with States/UTs in formulation of research proposals and its implementation as per the relevant guidelines.

### **13.4.2 INSTITUTIONAL STRENGTHENING**

#### **13.4.2.1 ORGANIZATIONS**

During 12<sup>th</sup> CPDAC meeting, Smt. K.P Padmavathy, CE, DR&CS, PWD, Tamil Nadu stated that the division which was engaged in the data collection and research work has been assigned some other work by Govt. of Tamil Nadu and urged Chairman, CPDAC that a division in each State may be sponsored by CWC for data collection. Shri S.V Prabhavalkar, SE, Goa informed that Goa has such a dedicated division but it needs support for automation on data collection from CWC. Chairman, CPDAC suggested that States may explore the funding sources through well-conceived proposals.

**All the maritime States are requested to discuss their current organization structure for implementation of coastal protection works, existing data collection setup and requirements. The same would be discussed in the context of outcome of the meeting of concerned agencies engaged in data collection (Agenda item 13.3.)**

### **13.4.2.2 TRAINING AND STUDY TOURS**

As a part of annual training calendar of National Water Academy, one week training programme on “**Coastal Erosion Protection and Coastal Zone Management**” was jointly organized by National Water Academy and CW&PRS, Pune during 6-10th June, 2011. Additionally, NWA Pune has been requested to extend the scope of the training programme using expertise of other institutes as NIOT, ICMAM, IIT Chennai, NHO, NIO etc. **Above mentioned institutes may also indicate the specialized training programme being organized by them and share with other participants for utilization in future. States/UTs may discuss and request for specialized training programme from these institutes.**

## **13.5 COASTAL MANUAL**

### **13.5.1 PREPARION OF INDIAN SHORE PORTECTION MANUAL**

During 12<sup>th</sup> CPDAC meeting, a presentation was made by Sh. Sanil Kumar, Scientist, NIO on the background and status of manual on “Protection and control of coastal erosion in India”. He pointed out that the work assigned to NIO is to update the existing manual and not to prepare a fresh Shore Protection Manual. He suggested to keep the original name of the manual instead of giving it a new name. In the presentation he indicated the date of draft finalization as July, 2011 and completion by November, 2011. However the same is still awaited.

**Representative from NIO may inform the status of the above work and reason for delay in completion of the work to the committee.**

### **13.5.2 MANUAL ON CONTSRUCTION TECHNIQUE OF COASTAL PROTECTION WORKS**

During the 12th CPDAC meeting , Chairman, CPDAC observed that the circulated Technical Memorandum on “Guidelines for Design and Construction Technique of Sea Wall” prepared by CW&PRS cannot be considered as a guideline and requested the members for suggesting material with subject matter that need to be added for use as guideline. CW&PRS has also requested comments/inputs of the State Agencies on the same. The same may be discussed/finalized during the meeting.

## **13.6 REVIEW OF THE EXISTING WORKS**

This sub-committee was constituted in respect of one of the function assigned to CPDAC i.e. **“To review the performance of the works carried out by States and evolve improved design techniques based on such experience from time to time.”** Now it is proposed that mandate of this sub-committee should also include the additional function of CPDAC i.e. **“To arrange effective and timely monitoring of the coastal protection & development projects.”** And hence the sub-committee will monitor the **coastal protection & development projects** including projects under ADB assistance (refer agenda item 13.7)



In pursuance of the decision taken in the 12<sup>th</sup> CPDAC meeting, the sub-committee of CPDAC on “**Performance Evaluation of Coastal Protection Works**” has been reconstituted consisting of the followings:-

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|--|------------------|
| 1. Chief Engineer (C&SRO), CWC, Coimbatore         | Convenor         |
| 2. Joint Director, CW&PRS, Pune                    | Member           |
| 3. Representative of SAC, Ahmedabad                | Member           |
| 4. Representative of concerned State/UT            | Member           |
| 5. Representative of NIO, Goa                      | Member           |
| 6. Director, Beach Erosion Directorate, CWC, Kochi | Member-Secretary |

The sub-committee has visited the State of Tamil Nadu in two phases in July, 2011 and September, 2011. **The sub-committee may also include a representative from Coastal Erosion Directorate, CWC as special invitee. Director (Beach Erosion), CWC and Member-Secretary of the Sub-committee may inform the committee about the outcome of the visit along with future programme for sub-committee.**

### **13.7 NATIONAL COASTAL PROTECTION PROJECT (NCPP)**

NCPP was initiated with a view to explore the possibility of funding coastal protection works through external assistance. After discussion between GoI and Asian Development Bank (ADB) for funding on coastal protection works, ADB approved grant for Project Preparatory Technical Assistance (PPTA). The PPTA was used to prepare an investment programme for Sustainable Coastal Protection and Management Project in the States of Goa, Maharashtra and Karnataka. Under PPTA an investment programme estimating to \$404.6 million USD including ADB loan of \$250 million has been envisaged. Loan from ADB to states will be in the form of back-to-back loan. After loan negotiation, the multi-tranche facility (MFF) for project was approved by ADB on 29th September, 2010 for amount of \$250 million to be implemented over a period of 8 years.

Term of Reference (ToR) of PPTA also included preparation of DPR for one or two projects in each participating state for immediate implementation based on state's priority. Mirya Bay (Maharashtra), Coco and Colva Beach (Goa) and Ullal (Karnataka) projects were selected for implementation in first tranche and Feasibility Study and Design report for these projects were completed under PPTA. Since State of Goa is not pursuing TAC Approval other two project namely **Ullal Coastal Erosion & Inlet Improvement Project** in Karnataka (estimated Cost Rs. 170.7 Crore at 2011 Price Level) and **Mirya Bay Coastal Erosion And Protection Project** in Maharashtra (estimated Cost Rs. 62.51 Crore at 2011 Price Level) have been accepted by the Advisory Committee On Irrigation, Flood Control And Multi-Purpose Projects in its 110th meeting held at CWC HQ, New Delhi on 20th July, 2011. Projects are to be implemented as Pilot projects under National Coastal Protection Project of Government of India with technical and financial assistance of Asian Development Bank and will be reviewed in post-project scenario. Afterwards the Government of India and the Asian Development Bank (ADB) signed an agreement for the first tranche (\$51.555 million loan) under the \$250 million Sustainable Coastal Protection and Management Investment Programme on 17.08.2011. The

first tranche loan will focus on heavily eroded coast in Karnataka (Ullal) and Maharashtra (Mirya Bay).

**Representatives from State of Karnataka and Maharashtra may provide the status of respective projects to CPDAC.**

### **13.8 MASTER PLAN FOR COASTAL PROTECTION**

Status of Master Plan preparation by respective State/UT may be discussed during the meeting. States/UTs who have such master plan may share and discuss it during the meeting for the benefit of other States/UTs.

### **13.9 COMPOSITION OF CPDAC**

Incase **Sub-committee of CPDAC on Coastal Data Collection** is constituted as proposed under agenda item 13.3, representatives from INCOIS and NIOT may be included as special invitee in CPDAC.

### **13.10 STATUS OF COASTAL PROTECTION WORKS IN MARITIME STATES/UTs:**

Information on existing costal protection works for incorporating in Shoreline Change Atlas of India is being pursued from the States/UTs. Additionally information on Coastal erosion and protection has been compiled for all the States/UTs and same is enclosed as **Annexure-I**. It is to be noted that updated information in respect of State of **Maharashtra, Orissa, West Bengal** is still awaited even after several follow-ups. Information in respect of **A&N Islands** has not been received. **All States/UTs are requested to provide the updated information regularly for compilation in format as per Annexure-I**

It is also proposed to compile the detailed information on status of coastal erosion, status of protection and funding requirements etc. **Hence all the States/UTs are required to submit a note on following:-**

1. Extent of coastal erosion problem in the State, district-wise
2. Current Status of coastal protection in the respective, affected areas/district
3. Tentative funding requirement for Data collection, maintenance of existing structure and new Coastal Protection Works during XII plan
4. Recommended/ Sanctioned outlay, if any, for above works
5. Organization structure of state department implementing coastal protection works
6. Any research proposal being submitted for funding

**13.11 Anti sea erosion measures in Lakshadweep- Examination of Maldivian Model for Shore Protection** (New Agenda item: Based on Excerpt from communication from Secretary (Works), UT of Lakshadweep). Excerpt of communication is as follows:

*"The Adminstrator of UT of Lakshadweep during his visit to Maldives had suggested new model of anti sea erosion measures to CWPRS which in its reply had downloaded the Maldivian model for shore protection through internet and a letter was sent. The administrator requested Ministry of Home Affairs to constitute an expert committee with a member from Lakshadweep, while submitting the comments of UTL on the Maldivian Model of shore protection sent by CWPRS vide their letter dated 17.01.2011.*

*The technology is a new one by which shore protection can be provided by building Mineral accretion structures in the offshore areas to increase the growth and steadily create a strong structure, which absorbs wave energy. The present model of tetrapods effectiveness is questionable and also makes the beaches ugly and unuseful."*

As per direction of Ministry of Home Affairs, Lakshadweep Administration has requested CWC to constitute an expert committee with engineers, ecologist, biologist and representative of Lakshadweep, etc. to examine the Maldivian model in detail, after visiting Maldives, if necessary.

**CW&PRS and representative of Lakshadweep are requested to give details about the matter during CPDAC meeting. Based on discussion, a committee may be constituted to examine the Maldivian model for shore protection in the context of its applicability for Lakshadweep.**

#### **13.12 ANY OTHER ITEM WITH THE PERMISSION OF CHAIR**

#### **13.13 VENUE OF THE NEXT MEETING**

**Annexure-I****STATE/UT WISE STATUS OF COASTAL EROSION AND PROTECTION**

S.N	State/ UT	Coastal Length (km)	Coastline Affected by Erosion(km)	Coastline Protected (km)	Coastline yet to be protected (km)	Remarks
		(as per NHO)	(given by respective States/UTs)			
Mainland						
1	Gujarat	1214.7	124.21	28.74	95.47	As of Mar 2011
2	Maharashtra	652.6	263	127	136	Updated Information awaited
3	Goa	160.5	25.2	8.25	16.95	upto of March 2011
4	Karnataka	280	152.733	57.989	94.744	As of Mar 2011
5	Kerala	569.7	478.14	346.752	131.388	As of March 2010
6	Tamil Nadu	906.9	151.81	75.62	76.19	As of Oct 2010
7	A.P.	973.7	65.7	20.45	45.25	As of Jan 2009
8	Orissa	476.4	107.55	10	97.55	Updated Information awaited
9	West Bengal	157.5	125	80.8	44.2	Updated Information awaited Coastline protected information is upto March 05
10	Puducherry	30.6	9.495	3.195	6.3	As of Dec 2010
Total Mainland		5422.6	1502.838	758.796	744.042	
Islands						
11	Lakshadweep	132	145.79 <sup>&amp;</sup>	71.51	74.28	As of Jan 2011 ( <sup>&amp;</sup> As reported by UT of Lakshadweep ,coastal length is 145.79 km and entire coastline is affected by erosion)
12	A&N Island	1962	-	-	-	Information not received
Total Islands		2094	145.79	71.51	74.28	
TOTAL INDIA		7516.6	1648.628*	830.306*	818.322*	
In Percentage		100.00%	21.93%	11.05%	10.89%	

\* Excluding A&amp;N Islands