

**INDIA**  
**National Cyclone Risk Mitigation Project, Phase II (NCRMP-II) P144726**  
**Implementation Support Mission (August- September 2017)**  
**Aide Memoire**

**I. Introduction**

1. A World Bank mission<sup>1</sup> visited the states of Karnataka (August 28-September 1, 2017), West Bengal (September 20-22, 2017) and Gujarat (September 25-27, 2017); to carry out a Project Implementation Support Mission for the National Cyclone Risk Mitigation Project Phase II (NCRMP-II). The mission would like to thank the NDMA and the participating States for their time and support extended during the mission. In addition, a video conference was held at NDMA to discuss the progress of Maharashtra and Kerala (August 21, 2017). This aide memoire summarizes the mission's observations, discussions, findings and key agreed steps.

**II. Key Project Data**

Board Approval	May 28, 2015	Achievement of PDO	Satisfactory
Effectiveness Date	Nov. 09, 2015	Implementation Progress	Moderately Unsatisfactory
Credit Closing Date	March 15, 2021	Problem Flags	None
Credit (original)	US\$308.40 million	Safeguards	Moderately Unsatisfactory
Project age	18 months	Fiduciary	Moderately Satisfactory
% Disbursed	15.87%		

**III. Project Development Objectives**

2. The Project Development Objective (PDO) of the NCRMP II is "*to reduce vulnerability to cyclones and other hydro-meteorological hazards of coastal communities in project states, and increase the capacity of the State entities to effectively plan for and respond to disasters.*"

3. **Overall Project Status:** Overall implementation progress based on cumulative progress in all the states is rated as **Moderately Unsatisfactory**, primarily due to lack of adequate progress in Kerala and Maharashtra. West Bengal and Gujarat have tendered more than 50 per cent of works and majority are under implementation. Karnataka and Goa have initiated tendering of Multi-Purpose Cyclone Shelter (MPCS) works; Kerala and Maharashtra are still preparing Detail Project Reports (DPR) and undertaking Environmental/Social Impact Assessment (EIA/SIA) studies for their identified works. Karnataka is yet to undertake EIA/SIA for two bridges and Manikatte Saline Embankment. All contract awards need to be completed latest by April 2018 so as to leave enough time for implementation.

<sup>1</sup> The mission was led by Anup Karanth (Senior Disaster Management Specialist), Jurminla Jurminla (Procurement Specialist), Neha Vyas (Senior Environment Specialist), Suprii Dua (Finance Management Specialist), Peeyush Sekhsaria (Disaster Management Specialist), Murahari Reddy (Road Specialist, Consultant) and Vinod Gautam (Environment - Consultant).

#### IV. Current Implementation Status and Issues

##### Component A: Early Warning Dissemination System (EWDS)

4. The NDMA has engaged Telecommunications Consultancy India Ltd. (TCIL) for this component since January 9, 2014 (under NCRMP-I). The firm has been asked to provide recommendation to the States on technology options for the EWDS. Maharashtra, Goa, Karnataka and Kerala are engaging TCIL as the knowledge partner for implementation of EWDS. It was agreed that these states will finalize contract, proposal and bid documents by February 2018. Gujarat and West Bengal are engaging the process of hiring the services of separate consultants for this component. Gujarat State Disaster Management Authority (GSDMA) has proposed different technology option for EWDS and this has been agreed by NDMA on August 2017. The Request for Proposal (RfP) will be ready by end October 2017; similarly, West Bengal will issue RfP to shortlisted firms by end of October 2017.

##### Component B: Cyclone Risk Mitigation Infrastructure

###### GOA

5. **Multi-Purpose Cyclone Shelters (MPCS):** The state has proposed to construct 16 MPCSs (number reduced as per the available outlays). The model DPR and bid documents for Dabolim MPCS have been cleared by World Bank. Tender for 7 MPCS have been floated on June 19, 2017, out of which 5 have been contracted and 2 will be retendered by end of October 2017. Another 3 MPCS will be tendered by end of November 2017 and remaining by December 2017. The screening exercises have been conducted for all identified MPCS sites and reports for 7 MPCSs tendered so far have been resubmitted to World Bank (WB) after incorporating the comments provided earlier. The State has decided to drop the construction and rehabilitation of 30 km of access roads as connectivity within the state and to the MPCS is already available and there is no need for the access roads, and shall utilize the outlay for construction of MPCS/saline bunds. The mission encouraged the SPIU to look at the approach towards management and maintenance of MPCS in Odisha, Andhra Pradesh and formalize the guidelines for MPCS.

6. **Saline Bunds:** The mission has reviewed and advised on the design foundation for Diwar Island. The Implementing Agency (IA) have carried out foundation exploration on the alignment of Diwar Island. TERI is on board to undertake the Environment and Social Impact Assessment studies (EIA/SIA) which is in progress. Based on the assessment, a sub-project specific Environmental Management Plan (EMP) and a Resettlement Action Plan (RAP) is under preparation. The screening report for saline embankments/bunds were submitted by the state earlier this year, on which comments/suggestions were provided. Tendering is likely to initiate by December 2017.

7. **Underground Electrical Cabling Works:** Rural Electrification Corporation has been entrusted with finalization of alignment. Draft DPR was submitted on October 9, 2017 to the World Bank and is currently under review. TERI is undertaking the Environment and Social Impact Assessment studies (EIA/SIA) and based on the outcome of these assessments, sub-project specific EMPs and RAPs will be prepared. The EIA/SIA study is currently underway.

## **GUJARAT**

8. **Multi-Purpose Cyclone Shelters:** Under this sub-component, the state has proposed to construct 100 MPCSSs (number reduced as per the available outlays). Of these, 18 MPCSSs are completed, 8 MPCSS are under construction, 45 MPCSS contracts have been awarded, and remaining 29 MPCSS are in the tendering stage and will be awarded by December 2017. SPIU informed that they are contemplating treating each MPCSS as a unit of GSDMA and agreed to share the revised shelter level management plan with PMU/NDMA and World Bank at the earliest.

9. The mission visited two MPCSS sites each (Katpor & Suva Village) in Bharuch. The observations are as follows: a) Monitoring and Supervision: The quality of construction and supervision of site works was found inadequate and need to be substantially improved (see Annex 2 for details of findings). The mission/ NDMA advised that TPQA reports be shared on a quarterly basis along with compliance report of the implementing agency for monitoring the quality at PMU level. (b) Design details – The mission identified inadequacies in design details of disabled toilets, bathrooms, wash basin heights, disabled access, door and window fixtures, access to mummy, water tanks etc. Dimensioned construction drawings need to be developed for certain minimum areas like the toilet blocks, disabled access and other problem points. The mission suggested that a workshop be organized for all IA, TPQA, PMSC staff, contractor staff on design detailing what was found to be problematic. (c) The mission suggested that the Bill of Quantities need to be verified for items like door window panels, frames, fixtures and corrective action taken to bring them upto standard. (d) The mission observed that the generator is of excess capacity and recommended to revisit the capacity requirement of the Generator for all remaining MPCSS and accordingly share the revised specifications with the Bank for concurrence. (e) In the presence of reliable electricity connection to the MPCSS and a generator back-up, the installation of solar photovoltaics should be revisited. In already installed locations the detailing of panel fixtures and related cabling needs to be corrected to withstand cyclonic winds in the region. (f) Community engagement and use of MPCSS during regular times need to be tabulated for each MPCSS. The mission appreciated the effort taken by GSDMA on the community outreach programme on MPCSS and further advised on engaging the community to identify ways in which the MPCSS will be used for regular purpose and build a sense of ownership. The guidelines on MPCSS management and maintenance have not yet been issued. And (g) The above comments hold true for the revised MPCSS designs and BoQs, the same to be shared with the WB and PMU-NDMA. For further details of site visit observations on MPCSS, refer Annexure 2.

10. **Access/Evacuation Roads and Bridges:** Under this component, 43 access roads totaling about 156.74 km are proposed to be constructed. To date, 20 roads (69.13km) falling outside CRZ have been completed. 19 roads (82.52km) are 95% completed in terms of physical progress. 4 roads will be tendered out by end of October 2017. The mission visited four sites in Surat and Bharuch Districts. The mission observed inadequate/deficient contract management and quality issues in the roads construction: a) In the completed road works, the mission noticed few issues regarding road compaction, fixing signage, defects in carriage ways, water stagnation at culverts, improper choice of material and design/construction of crash barrier system etc. The mission advised that all such issues should be fully rectified before the completion certificate is issued; b) In the on-going works; the DSC and R&B Engineers have not reviewed the DPRs to

identify the deficiencies, deviations, additional items of works required over and above the provisions in the Contract Agreement; c) In all road works Temporary Bench Markers (TBMs) are absent. Reference pillars are also absent in many packages; d) the Contract Agreement specifies conduct of monthly management meetings by the Engineer (GCC sub-clause 31), which have not been held for the road works visited; and e) the monthly progress report and quality control register needs to be maintained and available at the field level. For further details of site visits, refer Annexure 3.

11. ***Underground Electrical Cabling Works:*** Paschim Gujarat Vij Company Limited, which is the executing agency for this sub-component have prepared the detail project report (DPR). The DPR on electrical works has been cleared by World Bank on June 2017 while EIA/SIA report is under review.

### **KARNATAKA**

12. ***Multi-Purpose Cyclone Shelters:*** The State has proposed to construct 11 MPCs. All the sites have been identified and the required CRZ clearances have been obtained. Consolidated screening reports for all MPCs will be finalized and disclosed by December 2017 based on several rounds of comments/feedback that have been provided by the Bank. Approval for the DPR of Thekatte MPCs, as a model DPR, has been provided by the Bank. Out of the 11 MPCs, 7 MPCs of school model have been tendered in August 2017. The designs and drawings of MPCs at Hosabetu was reviewed by the Bank in the month of Aug 2017, the revised design based on the suggestions is to be provided by Nov 2017. One remaining MPCs site in a school premise has been finalized for which the DPR preparation is under progress.

13. ***Management and Maintenance:*** Government of Karnataka issued letter (RD 37 ETC 2015; dated 26/05/2017) to form two types of Committees for running the shelters along with objectives, roles and responsibilities, and members of the committees. The order also stipulates the formation of Task Forces - First Aid and Search and Rescue teams, identifying institutes for imparting trainings and INR 5 lakhs as corpus fund for each cyclone shelter.

14. ***Bridges:*** The State has proposed two bridges under the project. The structural design of Kodikaniyana Bridge is under review. DPR is under preparation. The process for selection of a consultant to undertake EIA/SIA is ongoing. It is likely that the contract would be in place by December 15, 2017.

15. ***Roads:*** Under this component, 110 km of roads have been proposed for construction. The CRZ clearance have been obtained for all the sites. DPR for Harikudru Roads has been approved by the World Bank on August 16, 2016 and tendered. Other roads to be tendered by December 31, 2017. The mission visited several sub-project/road sites and offered suggestions to help move this sub-component forwarded. Based on the small adjustments in the sub-project scope, which were agreed with the line agency and SPIU officials) several sites can avoid safeguard issues and additional regulatory procedures. This requires an updating/revision of the consolidated environment and social screening report. It was agreed that the revised consolidated screening report covering all the proposed road works shall be shared with the NDMA and the Bank by November 30, 2017.

16. ***Saline Embankments/Bunds:*** The State has proposed to rehabilitate/construct 10.46 km of embankments under the project. The revised design of Manikette (71) is under review.

was resubmitted to the World Bank and has been reviewed. It was noted that the earlier comments of the Bank were not adequately addressed and additional comprehensive comments were resent to the IA for clarification and action. The process for selection of a consultant to undertake EIA/SIA is on-going and it is likely that the contract would be in place by December 15, 2017.

### **KERALA**

17. **Multi-Purpose Cyclone Shelters:** The State has proposed the construction of 27 multi-purpose flood/cyclone shelters of which five require CRZ approval. The State has decided to carry out the work through the Public Works Department. The SPIU has submitted three architectural drawings – Muttathara (Thiruvananthapuram), Kumarapuram (Alappuzha) and Mararikulam North (Alappuzha) - that have been approved by the World Bank. The Mararikulam MPCS DPR is currently being reviewed by the Bank. Consultant has been selected to carry out soil investigation survey for various sites. It was agreed that 4 MPCS sites will be tendered by December 2017 and 6 MPCS by March 2018. The environment and social screening exercises have been completed and draft reports were shared with the Bank. Based on the comments provided after each round of submission, the documentation/report consolidating the findings/outcomes from these exercises has now been finalized and has been disclosed by SPIU.

### **MAHARASTHRA**

18. **Multi-Purpose Cyclone Shelters:** The State has proposed to build 11 MPCS. The DPR of Saitwade MPCS was reviewed by the Bank and suggestions on the Bill of Quality (BoQ) were provided, Bank is reviewing the ESMP – comments will be shared with the IA shortly. SPIU to send revised BoQ by November 30, 2017. The screening reports for 5 MPCS sites have been submitted to World Bank and the same is under review. The mission was informed that tendering will be done in phases, 5 MPCS in Phase I and 6 MPCS in Phase II. SPIU is requested to look at the approach towards management and maintenance of MPCS in Odisha and Andhra Pradesh and formalize the guidelines for their MPCS.

19. **Saline Embankments:** The State has committed to build 50 km of saline embankments/bunds under the project. Re-alignment survey has been completed by Kharland Development Corporation after issues cropped-up during the impact assessment study. The mission advised to expedite the revision of the model DPR by November 15, 2017 and complete the rest of the 7 DPRs by end of March 2018. The draft EIA/SIA reports need to be revised in line with comments discussed and provided by the Bank.

20. **Underground Electrical Cabling Works:** The districts of Alibag, Ratnagiri and Saatpati have been identified for underground electrical cabling works. The Alibag DPR and EIA/SIA is being reviewed by the World Bank. The DPR preparation for Ratnagiri and Saatpati towns is under process. CRZ clearances need to be expedited. The SPIU confirms that works for Alibag will be tendered out by December 2017.

### **WEST BENGAL**

21. **Multi-Purpose Cyclone Shelters:** The State has committed to build 150 MPCS out of which 146 MPCS are under construction and efforts are underway to resolve land availability

issues in case of 4 sites. Based on the existing guidelines for the maintenance and management of MPCs under the PMNRF, the MPCs guidelines are being finalized.

22. The mission visited two MPCs site locations - Manmathapur MPCs and Taranagar Saraswati MPCs of South 24 Parganas. The following are some of the observations while details are provided in Annexure 2: a) Staircase design: The current width of entry staircase being 1-1.2m is below the requirements. The mission advised that this needs to be widened to 2.5m to match the cantilevered entry space projection of 2.5 m. There is space for the same. (b) Electrical Panel: Electric panel is currently accessible at the ground level making it vulnerable to misuse/vandalism. The mission advised, that all electrical panels need to be enclosed in a grill work with a lock that allows for controlled access. (c) Doors/ Window and PVC tanks – The mission advised that the designs of the door-window frames, the panel details, opening arrangements and PVC tanks to be discussed with a competent technical authority keeping cyclonic winds into consideration. From an EHS perspective, additional comments have been provided in Annexure 4.

23. **Underground Electrical Cabling Works**: Digha (a seaside tourist city in the state) has been selected to lay 60 km of underground electrical cabling under the project. 33 KV OH Line will be converted to underground cable from the railway crossing to Digha sub-station covering approximately 30,000 households in the city. The EIA/SIA study has been completed. Package 1 has been tendered out after necessary EHS aspects were incorporated into the Bidding Documents among other things. Bid submission date is November 01, 2017. For, Package 2 the technical specifications, BOQs and drawings are to be submitted by November 15, 2017.

#### **Component C: Technical Assistance for Multi-Hazard Risk Management**

24. NDMA is managing this component with the following sub-components: (i) *Multi-hazard Risk Modelling and Assessment*: The ToR has been finalized and the RFP is issued by NDMA; (ii) *Shelter level training*: NDMA has received Shelter Level Training Plans and Budget from the states. NDMA is finalizing the Training Calendar for delivery of the modules. (iii) *Training for Capacity Building*: NIDM in association with PMU, NDMA shall take all necessary action in rolling out the Operational plan for Capacity Building. All NCRMP States to identify nodal institutions for imparting training and submit training calendar and budget upto District/Block level at the earliest. And iv) *Preparation of Seismic Risk Mitigation Program*: Draft ToR is under review and NDMA is initiating the procurement of consulting services

#### **Component D: Project Management and Implementation Support**

25. The following Implementation Arrangements status emerged during discussions:

States	SPIU Staffing
Goa	SPIU need to expedite the hiring of an Environment Specialist, Social Specialist and, Communication Specialist for preparing/coordinating safeguard aspects and subsequently their implementation.
Gujarat	The SPIU has a Project Management Support Consultants (PMSC) to assist in the day to day project management. GSDMA in the process of hiring a new Design, Construction and Supervision Consultants (DCSC) to support the executing agencies in site supervision of activities under the project.

<b>Karnataka</b>	SPIU needs to expedite immediately the selection of a Procurement Specialist in the SPIU.
<b>Kerala</b>	The SPIU needs to expedite the process for filling-in positions of an Environment Specialist (which became vacant recently), Social Specialist and Community mobilisers.
<b>Maharashtra</b>	SPIU has appointed PMC to assist in project management. The mission advised to expedite the hiring of Procurement Specialist.
<b>West Bengal</b>	SPIU is well staffed and all required personnel/experts are currently in place.

## V. Environment Management and Safeguards

26. *Overview:* The mission reviewed the implementation progress of Component B from an environment management and safeguards perspective and focused on: (a) status and quality of the environmental screening exercises, and its documentation/report preparation; (b) status on obtaining of required regulatory clearances/permissions; (c) progress of Environment Impact Assessment/s for the required sub-projects; (d) disclosure of document/s related to environment management; (e) institutional arrangements for ESMF/EMP implementation and; (f) compliance to EMP/environment, health and safety requirements for works, initiated.

27. *Implementation Arrangements:* Nodal Environment Officers/Experts are in place in Karnataka, Maharashtra (with an additional support through PMC), Gujarat (through PMSC) and West Bengal. The mission requested all the nodal environment officers at the state level to play a more active role in the review of documents produced by consultants and line agencies. Many a times, incomplete and/or generic documents are sent to the Bank, which unnecessarily increases transaction time and effort. Goa has moved forward the process for hiring an environment specialist, who is likely to be on-board by end of November 2017. The position in Kerala fell vacant recently and needs to be filled-in by end of December 2017. The position at NDMA/PMU continues to remain vacant and requires to be filled-in at the earliest.

28. *Environment Screening:* Gujarat, Kerala, and West Bengal have substantially completed the Environment Screening exercises. Consolidation of outputs has been completed in case of Kerala and the revised final report has been disclosed by the SPIU. The final/updated report disclosures are required in case of Gujarat and West Bengal based on suggestions provided by the Bank last year. Karnataka too has made progress in completing the field verification and in the preparation of draft environment screening reports for evacuation roads and MPCs. However, the report on 'roads' needs to be revised in line with findings from site visits made during September 2017. The detailed comments on MPCs report have also been shared with the state by the Bank and once these are incorporated, the report will be final and can be disclosed. Screening exercises for identified sub-projects have progressed substantially since the last mission in Maharashtra and Goa and draft consolidated reports are now available (covering most of the identified sub-projects). Reports are likely to be final before/by December 31, 2017.

29. *EIA and EMP preparation:* Embankment strengthening under the project will be implemented in the states of Karnataka, Maharashtra and Goa. EIA study and EMP preparation has commenced and is well underway in case of Maharashtra and Goa. Consultants are on-board to undertake the Environment Impact Assessment and based on the outcome of the assessment, sub-project specific EMPs will be prepared. However, the consultants have not yet

been appointed in case of Karnataka. The process of selection is currently on-going and the contract is likely to be in place by December 15, 2017.

30. With regards to the underground electrical cabling, works under the project have been proposed in Maharashtra, Goa, Gujarat and West Bengal. The preparation of EIA and EMP is in different stages in these states. In the case of West Bengal, the EIA/SIA study has been completed. Package 1 has been tendered out after necessary EHS aspects were incorporated into the Bidding Documents. In Maharashtra, districts of Alibag, Ratnagiri and Saatpati have been identified for underground electrical cabling works. The Alibag DPR and EIA/SIA is currently being reviewed by Bank. For the remaining districts, DPRs are under preparation, following which the impact assessment part of the exercise will be undertaken. For Gujarat, the EIA/SIA report has been reviewed and comments discussed. The report is likely to be finalized by December 10, 2017. In Goa, TERI has been brought on board to undertake the Environment Impact Assessment and based on the outcome of the assessment, sub-project specific EMPs will be prepared. The EIA/SIA study is currently underway in Goa.

31. *EMP implementation:* In Gujarat and West Bengal, civil works on selected sub-projects have initiated and EMP compliance monitoring is being undertaken by the SPIU/TPQA in West Bengal and by PMSC in Gujarat. While the over-all supervision and reporting on EMP implementation in West Bengal is satisfactory despite the challenges of sites being in less accessible/interior areas, the supervision/reviews by PMSC (KPMG) in case of Gujarat, including proper oversight and preparation of ATRs is substantially weak. The mission also advised Gujarat and West Bengal, where works are currently underway to enforce the Health and Safety guidelines for Workers and Public covered extensively in the Environment & Social Management Framework (ESMF) applicable for NCRMP project, available at [www.ncrmp.gov.in](http://www.ncrmp.gov.in).

32. *Regulatory Clearances:* On obtaining regulatory clearances (such as CRZ permission), West Bengal, Karnataka and Maharashtra (for saline embankments) have made the required progress and are on track - all required clearances are in place. Clearance has also been obtained for roads in case of Gujarat. Kerala has identified five sites (MPCS) that require CRZ clearance, which needs to be expedited. Also, the requirement for UGEC works in Maharashtra and saline embankment works in Goa needs to be clearly ascertained and if required, the case applications have to be filed at the earliest.

33. *Over-all Environment Performance Rating:* Keeping in mind the above status and progress since the last mission, the over-all rating on environment management and safeguards for the project continues to be '*Moderately Satisfactory*'. State-wise details, including key points from site visits have been provided in Annexure 4.

## VI. Social Safeguards

34. The overall progress in the project states in completing safeguard documentation and implementation is '*Moderately Unsatisfactory*'. Majority of the project states except West Bengal, have not completed/finalized SIA/RAP studies for embankments and underground cabling; the approaches for shelter management is under formation; consolidated screening reports for MPCSs are under preparation. These activities should have been completed given the project timelines. The PMU-NDMA needs to monitor these activities closely and ensure



that states/project complete the required activities in line with the process and procedure stated in the ESMF. State-wise details have been provided in Annexure 5.

The following presents the issues and agreed actions with the states.

- a) MPCSs: Consolidated social screening reports for MPCSs agreed to be submitted by all the project states before end of December 2017. The mission has discussed with all the states that the locational choices for the MPCS sites should be guided by usability and proximity of the proposed shelters to the communities than the availability of government land.
- b) Embankments: Embankment strengthening under the project will be implemented in the states of Karnataka, Maharashtra and Goa. The SIA and RAP studies have commenced and field surveys completed in Maharashtra and Goa.
- c) Electrical Underground cabling: Underground electrical cabling works are included in states, Maharashtra, Goa, West Bengal, Gujarat. The preparation of SIA and RAP are in different stages in different states. West Bengal has finalized the RAP, while other states have commenced the studies.
- d) Forming the shelter utilization and management committees: All Project States will finalize the approach and policy on Shelter Maintenance committees and their utilization before end of December 2017.

## VII. Procurement

35. *Post Procurement Review (PPR) for FY17*: The Bank concluded PPR for FY17 (July 1, 2015 to June 30, 2016) for this Project and final draft report has been shared to the Project for their concurrence and validation before finalizing it. No comments were received and the report was finalized. Further, all SPIUs were requested to submit contract list for PPR for FY2018 (July 1, 2016 to June 2017). The list is still awaited.

36. *Update of Procurement Plan (PP) on STEP*: All procurement plans are now prepared and being updated on STEP. However, SPIUs are not uploading procurement related documents on STEP and this is creating a problem. The mission advised that all SPIUs should upload all procurement related document on STEP on real time basis so that all the information are available to the viewers in time.

37. *Contract Management*: The mission noted that there are several issues such as time over-run, substantial variations in contract amount due to GST and other factors, invalid contract agreement due to non-renewal of expired contract, etc. (this is pertinent only for Gujarat and West Bengal as other states are yet to implement contracts). Therefore, the mission advised respective SPIUs to look into these issues on regular basis to minimize such lapses.

38. *Grievance Redressal*: The Bank has received complaint from M/s Mukesh & Associates (Design and Construction Supervision Consultancy for NCRMP II works towards construction of MPCS and Roads) regarding stating that GSDMA has failed to make payment as per the contract agreement. The Bank has forwarded the complaint letter to GSDMA advising them to resolve it at earliest and keep the Bank informed on its resolution. This complaint has also been recorded in the Bank's complaint management system and it will be monitored on regular basis.

39. **Procurement risk assessment.** The mission has also conducted or updated procurement risk assessment. It is concluded that there is no improvement in risk and overall risk rating has been retained as substantial.

40. **Procurement performance:** There is huge variation in procurement performance amongst the states. Gujarat and West Bengal is fairly doing well while other states are lagging-behind. Therefore, the overall procurement performance of this project is rated as '**Moderately Satisfactory**'. The State-wise status and suggestions on procurement are given in Annexure 6.

### VIII. Financial Management

41. A mission was held for Gujarat and West Bengal for which observations are detailed in Annexure 7. Financial management aspects of other states in the project were reviewed and discussions were also held with finance officials from NDMA. The following financial management aspects were discussed:

42. **Budgeting and disbursement:** There is no budgeting constraint and all states have their separate budget codes to receive funds. The total disbursement from the Bank is USD 48.95 million, which represents 15.87% of the total loan amount of USD 308.40 million. The States of Goa, Maharashtra, Kerala and Karnataka are yet to spend any funds allocated under Component-B. Gujarat has un-spent balances of INR. 63.65 crores which needs to be fully utilized for further release of funds.

43. The table below present that overall fund situation under the project. (in INR Crores)

Total Budget Outlay			Total Releases			Total Expenditure		
GoI	State	Total	GoI	State	Total	GoI	State	Total
1,881	480	2361	638	96	734	324	103	427

44. **Internal Audit:** Internal auditors have now been also appointed in the states of Goa, Karnataka, Kerala and Maharashtra and are expected to commence work shortly. Since the expenditures for these States are low, it is suggested that the Internal Audit should be carried out till March 31, 2017 in one round itself. For other entities that Internal audit position is: at NDMA stands completed till March 31, 2015; at Gujarat stands completed till March 31, 2017; at West Bengal under way for FY 2016-17. The mission emphasizes that the scope of Internal audit is much beyond the financial aspects. Internal Audit is an assessment of the adequacy of the Project management, financial management, and procurement system including internal controls. For all project implementing entities, it should be ensured that the scope is not under-delivered under any circumstances.

45. **Accounting and Book keeping:** The mission would like to emphasize that accounting and financial aspects laid down in Financial Manual for NCRMP-II should be adhered to. For West Bengal, the mission highlights with concern inadequate accounting, record keeping and consolidation of financial information at PIU. Steps should be taken by all participating States to maintain proper accounts and records at both PIU and PMU.

46. **External Audit:** The audit for FY 2016-17 is under way for all States.

47. The current overall financial management performance rating continues to be **Moderately Satisfactory** as some of the financial management arrangements still needs to be streamlined.

**IX. Next Implementation Support Mission**

48. The next mission will be conducted in March 2018.

**Annexure 1: Key Agreed Actions – September 2017 Mission**

Note: Please see Annexure 4 for additional agreements on environmental management and safeguards.

A.1	A.2	A.3	A.4
A.1	Submit to the Government the request for transferring ownership for remaining MPCs sites	SPIU	Immediately
A.2	Submit consolidated Environment and Social Screening reports covering all proposed sites and disclose the same	SPIU	December 31, 2017
A.3	Complete preparation of DPR for Saline Bunds	SPIU	December 31, 2017
A.4	Complete Tendering of 7 MPCs sites Complete tendering of 3 MPCs sites Complete tendering of 6 MPCs Sites	SPIU/	October 31, 2017 November 30, 2017 December 31, 2017
A.5	Submit guidelines on formation of Cyclone Shelter Management Committee	SPIU	December 31, 2017
A.6	Complete staffing of SPIU (in particular: Environment and Social Specialist, Communication Specialist)	SPIU	Immediately
A.7	Complete Internal Audit till March 31, 2017 and share the audit report with the Bank.	SPIU/ PMU	January 15, 2018
B			
B.1	Review and rectify quality issues in completed MPCs	SPIU	Immediately
B.2	Review and rectify quality issues/defects on all 20 completed roads; share ATRs with NDMA and the Bank	SPIU	November 30, 2017
B.3	Ensure EHS compliance on all on-going worksites	SPIU/Line Agencies	Immediately
B.4	Ensure monitoring and inspection of quality in all contraction sites – MPCs and roads	SPIU	Continuous
B.5	29 MPCs to be tendered	SPIU	December 2017
B.6	Finalize and issue guidelines on formation of Cyclone Shelter Management Committee	SPIU	December 31, 2017
B.7	Community consultation for MPCs use in regular times and building ownership	SPIU	Continuous
B.8	4 Road works to be tendered out	SPIU	December 2017
B.9	Workshop on Contract, Design and EMP management	World Bank	December 2017
B.10	TPQA reports to be shared with NDMA	SPIU	December 2017


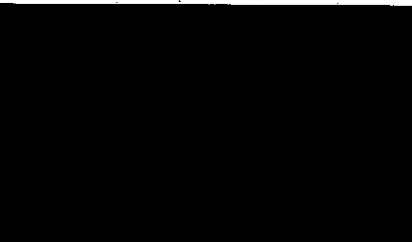
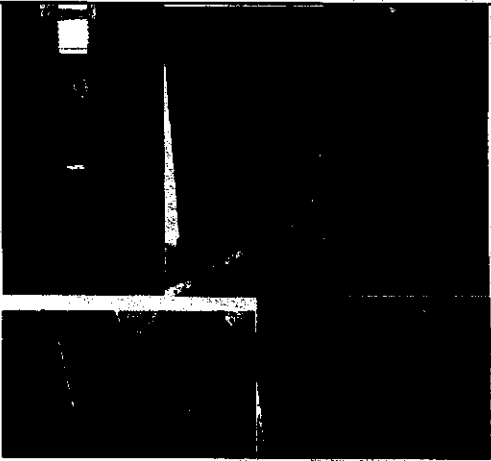
B.11	Appoint an Internal Auditor for FY 2017-18 as per agreed TOR	SPIU	Immediately
B.12	Substantially revamp and strengthen PMC's performance to enable timely and quality oversight on designs and supervision	SPIU/PMC	Immediately
C.1	Finalize the use of MPCs in time of non-emergency	SPIU	Immediately
C.2	Revise and resubmit consolidated Environment Screening Report for MPCs sites	SPIU	November 30, 2017
C.3	Complete Environment Impact Assessment and Social Impact Assessment study for all embankment works, Bridges and Roads	SPIU/Minor Irrigation Department/PWD	Mar 31, 2018
C.4	Complete preparation of DPR for Manikatte Saline Embankment with design and cost estimates	SPIU/Minor Irrigation Department	Apr 31, 2018
C.5	Prepare a plantation strategy for MPCs and roads	SPIU	December 31, 2017
C.6	Submit guidelines on formation of Cyclone Shelter Management Committee	SPIU	December 31, 2017
C.7	Finalize staffing of SPIU (in particular: Procurement Specialist)	SPIU / IAs	Immediately
C.8	Complete Internal Audit till March 31, 2017 and share the audit report with the Bank.	SPIU/PMU	January 2018
D.1	Finalize model DPR for Mararikulam MPCs	SPIU	November 2017
D.2	Submit utilization plan for all MPCs sites	SPIU	Immediately
D.3	Finalize staffing of SPIU (in particular: Procurement Specialist; Environment Specialist)	SPIU / IAs	Immediately
D.4	Initiate bidding process for 4 MPCs sites 6 MPCs Sites	SPIU	December 2017 March 2018
D.5	Submit guidelines on formation of Cyclone Shelter Management Committee	SPIU	January 10, 2018
D.6	Complete Internal Audit till March 31, 2017 and share the audit report with the Bank.	SPIU/PMU	January 15, 2018
E.1	Share Revised DPR of Saitwade MPCs with World Bank and NDMA incorporating comments provided	SPIU	November 15, 2017


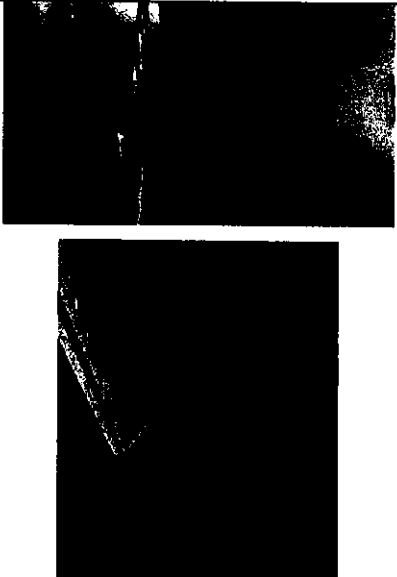
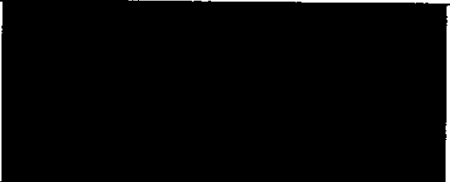


E.2	Submit guidelines on formation of Cyclone Shelter Management Committee	SPIU	January 10, 2018
E.3	Share revised DPR for saline embankments	SPIU	November 15, 2017
E.4	Review and provide comments on EIA/SIA of Alibag	World Bank	November 20, 2017
E.5	Initiate tending of Saline Embankment	SPIU / IAs	January 2018
E.6	Resubmit the DPR for U.G Alibag	SPIU	December 30, 2018
E.7	Complete Internal Audit till March 31, 2017 and share the audit report with the Bank.	SPIU/PMU	January 15, 2018

F.1	Finalize the Guidelines on Shelter Management and Maintenance	SPIU	December 31, 2017
F.2	Finalize the list of emergency equipment for each MPCS	SPIU	December 31, 2017
F.	Finalize and disclose the updated consolidated Environment and Social Screening Report	SPIU	December 15, 2017
F.5	Complete DPR for Digha	SPIU	December 31, 2017
F. 6	Adopt Financial Management Manual for all financial management aspects.	SPIU/ PMU	Immediately
F.7	Share final figures of sanctioned budget, Central and State releases, expenditure and unspent fund's as of August 31, 2017.	SPIU	Immediately
F.8	Share Internal Audit Report	SPIU	November 15, 2017

<b>G. NDMA</b>			
G.1	Complete Internal Audit till March 31, 2017 and share the audit report with the Bank.	NDMA (PMU)	January 15, 2018
G.2	Appoint Environment Specialist and ensure his/her availability for environment management and safeguard functions	NDMA (PMU)	December 15, 2017

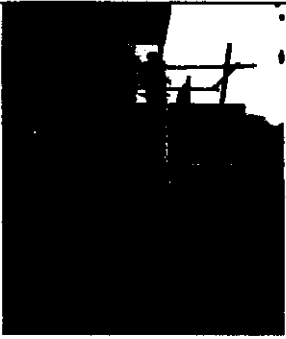
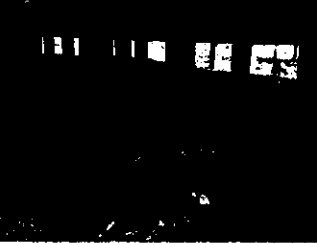
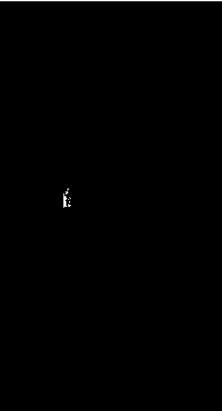
**Annexure 2: Multi-Purpose Cyclone Shelters – Technical Observations****GUJARAT**

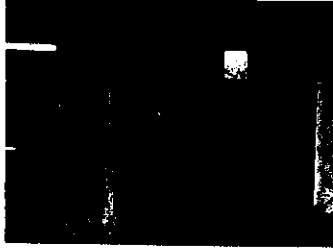

<b>Solar Power system</b> <ul style="list-style-type: none"> <li>▪ Return of investment to be calculated and accordingly modifications to be worked out</li> <li>▪ Design of anchorage and other details to be worked out as per cyclonic wind conditions.</li> <li>▪ Possibilities of foldable solar panels to be explored</li> <li>▪ Possibilities of connection to an on-grid system to be explored for already installed sites</li> <li>▪ Solar panel wires running along roof surface in PVC pipes – will get damaged by human use – proper protective arrangement to be designed</li> </ul>	
<b>Terrace</b> <ul style="list-style-type: none"> <li>▪ No light fixture in the store provided at roof level</li> <li>▪ Surface finishing of the terrace cracking up and has already seen repair, poor quality of work - needs to be checked for water impermeability</li> <li>▪ No access to mummy with water tanks provided</li> <li>▪ PVC tanks will not stand cyclonic wind conditions</li> <li>▪ Calculation based enclosure to be designed to ensure safety of PVC tanks and such that the enclosure itself withstands wind pressure</li> </ul>	
<b>Toilets and Water facilities</b> <ul style="list-style-type: none"> <li>▪ Disabled toilet inaccessible</li> <li>▪ No bath area provided, instead there is a leg wash space</li> <li>▪ Hand wash sink too high, poor detailing of water down take pipe</li> <li>▪ No channel for urine down take in men's urinal</li> <li>▪ A detailed set of drawings to be developed for the toilet layout including toilet for disabled and included in each contractor and supervisor's folder.</li> <li>▪ Current design needs modification to include a bath – either by changing the leg was area or turning one WC into the bath.</li> </ul>	

<b>Door &amp; Windows</b> <ul style="list-style-type: none"> <li>• External facing Door and windows will not withstand cyclonic winds</li> <li>• Poor quality fixtures used – panels, aldrops, handles, hinges etc</li> <li>• Calculation based design and details for cyclonic wind conditions for all door and windows to be developed and specifications in the BoQ to be verified and updated as need be</li> </ul>	
<b>Generator, electrical arrangements</b> <ul style="list-style-type: none"> <li>• Generator exhaust pipe to be extended to the outside</li> <li>• Impact of generator vibration on building structure to be verified – appropriate corrective action to be taken</li> <li>• Location of Generator on ground floor is problematic from the perspective of flooding especially during an evacuation event, the same to be analysed and corrective action to be taken.</li> <li>• Similarly a separate secure fuel room to be developed</li> <li>• The Generator capacity to be revisited, the current capacity is on the higher side</li> <li>• Electric panels – To be enclosed in a lock proof grilled enclosure</li> <li>• Panel boxes just placed, not bolted down to the floor</li> </ul>	
Hanging wires to tube light to be enclosed in PVC pipe/ channels to as to not hang and be vulnerable to getting hit by fans	
<b>Plantation and open areas</b> <p>Poor maintenance of saplings in 2<sup>nd</sup> site Tree species selection: Tree species native and naturalized that do well in coastal conditions and are of economic value to the communities to be selected.</p>	
Lamp post in middle of open space to be removed, care to be taken to ensure that all sites are free of such encumbrances	



**WEST BENGAL**

MPCS	Issues	Suggestions
	<p>Width of entry staircase currently about 1-1.2m width, this is below the requirements. This was done with the understanding that the main entrance is via the ramp.</p>	<p>This needs to be widened to 2.5m to match the cantilevered entry space projection of 2.5 m. There is space for the same.</p>
	<p>Shelters have a raised floor level of 1.5m upwards. The space created below where the level is ranging between 1.5 – 2m is proposed to be sealed off by brick walls. It is perceived that the space below will be misused to dump waste, used by anti-social elements. Considering the flooding scenario – the proposed wall is not going to keep the flood water away, water will seep in, wall may like to break. Likely result is extensive dampness, water stagnation etc.</p>	<p>It is advisable to maintain this space as open, with surfacing of the ground by PCC or other equivalent such that there is no water stagnation or plant growth and the place can be kept clean</p>
	<p>Electric panel is on the walls and currently accessible, this makes it vulnerable to misuse, vandalism</p>	<p>Electrical panel needs to be enclosed in a grill work with a lock that allows for controlled access</p>

	<p>Public toilets on Ground floor for use during functions or otherwise at the front right hand side corner – comprises a wash space, a gents toilet, toilet for disabled and for women. No sunken slab at this location means that the WC have been raised to accommodate required depth requirements.</p>	<p>For all structures where the sunken slabs can be accommodated the same needs to be done. Additionally, a basic arrangement of screen walls to enhance privacy of users is advisable</p>
Toilet Blocks	<p>In the Toilet block's there are an equal number of baths and WCs, the number of baths are more than required and WCs are less</p>	<p>In ongoing constructions, the design should be modified so as to have 1 or maximum 2 baths and the rest as WCS and communicated to field supervisors and contractors. In completed constructions the same should be changed</p>
Lofts	<p>Rooms have inbuilt storage but it may be insufficient during evacuation</p>	<p>For still incomplete designs addition of lofts could be considered</p>
	<p>4 PVC tanks of capacity 2500 litres/each have been proposed on a raised platform as seen in the image.</p>	<p>Considering cyclonic conditions – these tanks need to be secured from the impact of cyclonic wind conditions for both conditions, i.e. when full and empty. Appropriate details for the same need to be discussed and finalised</p>
Door/ Window Frames	<p>Windows: Aluminum frames, Sliding panels in aluminium frames with toughened glass panes on 3 track system</p> <p>Doors: Wooden frames – aluminium panels (TBC)</p>	<p>Considering Cyclonic conditions the door-window frames, the panel details, opening arrangements need to be discussed with a competent technical authority and design modified</p>

**Annexure 3: Detailed observations from the Mission site visits**

In order to have firsthand information on the progress of works, quality in construction and also general Contract Management issues at the field level, Mission visited few works in the districts of Surat and Bharuch.

**Surat District**

**Package No.SRT-01** was inspected on 25.09.17 along with Engineers/ officers of Panchayat R&B Department, GSDMA, NDMA and PMC representatives along with the Contractor's personnel. This package consists of 3 road works. Mission visited 2 roads work only. Mission observations road wise are as under:

**Name of the Roads:** i) Improvement of Kapasi approach Road from Km.0/0 to Km.2/400: Package No. SRT-1- Slice 1 and ii) Access Road, Mor Approach: Package No. SRT-1 Slice-2.

**Key Data**

<i>District: Surat</i>	<i>Taluk: Olpad</i>	<i>Length: i) 2.400 km &amp; ii) 1.40 km.</i>	<i>Start Date: 10 th Nov.17</i>
<i>Contract Period: 11 months</i>	<i>Schedule date of Completion: 9th Sept.2017</i>	<i>Time elapsed= 11.50 months</i>	<i>Status of work: reported as substantially completed</i>
<i>Initial Contract price: 209.76 lakhs for entire package of 3 roads, Length 5.000 km.</i>	<i>Projected completion Cost: Rs. 209.76 lakhs</i>	<i>Expenditure: 196.00 Lakhs</i>	<i>Variation: 0.00%</i>
<i>Completion certificate: Yet to be issued</i>	<i>Taking over certificate: yet to be issued</i>	<i>Progress as on date as reported = 95 %</i>	

**Scope of work:** BM, MSS, CD works, widening formation and shoulder works.

**Status of work as on date:** Reported as substantially completed, completion certificate is yet to be issued.

The following are the observations; These are in addition to general observation indicated above.

- Shoulders have not been formed as per the widths indicated in the drawing. At some cahinages, shoulder width is less than 0.5m against 1.875 m. The compaction is inadequate. The level of the shoulder is higher than the carriageway.
- Fixing of signages is not proper, it has come out at many locations. The concrete is of poor quality and it is not as per the requirement. These are to be refined with proper M15 grade concrete foundation of 0.50 m depth. Further the painting to the sign post is not proper. This shall be done as per the standard drawing.
- More signages are required as there are sharp curves/ reverse curves which require signages for safety. These additional signages required to be identified and approval obtained from the competent authority and got them fixed.
- Contract provides for Metal beam crash barrier. All complete rail elements, posts, bolts, nuts, hardware and other steel fittings shall be galvanized. But only MS metal beam, posts and fittings are used. some metal beams are already corroded. Fixing also not proper. some places only one bolt was used. Posts are also MS without galvanizing and their fixing in the ground also is not proper, some already come out. At one place the end of metal beam is nailed to a tree. The entire work need to be rejected and got redone with material to the standard specification (section 811 of Orange Book).
- Mix seal surfacing (MSS) already completed. Mission observed the gradation of MSS is on finer side and the bitumen content was observed on the lower side. The sample piece indicates no consistency even though the work was completed recently that too with bitumen grade of VG10. Engineer shall collect sample and conduct tests for gradation and also bitumen content. Similarly tests to be

- conducted on BM layer also. If the work is found to be not satisfying the technical specifications, the contractor to be notified to rectify.
- vi. Camber of the completed road is not proper. As it is very high rain fall area 2.5% camber to be maintained.
  - vii. Fixing of HM and KM stones are not carried properly. Already some HM stones are coming out. Contractor to be notified to get it re-fixed as per the standard drawing of MORTH.
  - viii. BT road is continued in the village limits. No drains are provided. CC roads should have been provided. In all future works, CC roads only to be provided in the village limits.
  - ix. Road side katcha drains shall be properly done.
  - x. CD works are not properly planned. In some culverts the pipes are laid at much lower than the adjacent ground level and there is no flow. In other the inlet level is much higher than the GL there by water is not flowing through the pipe. This indicate no working drawings are prepared by the Contractor and approved by the Engineer. At least in all future works these shall be invariably carried.
  - xi. Head wall of Pipe culvert height above road level is carriageway. The height is varying from 200 mm to 400 mm. As per standard drawing it shall be 500mm to safe guard against safety. All the head walls to be rectified immediately.
  - xii. Practically no compaction was done in the earthwork in Quadrant portion. Further no quadrant pitching was done, due to this the earth work carried in the quadrants are slipping. These shall be rectified.
  - xiii. Electrical poles exist just by the side of the BT edge. This will lead to accidents. These shall be shifted.
  - xiv. There are 2 minor bridges in slice -2 work. The wearing coat was completed but the camber was not maintained. Further at the inlet of drain pipes, gratings were not provided. These needs to be fixed before carrying out the Wearing coat. Now the wearing coat has to be cut to fix the gratings. In addition, the drain pipe shall project slightly below soffit of the slab so that water will discharged into the river. But the pipe fixed is flush with slab due to this the water will spread along the slab at bottom. This shall be rectified.
  - xv. At one location on road slice-2, the existing pipe was buried on upstream side but on downstream is open and the EW was scoured up to carriage way leading to accidents. This shall be filled with earth duly compacting forthwith.

### **Bharuch District**

**Package No. BRH-07** was inspected. This package consists of 6 roads with total length of 21.20 km. Mission visited only 2 roads out of 6 roads.

**Name of the Road:** i) Improvement of Vamaleswar-Ankalva-Dhamrad-Aniyadra Road from Km.0/0 to Km.14/710, excluding road portions in village limits where CC roads were existing- net length under the project=12.76 km.: **Package No. BRH-7- Slice-6.**

#### **Key Data**

District: Bharuch	Taluk: Hansot	Length: 12.760 km	Start Date: 5 th Jan.17
Contract Period: 11 months	Schedule date of Completion: 4th Dec.2017	Time elapsed= 8.50 months (77%)	Status of work: widening work with GSB is in progress on both sides in 1.6 km and one side in 4.5 km.
Initial Contract price: 849.13 lakhs for entire package of 6 roads, Length 21.200 km.	Projected completion Cost: Yet to be assessed	Expenditure: 25.00 Lakhs for the entire package Progress as on date as reported = 3.00 %	Variation: 0.00% as on date

**Scope of work:** Widening the road to 5.50 m (IL), EW Formation, widening with GSB 250 mm thick, WBM 250 mm thick, BM 37.5 mm, MSS 20mm along with CD works and shoulder works.

**Status of work as on date:** 2 layers of WBM was completed, grade 3 WBM is in progress. Retaining walls and Brest walls are almost completed. Other works are yet to be taken up.

The site was inspected on 14.05.17 along with DSC Engineers, PWD Engineers and the Contractor's representatives. The following are the observations; These are in addition to general observation indicated above.

- i. Even the TBMs at 4 per km are yet to be established. Chainage points were fixed at 200m intervals. These will not serve as reference pillars. Reference pillars shall be at 50 m intervals and shall contain information regarding chainage, top levels of GSB, WBM, BM and MSS. Work is being carried without these reference pillars.
- ii. Though 8.5 months has elapsed (i.e. 77% of total period), the progress achieved is only 3% overall for the entire package. Already milestone -1 and milestone-2 period was over. Majority of the works should have been completed by now. There is no action by the Engineer so far. Contractor is yet to submit 1st revised program which they were expected to submit within 14 days of LOA. By now there shall be 8 updated program in place.
- iii. Widening of the carriageway is in progress on this road. The EW formation was not carried to the required width and compaction. The GSB work carried in the widening portion also is not adequately compacted. The compacted material is coming out with spade. Engineer shall verify the entire stretch and get it rectified the GSB with proper gradation and also compaction. Without this the specified CBR of 30 could be obtained.
- iv. The safety measures are inadequate. This shall be improved.
- v. Even after 8.5 months, labour license was not obtained by the Contractor. Mission was informed that the Contractor engaged about 100 labour in all the 6 works. The Chief Engineer as a Principal Employer is responsible to oversee contractor obtain necessary labour license from the competent authority. If any unwanted event occurs at the site, Principal Employer is also equally responsible as per the Act.
- vi. The top of head wall of CD works need to be verified with reference to the final carriageway level. It shall be 500 mm above the finished road level.
- vii. EE/ erstwhile DSC have not reviewed the DPR/ Contract provisions to identify increase in quantities/ new items of work needed in order to achieve the desired objective of the road as per standards. At least now the review shall be taken up to identify the additional requirement if any and obtain approval of competent authority and issue instruction to the Contractor to take up the additional items, rates for these items are to be fixed as per the Contract provisions.
- viii. In view of the good working season from this month onwards, EE shall take action to expedite the works to complete early.

**2. Name of the Road:** Improvement of Vaghvan- Ankulva Road from Km.0/0 to Km.3/255: length =3.255 km.: **Package No.** BRH-7- Slice-4. **Key Data:**

District: Bharuch	Taluk: Hansot	Length: 3.255 km	Start Date: 5 th Jan.17
Contract Period: 11 months	Schedule date of Completion: 4th Dec.2017	Time elapsed= 8.50 months (77%)	Status of work: Road work is yet to start, 7 Nos. pipe culverts are completed out of total 12 Nos.
Initial Contract price: 849.13 lakhs for entire package of 6 roads, Length 21.200 km.	Projected completion Cost: Yet to be assessed	Expenditure: 25.00 Lakhs for the entire package Progress as on date as reported = 3.00 %	Variation: 0.00% as on date

**Scope of work: EW Formation, GSB 300 mm thick, WBM 300 mm thick, BM 37.5 mm, MSS 20mm along with CD works and shoulder works.**

**Status of work as on date:** Only 7 number pipe culverts were completed and the Earth work formation yet to start. Practically no work is going at the site.

The site was inspected on 26.09.17 along with DSC Engineers, PWD Engineers and the Contractor's representatives. The following are the observations:

- i. Practically no work was going at the site.
- ii. Only 7 culverts out of 13 CD works were completed.
- iii. The existing road is a cart track full of Boulders dumped for the ONGC vehicles to move. The surface is quite uneven with boulders exposed. The EE has informed that only 20 cm thick earth work was proposed in the DPR. This is not sufficient to make up the undulations. Engineer shall examine in detail and identify the additional quantity of EW/ items of works required over and above the contract provisions. Design shall be reviewed based on ground conditions, traffic projected and decision shall be taken immediately.
- iv. EE/erstwhile DSC should have reviewed and identified the additional items required.
- v. The progress of work is behind schedule. Engineer shall obtain updated program from the contractor to complete the balance work immediately.
- vi. Had the Engineer conducted monthly management meetings which is required as per GCC sub-clause 31, things would have been different.
- vii. TBMs are not established so far. Without TBMs the culverts are built. There shall be 4 TBMs per km. There are no reference pillars which shall be at 50m C/C. Engineer shall see that these are established immediately.
- viii. The culvert head walls are to be raised in order to obtain 500mm above carriageway.
- ix. Other 4 roads also to be reviewed on the above lines and action taken. CE/PMC/GSDMA shall constantly review not only this package but similar packages which are behind schedule.

#### Annexure 4: Environment Management and Safeguards

1. **Overview:** The mission reviewed the implementation progress of proposed investments (MPCS; Roads, Bridges, Saline Embankments and Underground Electrical Cabling works) from an environment management and safeguards perspective and focused on the following: (a) status and quality of the environmental screening exercises, including its documentation/report preparation; (b) status on obtaining of required regulatory clearances/permissions; (c) commencement and progress of the Environment Impact Assessment/s for required sub-projects; (d) disclosure of document/s related to environment management; (e) institutional arrangements for ESMF/EMP implementation and; (f) compliance to EMP/environment, health and safety requirements for works, where execution has begun.
2. Keeping in mind the status and progress since the last mission, the over-all rating on environment management and safeguards for the project continues to be 'Moderately Satisfactory'. State-wise details, including key points from site visits are summarized in this annexure.

#### GOA

3. **Site selection and screening for MPCS:** The total number of Multi-Purpose Cyclone Shelters (MPCS) to be constructed in the state under the project has been brought down to 16 (9 in South Goa and 6 in north Goa). The numbers now stand reduced in line with available outlays from 20 shelters that were proposed initially in the state as part of NCRMP II. Out of the proposed 16 shelters, 13 sites have been identified and these have been handed over to the Water Resources Department (WRD). The process for site take over by the WRD for another 3 sites (Adarshnagar, Quepem; Salcete) had been initiated at the time of interim mission to the state in March 2017. Tender for 7 MPCS have been floated in June 2017 - out of which 5 have been contracted and 2 will be retendered by end of October 2017. The environment screening exercises have been conducted for all identified MPCS sites and reports for 7 MPCSs tendered so far have been resubmitted to the World Bank (WB) after incorporating the comments provided earlier.
4. **Design/DPR for MPCS:** The model DPR and bid documents for Dabolim MPCS have been cleared by Bank. These documents addressed EHS provisions in building design in addition to EMP and specifications that finally were incorporated into the Bidding Document. The mission advised the state to emulate environmental parameters/aspects in DPRs for other MPCS (including green building elements) and EHS provisions in the Bidding Documents in line with the approvals given for Dabolim. /DPR. Three (Mahalwada, Nagarcem, Cuelim) out of the sixteen sites selected in the state would require demolition of existing dilapidated buildings for which the concerned DPRs and Bidding Documents have factored additional assessments and measures (including confirmation of any hazardous materials such as Asbestos). For the fourth such site at Dando-Siolim, the SPIU will confirm upon completion of the site assessment (as part of DPR preparation) whether existing building demolition would be required. If yes, then an approach similar to the three sites where demolition related requirements have been identified, would be followed.
5. **Shelter Utilization and Management Plan:** Proper engagement with the Education Department; targeted communities and other stakeholders needs to be ensured for proper utilization of the buildings. It was agreed that utilization and management plans for all the proposed MPCS will be finalized/shared with NDMA/Bank by December 31, 2017.
6. **Saline Embankment Works:** The Bank team had supported and fully guided the preparation and finalization of the ToR for EA/SA studies last year. TERI has been brought on-board to undertake the Environment and Social Impact Assessment studies (EIA/SIA) for the two-proposed works under this sub-component. The EIA for Diwar Island is currently underway. Based on the findings of the assessment, a sub-project specific EMP will be prepared. The SPIU/WRD has to ensure that the design/DPR factors-in findings from the assessments and that the EMP is integrated in the Bidding Document before the tenders can be invited. The screening report for saline embankments/bunds were submitted by the state earlier this year, on which comments/suggestions were provided in March 2017. Tendering is likely to initiate in second half of December 2017.

7. *Underground Electrical Cabling Works:* Draft DPR was submitted in October 2017 to the Bank and is currently under review. TERI has been brought on board to undertake the Environment and Social Impact Assessment studies (EIA/SIA) and based on the outcome of the assessment, sub-project specific EMPs will be prepared. The EIA is currently underway. The concerned department has to ensure that the design/DPR factors-in findings from the assessment and that the EMP is integrated in the Bidding Document before the tenders are invited.
8. *Disclosure of Information/Documents:* Screening exercises for identified sub-projects have progressed substantially since the last mission in Goa and draft reports have been shared with the Bank. Once the SPIU's environment specialist is on-board, the drafts are to be finalized and made disclosure worthy before/by December 31, 2017.
9. Once the consolidation of the screening report is completed by the SPIU, it shall be put onto the public domain, including the website and at the local level in line with norms spelt out in the ESMF. The translated version of the Executive Summary of the ESMF in local language (Hindi/ Konkani) will also be shared with the Bank and NDMA for record, including the website link on which it is posted and local level/s of disclosure as sub-project locations are getting finalized.
10. *Regulatory Clearances:* Based on the screening results for MPCs, 15 out of the 16 identified sites don't require regulatory clearances such as CRZ, forest or tree cutting permissions. This doesn't include those consents/permissions that have to be taken and/or adhered to by the Contractor during the construction – these will be required in all the cases and have been clearly listed in the Bidding Documents. In one case (Junaswada), where CRZ clearance was required, the architectural plan/proposal is being revised in line with comments from the SCZMA. The Bank has requested the SPIU to share periodic updates on this matter. The mission advised the state to ensure that permission from local bodies, as and where required, should also be sought prior to the award of works.
11. *Institutional Arrangements:* SPIU still has no designated Environment Specialist in the team. The mission reiterated that it is necessary to fill-up this position at the earliest – without this, slippages in meeting the requirements of ESMF/EMPs is highly likely. The process of filling-up of this post has been initiated and a Nodal Environment Officer is likely to be in place before mid-December 2017.
12. *Sensitization and Training on ESMF:* The mission suggested that a sensitization/training program should be conducted for SPIU and the line agency staff to ensure that the ESMF requirements are well understood. The mission has agreed to support such a training in the coming months for which the dates will be discussed and agreed with Govt. of Goa separately. However, before such a program can be organized, it is necessary to have the SPIU's environment and social positions filled-up.
13. *Key Activities/Agreements:* (i) Recruitment/deployment of Nodal Environment Officer – Immediate; (ii) Complete the EIA study for Diwar saline embankment and share the draft report by December 15, 2017; (iii) Complete the EIA study for underground electrical cabling works and share the draft report with Bank and NDMA by January 10, 2018; (iv) Complete the consolidation of the Environment Screening report for the identified 16 MPCs sites by December 31, 2017 – Bank has already provided written comments and guidance for this; (v) Conduct a workshop within Jan 2018 to gain clarity on the need, process, role of various agencies/individuals and reporting requirements pertaining to Environment Management- Bank will support this activity; (vi) Disclosure of environment documents – as they are prepared and finalized and reconfirm disclosure of ESMF's executive summary in vernacular to the Bank and NDMA.

## GUJARAT

14. *Site selection and screening for MPCs:* The state has proposed to construct 100 MPCs (number reduced from 128 as per the available outlays). Of these, 18 MPCs are completed, 8 are under construction.



contracts for 45 shelters have been awarded, and another 29 are in the tendering stage and will be awarded by December 2017.

15. *Design/DPRs for MPCs*: The mission had pointed out a few aspects from an EHS perspective but no update/compliance note has been put together. Improvement/detailing was sought in the designs/DPRs on: a) toilet position, b) kitchen, c) approach to toilets for the physically challenged and its detailing, d) location and details of generator room, e) fuel room, f) change design of windows opening onto the passage to ventilators, g) detailing for bathrooms, h) provision of lofts and, i) High Flood Level (HFL) data.

16. Also, possibilities of greener materials like fly ash bricks or autoclave aerated concrete blocks or hollow concrete blocks had to be explored and built into the BoQ. Likewise, the guidance provided by the Bank earlier on infusing green elements in the DPR pertaining to the choice of door/window frames, glasses, paints, pavers, water and energy efficiency measures etc. had to be built into DPRs. A compliance note would have helped in capturing the efforts but this has not yet been put together.

17. *Shelter Utilization and Management Plans*: The SPIU informed that they are contemplating treating each MPCs as a unit of GSDMA and agreed to share the revised shelter level management plan with NDMA and Bank.

18. *Key Observations from Visits to MPCs sites*: Site visits during the mission covered MPCs sites at Kotpar and Suva in Bharuch district. Some key observations that need to be rectified include:

- a) Inadequacies in design details of bathrooms, wash basin heights, access and toilets for physically challenged, door and window fixtures, access to mummy, water tanks etc.
- b) No exhaust/chimney provision for the DG set – health hazard for the users of the building (has been flagged earlier as part of the design review)
- c) Improper placement of the DG set - placed without foundation and vibration pads (creating noise and vibration)
- d) No place for storing diesel for DG set operation
- e) Non-display of warning/danger signage at/near high voltage electrical panels
- f) Display of do's and don'ts is necessary near the DG set and high voltage electrical panel/s. This should include cardio-pulmonary resuscitation (CPR) chart in English and Gujarati.
- g) Lightning arrestor provision has not been made.
- h) Issue with design for toilet meant for physically challenged, including its approach/entry and other detailing (has been raised earlier as part of the design review)
- i) Detailing of the bathrooms/toilets hasn't been done adequately
- j) Fire extinguishers have been placed but date of inspection/refilling has not mentioned on any of them.
- k) At Suva MPCs, ramp needs to be constructed in the toilet for the physically challenged.
- l) At the Suva shelter, steel rope provided to support the electric pole is located in the middle of entrance road, creating a hazard for the people coming to the MPCs.
- m) No or improper provision of Project information Boards at work sites.

19. *Access/Evacuation Roads*: Under this sub-component, 43 access roads totaling about 156.74 km are proposed to be constructed. To date, out of 20 roads (69.13km) falling outside the CRZ area. Another 19 roads are (82.52km) are 95% completed in terms of physical progress. For the 23 roads that fall in the CRZ area, the state has obtained the necessary CRZ clearance, and 10 roads works have been tendered out while the remaining will be tendered by end of December 2016.

20. *Key Observations from Visits to Road sub-project sites*: Site visits during the mission covered five sub-project sites in Surat district. These were: Kapasi Approach Road; Mor Approach Road; Thothab Approach Road; Vamleshwar-Dhamrad-Aniyadra Approach Road and Vaghwan-Ankalva Approach Road. Some key observations that need to be rectified are listed below:

- a) Lack of berm/shoulder construction and/or compaction along with the pavement – creating unsafe/hazardous conditions for road users (observed during this as well as the last mission)
- b) Lack of installation of required safety and informatory signage – a few boards that have been erected are without proper foundation (observed during this as well as the last mission)
- c) Improper design and construction of CD structures (affecting required cross drainage and leading to stagnation of water)
- d) Issues related to work planning/completion, exposing users to prolonged period of unsafe conditions (eg: Kapasi Approach Road – delays in earth filling between road and retaining wall along the pond)
- e) Non-clearance of debris from work sites (observed during this as well as the last mission) – prior identification and approval of disposal sites not being followed.
- f) Deficiencies and major gaps in adhering to work zone safety requirements, both in terms of road user's safety and that of workers (observed during this as well as previous mission) – warning signage and barricading was found to be either missing or grossly deficient.
- g) Use of steel rods for tying safety tapes – creating a hazard for the users of the road
- h) Lack of provision of basic facilities (toilet, water) for the labour (observed during this as well as previous mission/s)
- i) Lack of proper first aid and emergency response provisions (observed during this as well as previous mission/s)
- j) Issues related to embankments (dressing, protection etc.) - was flagged in the earlier mission/s.
- k) Issues related to road safety and associated provisions – was flagged in the earlier mission/s.
- l) Non-shifting of two electrical poles that are right on the edge of the road, creating unsafe conditions (Kapasi Approach Road)
- m) On left hand side, right next to a sharp curve, deep ditch exists at the edge of carriageway creating a serious threat to road user's safety (Thothab Approach Road). In some cases, construction material like aggregate, sand, etc. are dumped along the road and construction equipment was found to be parked along the road in an unsafe manner.
- n) No or improper provision of Project information Boards at work sites.

21. *Underground Electrical Cabling Works:* The city of Gandhidham in the Western Coast of Gujarat has been selected for Underground Electrical Cabling. Paschim Gujarat Vij Company Limited, which is the executing agency for this sub-component, has prepared a draft DPR. Draft EIA/SIA report has been prepared and shared with the Bank. For Gujarat, the EIA/SIA report has been reviewed and comments discussed. The report is likely to be finalized by December 10, 2017. Based on the assessment and engineering proposition, a sub-project specific EMP will be finalised. GSDMA/SPIU and PGVCL have to ensure that the design/DPR factors-in findings from the assessments and that the EMP is integrated in the Bidding Document before the tenders are invited.

22. *Screening Report/Documentation:* Environment and social screening exercises have been undertaken for all the sub-projects. While the screening forms are in order, the mission once again pointed out that a consolidated report needs to be put together. It will include the following in addition to the main screening checklist: (a) a summary presenting the methodology adopted and results of the exercise; (b) map/s (on a GIS platform with clearly demarcated sub-project location, natural environment features, access routes/roads, settlements, CRZ/forest/protected area boundaries etc.); (c) proceedings/ minutes of the consultations carried out; (d) photographs of the sub-project/site. Much of this information is available with the SPIU but needs to be collated together. Sample screening outputs for selected sub-projects has been cleared by the Bank but consolidated report (with executive summary) is still awaited/pending and needs to be shared with the NDMA and Bank.

23. *Disclosure of Information:* Once the consolidation of the screening report is completed (in line with the points mentioned in previous AMs) by the SPIU, it shall be put onto the public domain, including the website and at the local level in line with norms spelt out in the ESMF. The SPIU needs to confirm that

translated version of the Executive Summary of the ESMF in local language (Gujarati) is available at the local/sub-project level for all works under the project.

24. *Implementation Arrangements:* SPIU currently has Project Management Consulting firm on board with a designated Environment Specialist. It was agreed that the Safeguard Experts in the PMC team will review the site conditions and assist PGVCL during the preparation of the DPR/EA/SA for underground electrical cabling works in addition to their services to R&BD for consolidation of screening reports, preparation of sub-project specific EMPs, and supervision of roads and MPCs during execution of works. However, much more proactivity is needed from PMC – specifically for supporting supervision of EMP/EHS aspects on behalf of GSDMA and collating/preparing the compliance updates in a timely manner.

25. *Key Issues:* The supervision of site works by the PMSC (Project Management Support Consultants) and TPQA (Third Party Quality Audit) were found inadequate and need to be substantially improved. Some basic oversight (at critical stages) on the line agency from GSDMA's side is also needed. Many issues flagged above have been raised earlier too but there seems to be lack of follow-up with line agencies from either GSDMA or PMSC - particularly the latter since one of their key responsibilities included helping the GSDMA on safeguard issues. PMC's environmental expert didn't join the site visits. Action Taken Reports/compliance notes on the issues raised are awaited even after 19 months.

26. The mission once again advised that checklists should be developed for verifying execution and completion of specific works to ensure quality is maintained and that the basics are not compromised before an asset is taken over.

27. *Sensitization and Training on ESMF:* Since the works for a few MPCs and roads are under execution and a few more will be initiated soon, the mission suggested that a sensitization/training program should be conducted for contractors and the line agency staff to ensure that the ESMF/contractual requirements (including those related to work site safety management, labor and other regulations, construction management and site clean-up and rehabilitation) are implemented in letter and spirit. The mission has agreed to support a training in the coming months for which the dates will be discussed and agreed with GSDMA.

28. *Key Activities/Agreements:* (i) Finalize/update the consolidated Environment Screening Report by December 15, 2017; (ii) Conduct an Orientation Workshop for line agency staff, contractors and other consultants by January 31, 2018 – Bank will support this activity; (iii) Finalize EIA and EMP/s for underground electrical cabling works by December 10, 2017; (iv) Take corrective actions pertaining to environment, health and safety stipulations for roads (where civil works are either complete or are nearing completion) and MPCs (where construction is underway), including a completion compliance check mechanism prior to closure of civil works (detailed comments were provided during the site visits in this and previous missions); (v) Include green building elements in case of shelters for which design/DPR preparation is underway; (ix) Disclosure of environment documents – as they are prepared and finalized and reconfirm disclosure of ESMF's executive summary in vernacular to the Bank and NDMA, specifically at the local level.

## **KERALA**

29. *Site selection for MPCs:* The state has proposed the construction of 27 multi-purpose flood and cyclone shelters in nine coastal districts of Kerala. Of these, locations have been finalized for 23 sites after extensive consultation at various levels. A Govt. order too was issued earlier on the selection of sites. The mission advised SPIU to expedite the process of finalizing the remaining four MPCs sites (one each in Trivandrum, Kollam, Nyarekal and Ernakulum). The mission was informed that alternative sites are being sought for three while one in Kollam is being considered for scaling down the building footprint. The mission also requested for submission of utilization plans for all 27 MPCs.

30. *Designs/DPRs for MPCs*: The mission once again recommended integration of “green building” elements “such as natural lighting and ventilation, rain water harvesting, solar, use of non-lead based paints, wastewater management, solid waste management, plantation etc. in the design of MPCs and seek GRIHA certification for the same. Advise and further support from the Bank will be extended as DPRs get prepared/finalized.
31. The SPIU has submitted three architectural drawings – Muttathara (Thiruvananthapuram), Kumarapuram (Alappuzha) and Mararikulam North (Alappuzha) - that have been approved by the Bank. The Mararikulam MPCs DPR is currently being reviewed.
32. Suggestions pertaining to integration of EHS elements in the design/DPR are being made by the Bank. The State has decided to carry out the work through the Public Works Department. The SPIU and PWD should ensure that EHS aspects are incorporated on similar lines in all the remaining DPRs for MPCs.
33. *Screening Report/Documentation*: The environment screening exercises have been completed and draft reports were shared with the Bank on three occasions. Over-all, the effort made by the SPIU and diligence of the field team/environment specialist in this direction has been acknowledged and appreciated by the Bank. Based on the comments provided after each round of submission, the documentation/report consolidating the findings/outcomes from these exercises has been finalized.
34. *Disclosure of Information*: The consolidated screening report has been disclosed by SPIU on the website. The disclosure at the local level in line with norms spelt out in the ESMF needs to be carried out in the forthcoming months. The SPIU needs to confirm that the translated version of the Executive Summary of the ESMF in local language (Malayalam) has been made available at the local/sub-project level for reference and distribution among concerned stakeholders as sub-project preparation is moving forward. Further, the mission once again suggested that project information brief/leaflets should be prepared to ensure that all relevant information is made available to local communities in simple and user friendly manner.
35. *Regulatory Clearances*: The State has finalized the sites for the 27 proposed MPCs under the project and Environment screening exercises have been completed. Out of the 27 MPCs, 5 sites require CRZ clearance. The mission once again advised that the sites requiring CRZ clearance should be taken-up for bidding in the second phase after the necessary approvals have been obtained. The phasing of civil works should be accordingly reflected in the Procurement Plan.
36. *Implementation Arrangements*: The position of Nodal Environment Officer in Kerala fell vacant recently and needs to be filled-in by end of December 2017.
37. *Key Activities/Agreements*: (i) Integrate elements of “green buildings” such as natural lighting and ventilation, rain water harvesting, solar, use of non-lead based paints, wastewater management, solid waste management, plantation etc. and GRIHA certification requirements in the design/DPRs/Bidding Documents of MPCs; (ii) Obtain CRZ clearance for the 5 sites by January 31, 2018; (iii) Disclosure of environment documents – as they are prepared and finalized and confirm disclosure of ESMF’s executive summary in vernacular at the local level to the Bank and NDMA.

## **KARNATAKA**

38. *Site selection for MPCs*: The State has proposed to construct 11 MPCs under the project. The mission was informed that all the sites have been identified and the required CRZ clearances have been obtained for all the proposed locations. MPCs in Karnataka will be built either in school premises or on open government lands.
39. *Design/DPRs for MPCs*: Approval for the DPR of Thekatte MPCs, as a model document, has been accorded by the Bank, which also incorporates the environment management aspects. The remaining MPCs

DPRs are being/shall be prepared on similar lines and will further incorporate additional design elements for GRIHA certification. The Bank will extend the knowledge support to streamline this process.

40. Out of the 11 MPCS, 7 MPCS of school model have been tendered in August 2017. The designs and drawings of one MPCS at Hosabetu (out of the 3 MPCS of community hall model) was reviewed by the WB. The revised design based on the suggestions provided by WB is to be provided by November 2017. One remaining MPCS site in a school premise has been finalized for which the DPR preparation is under progress.

41. *Utilization of the MPCS:* The mission requested SPIU to identify the purpose to which the MPCS will be put to use in normal time prior to finalizing the design, as the usage of the building in normal time will impact the design proposition. In doing this, it is critical to look at the entire site area in order to identify existing constraints that might limit the multi-purpose use of the shelter. The mission also reiterated that SPIU-Karnataka should share the utilization plan of all MPCS in line with previous agreements and it was agreed that this shall be shared latest by December 20, 2016.

42. *Bridges:* The State has proposed two bridges under the project. DPRs are currently under preparation. Limited EA will have to be undertaken for Bridges and sub-project EMPs need to be prepared. The process for selection of consultant for undertaking EIA study is still underway and has seen unnecessary delays. The mission requested SPIU to expedite the process, which has seen unwarranted delays since the finalization of the ToR for these services more than a year back.

43. *Roads:* Under this component, 110 km of roads have been proposed for construction. The CRZ clearance have been obtained for all the sites. DPR for Harikudru Roads has been approved by the World Bank on August 16, 2016 and tendered. Other roads are likely to be tendered by December 31, 2017.

44. The mission visited 10 sub-project roads and reviewed 11 documents (screening reports and DPRs) in two project districts Udupi, Dakshina Kannada and Uttara Kannada. The Bank provided specific case by case inputs to the SPIU and the field officials from line agency. This was done to bring a closure to unwarranted delays arising from improper application of safeguard requirements and communication gaps between SPIU's safeguard experts and field staff. The mission as a special case offered suggestions to help move this sub-component forward. Based on the small adjustments in the sub-project scope, which were agreed with the line agency and SPIU officials, several sites can avoid safeguard issues and additional regulatory procedures/permissions. Based on this, an updating/ revision of the consolidated environment and social screening report is required.

45. It was agreed that the revised consolidated screening report covering all the proposed road works shall be shared with the NDMA and the Bank by November 30, 2017. The DPRs/Bidding Documents for all but two roads, which require EIA study can be finalized and tenders invited. The Bank requested that all key safeguard documents should be shared with the Bank and NDMA before bids are invited to avoid complications and issues at a later date.

46. *Saline Embankments/Bunds:* The State has proposed to rehabilitate/construct 10.46 km of embankments under the project. The revised design of Manikatte (7 km) saline embankment was resubmitted to the World Bank and has been reviewed. It was noted that the earlier comments of the Bank were not adequately addressed and additional comprehensive comments were resent to the IA for clarification and action. The mission once again informed SPIU that an EIA and SIA study for all embankment works is required in line with the agreed ESMF for the project. The hiring process for getting a consultant on board for conducting the EIA/SIA needs to be expedited to avoid further delays in sub-project preparation. The process for selection of a consultant to undertake EIA/SIA is currently on-going, albeit with delays.

47. *Environment Screening for all work categories:* Environment screening exercises have been completed for all the three districts last year itself. However, the mission had found gaps/inconsistencies in the information that was needed to make the screening documentation complete. The Bank had also

conducted a two-day training on Environment and Social Management for SPIU and line agencies on March 2-3, 2016 to help resolve sub-project preparation issues. Karnataka has finally made progress in the preparation of draft environment screening reports for evacuation roads and MPCs. However, the report on 'roads' needs to be revised in line with findings from site visits made during September 2017. The detailed comments on MPCs report have also been shared with the state by the Bank and once these are incorporated, the report will be final and can be disclosed. Still the sub-project preparation. Consolidated screening reports for all MPCs and roads will be finalized and disclosed before December 31, 2017 based on several rounds of comments/feedback that have been provided by the Bank. The same for saline embankments will be completed after the consultant is on-board.

48. *Integration of EMP into Bidding Documents:* The mission emphasized that the SPIU/line agency should both verify each bid document and ensure that the EMP (as agreed and approved by the Bank in line with requirements set forth in the ESMF) for specific works is included in the bid/contract document/s. Further, it was clarified that in line with site conditions/requirements, as and where needed appropriate management/mitigation measures (adapting the Generic EMP to specific sub-project requirements) should be built into the Bidding documents. Approved versions of EMPs for MPCs and road works (ones not requiring EIA) were recirculated to ensure that correct versions are being used by the field divisions. The mission also suggested that SPIU should refrain from circulating multiple communications/versions on the subject, which were found to be creating confusion among field staff. Disclosure of Information: Once the screening report is finalized in line with the points mentioned above by the SPIU, it shall be put onto the public domain, including the website and at the local level in line with norms spelt out in the ESMF. It will be confirmed that the translated version of the Executive Summary of the ESMF in local language (Kannada) has been made available at the local/sub-project level for reference and distribution among concerned stakeholders as sub-project preparation is moving forward. Further, the mission suggested that project information brief/leaflets will be prepared to ensure that all relevant information is made available to local communities in simple and user friendly manner.

49. *Institutional Arrangements:* SPIU currently has one Environment expert (hired on December 3, 2015) as part of its set-up. The specialist needs to work with line agencies/ consultants to undertake/complete the activities/actions listed above. Additional help/experts have been roped-in to help the project move forward, which has been marred by inconsistent/incomplete inputs in the last nearly one and half year.

50. *Key Activities/Agreements:* (i) Integrate elements of "green buildings" such as natural lighting and ventilation, rain water harvesting, solar, use of non-lead based paints, wastewater management, solid waste management, plantation etc. and GRIHA certification requirements in the design/DPRs of MPCs; (ii) Appointment of consultant for EIA study covering saline embankments, bridges and selected roads by December 10, 2017 – Bank has already provided substantive comments and inputs till date; (iii) Finalization of consolidated Environment Screening Reports for roads and MPCs by December 31, 2017; (iv) Conduct EIA and prepare draft EMP/s for saline embankments/bridges/selected road works by March 31, 2018; (v) Prepare a plantation strategy for MPCs and roads by January 31, 2018; and (vi) Disclosure of environment documents – as they are prepared and finalized and confirm disclosure of ESMF's executive summary at the local level in vernacular to the Bank and NDMA.

## **MAHARASHTRA**

51. *Site selection for MPCs:* The State has proposed to build 11 MPCs under the project. The DPR of Saitwade MPCs was reviewed by the Bank and suggestions on the Bill of Quality (BoQ) were provided. The Bank is reviewing the ESMP – comments on the same will be provided by November 20, 2017.

52. *Saline Embankment:* The State has committed to build 50 km of saline embankments and bunds. Re-alignment survey has been completed by Kharland Development Corporation after issues cropped-up during the impact assessment study. The mission advised to expedite the revision of the model DPR by

November 15, 2017 and complete the rest of the 7 DPRs by end of March 2018. The draft EIA/SIA reports need to be revised in line with comments discussed and provided by the Bank. The mission advised that an EIA and SIA study will be required for this sub-component and EIA/SIA findings and an EMP needs to be integrated into the DPRs and Bidding Documents respectively before the tender/s can be invited. A review meeting was held in March 2017 as part of an interim mission – several comments and suggestions were provided by the Bank on the EIA/EMP during the said discussions.

53. *Underground Electrical Cabling Works:* The districts of Alibag, Ratnagiri and Saatpati have been identified for underground electrical cabling works. The Alibag DPR and EIA/SIA is being reviewed by the World Bank. The DPR preparation for Ratnagiri and Saatpati towns is under process. CRZ clearances need to be expedited. The SPIU confirms that works for Alibag will be tendered out by December 2017 and EIA/EMP will be finalized and suitably incorporated before that.

54. *Environment Screening for all work categories:* Maharashtra has finally made progress in the preparation of draft environment screening reports for MPCS and saline embankments. The screening reports for 5 MPCS sites have been submitted to World Bank and the same is currently under review. However, the report on 'embankments' is yet to be shared with the Bank. The detailed comments on MPCS report have been shared with the state by the Bank and once these are incorporated, the report can be disclosed as an interim one. It will be deemed final after the process is completed to cover all sites/sub-projects. Consolidated screening reports for MPCS is likely to be finalized and disclosed before December 31, 2017. The same for saline embankments and underground electrical cabling works will be completed/disclosed by January 15, 2018.

55. *Regulatory Clearances:* A written clarification has been obtained by the Kharland Board (line agency) on the CRZ clearance issue for works under NCRMP II. Some contracts under the underground electrical cabling works may require CRZ and/or other regulatory permissions. The precise triggers on this will be known once the EIA is submitted for all the proposed works. For MPCS, the need for any clearances will emerge only after all the sites are finalized and the screening exercises are completed. So far, 4 MPCS sites have been identified, which would require CRZ clearance.

56. *Integration of EMP into Bidding Documents:* The mission emphasized that the SPIU/line agency should both verify each bid document and ensure that the EMP (provided in the ESMF) for specific works is included in the bid/contract document/s. Further, it was clarified that in line with site conditions/requirements, as and where needed appropriate management/mitigation measures (adapting the Generic EMP to specific sub-project requirements) should be built into the Bidding documents.

57. *Disclosure of Information:* Once the consolidation of the screening report is completed by the SPIU, it shall be put onto the public domain, including the website and at the local level in line with norms spelt out in the ESMF. The translated version of the Executive Summary of the ESMF in local language (Marathi) will also be shared at the local level (as sub-project preparation moves forward) and details will be shared with the Bank and NDMA for record. Further, the mission suggested that project information brief/leaflets will be prepared to ensure that all relevant information is made available to local communities in simple and user friendly manner.

58. *Institutional Arrangements:* SPIU currently has one Environment expert as part of its set-up. A Project Management Consultant with a designated Environment officer is also supporting the SPIU. The specialists will need to work with line agencies/consultants to undertake/complete the activities/actions listed above and ensure that a large number of critical environmental activities currently underway during preparation are adequately supported.

59. *Key Activities/Agreements:* (i) Integrate elements of "green buildings" such as natural lighting and ventilation, rain water harvesting, solar, use of non-lead based paints, wastewater management, solid waste management, plantation etc. and GRIHA certification requirements in the design/DPRs of MPCS; (ii) Finalization of consolidated Environment Screening Reports for MPCS by December 31, 2017 and for other sub-components before January 31, 2018; (iii) Complete EIA and prepare EMP/s for saline

embankments/underground electrical cabling works by January 15, 2018; (iv) Disclosure of environment documents – as they are prepared and finalized and confirm disclosure of ESMF's executive summary in vernacular at the local levels to the Bank and NDMA.

## **WEST BENGAL**

60. *Site selection and progress on MPCs*: The state has committed to build 150 MPCs out of which 146 MPCs are under construction and efforts are underway to resolve land availability issues in case of 4 sites. The mission appreciated the endeavor of the Project Director/SPIU in resolving site selection/availability issues, specifically given the constraints posed by remoteness of locations, population density, ecological factors and social setting in the state.
61. *Shelter Utilization and Management Plans*: Based on the existing guidelines for the maintenance and management of MPCs under the PMNRF, the guidelines for shelters constructed under the project are being prepared. The final guidelines are expected to be in place by January 15, 2018. Finalization of shelter utilization plans needs to be accorded a priority as it stands delayed.
62. *Screening/documentation for MPCs*: Environment screening exercises were completed for all the 150 MPCs locations more than two years back. Over-all, the effort made by the SPIU in this direction has been acknowledged and appreciated by the Bank. Given some changes in sites, the report needs to be updated. The mission explained that the consolidated report (as done earlier) should include updating of: (a) the screening checklist (for sites that have undergone a change); (b) a summary presenting the methodology adopted and results of the exercise; (c) map/s (with clearly demarcated sub-project location, natural environment features, access routes/roads, CRZ/forest/protected area boundaries etc.) for sites where there are changes; (d) consent letter/proceedings/minutes of the consultations carried out and; (e) photographs of the sub-project/site (for sites that have undergone a change). Much of this information is available with the SPIU but needs to be collated together.
63. *Disclosure of Information*: Once the updating of the consolidated screening report is done, it shall be re-disclosed in line with norms spelt out in the ESMF. Report is likely to be final by December 31, 2017.
64. *EHS Management during Construction of MPCs - Key observations from site visits*: The mission visited two MPCs locations during this mission - Manmathapur MPCs and Taranagar Saraswati MPCs, both located in South 24 Parganas district.
65. The mission noted the efforts made by the state in enforcing the EMP provisions and previously raised issues such as provision of project information board (bi-lingual), barricading (which was important given that construction is being carried within school campus), use of safety tapes, controlled entry, safety signage/warnings, insurance cover, labour licenses, provision of portable toilets, water, first aid kit, fire extinguishers, use of acoustic generators, improved material stacking, etc. have been attended to despite the challenges of remoteness and comparatively difficult/time consuming access to some sites.
66. However, further streamlining and continuous efforts are required on part of the Contractors. Some areas/aspects requiring attention include: (a) electrical and fire safety practices; (b) scaffolding/bracing safety practices; (c) site grading to avoid accumulation of water; (d) prevention against vector borne diseases and bites (insects/snakes); (e) repair/maintenance of access roads; (f) provision of clean fuel for cooking in labour camps; (g) waste management (solid and waste water); (h) more stringent enforcement on PPE use; (i) emergency response planning and; (j) delivery of proper tool box talks by Environment and Safety Officers and Supervisors at site, for which they themselves need some proper training. The mission also found deficiencies in the services provided by TPQA regarding oversight on EHS issues – this includes not pointing out the deficiencies and ensuring that timely 'corrective actions'. The mission further suggested SPIU to monitor and record compliance on points mentioned in the CRZ permission/clearance letters.
67. From a design perspective, the following EHS aspects need attention in case of MPCs: a) increase in width of entry staircase; (b) safety and controlled access for electrical panels; (c) design of the door-



window frames and the need to secure PVC tanks to withstand cyclonic winds; (d) placement of generators (including exhaust provision; foundation and vibration control pad placement); (e) proper sloping of the roof and that of the toilet/bathroom floors; (f) provision of rain water harvesting with a high priority to blocks facing water quality issues; (g) hooks for tying boats and cattle and; (h) detailing of toilets and ensuring during supervision that the finer points are actually being adhered to. The mission suggested that developing clear checklists for construction stage checks and closure/completion of works will help in ensuring that basic/key requirements are not inadvertently missed out.

68. *Underground Electrical Cabling Works:* The State has committed to lay 60 km of underground electrical cabling under the project. Digha (a seaside tourist city in the state) has been selected for underground electrical cabling works. 33 KV OH Line will be converted to underground cable from the railway crossing to Digha sub-station. This will cover approximately 30,000 households in the city. An EIA has been conducted for the proposed works, which also includes the findings/documentation from the environment screening exercise. Based on the assessment and engineering proposition, a sub-project specific EMP has been prepared. The EHS requirements have been integrated into the Bidding document.

69. *Key Activities/Agreements:* (i) Updating of the consolidated Environment Screening Report by December 31, 2017; (ii) Verify/confirm the need to inform CRZ authority in cases where a change in location is proposed/took place; (iii) Conduct a review workshop for line agency staff, contractors and other consultants by January 31, 2018 (covering sub-project closure related activities as well) – Bank will support this activity; (iv) Confirm disclosure of EIA/EMP/s for underground electrical cabling works at Digha; (v) Revise the plantation strategy for MPCS by January 31, 2018 and; (vi) Take corrective actions pertaining to environment, health and safety stipulations for MPCS where construction is currently underway - several suggestions/comments were provided during the site visit and key ones are summarized above.

### Annexure 5: Social Safeguards

1. The overall progress in the project states in completing safeguard documentation and actions for their implementation is **moderately unsatisfactory**. Majority of the project states except West Bengal, still have not completed/finalised SIA/RAP studies for embankments and underground cabling; the approaches for shelter management is under formation; consolidated screening reports for MPCSSs are under preparation. These activities should have been completed given the project timelines. The NDMA needs to monitor completing these activities given the project time lines.

#### KARNATAKA

2. The overall progress in completing safeguard documentation and actions for their implementation is moderately unsatisfactory. The mission visited 10 proposed project roads (and reviewed 11 project roads) in two project districts Udupi, Dakshina Kannada and Uttara Kannada. The below gives the details.

3. MPCSSs Utilization and Management systems: MPCSSs in Karnataka will be built either in school premises or on open government lands. The Government of Karnataka through letter no RD 37 ETC 2015 (dated 26/05/2017) directed the PMU to form two types of Committees for running the shelters and stipulated objectives, roles and responsibilities, and members of the committees in the order –

- a) For school design model shelters located in school premises: The existing School Development and Monitoring Committee (SDMC) is designated to serve as Cyclone Shelter Management and Maintenance Committee (CSMMC) for the newly built shelters.
- b) For community design model located in open areas: The existing Amenities Standing Committee of Gram Panchayat will serve as Cyclone Shelter Management and Maintenance Committee (CSMMC). Through the same order, the GoK has also formed Task Forces for First Aid and Search and Rescue teams, identified the institutes for imparting the training and proposed for providing Rs 5 lakhs as corpus fund for each cyclone shelter.

4. For operationalizing the Order, the PMU has to implement appropriate measures before end December 2017 for fund allocation, identification of training institutes, and designating the existing committees for MPCSSs.

5. MPCSSs – Safeguards Screening Reports: For the 11 MPCSSs taken up under the project, screening reports are submitted and finalized for 10 MPCSSs and for the remaining one, it is in the process of finalization. It is agreed that the

- (a) screening report for remaining one MPCSS will be shared with the World Bank before November 2017;
- (b) consolidated screening report for all the MPCSSs will be finalized and disclosed on SPIU website before December 15, 2017.

6. Evacuation Roads – Safeguards Screening Reports: Of the proposed 110 kms, the screening reports were prepared for 48 kms (25 roads, 16 packages). The mission visited 10 roads – 9 in Udupi and 1 in Dakshina Kannada. All the roads proposed are existing roads. The works essentially include building the concrete pavement along with required drainage facilities within the existing RoW. As per the discussions, records shared during field visits, there is no requirement of private land for any of the 25 roads taken up under the project. Based on the visits, the mission noted the discrepancies in the screening reports and agreed the following with the SPIU:

- (a) transect walk maps present widths of black top of the road instead RoW of entire road width. Maps will be revised to correct this anomaly;

- (b) during the field visits, for some roads, lengths are proposed for revisions based on HDL and alignment needs. Revise the screening reports in line with final revisions;
  - (c) submit consolidated screening reports for 25 roads before December 15, 2017 and disclose on the SPIU website before December 30, 2017.
  - (d) prepare utilities to relocate and initiate measures;
  - (e) prepare and share screening reports for the remaining 52 kms before end November 2017.
7. **Bridges (two bridges – Kodikanya and Manur) – social documentation:** Following 2016 ISR mission, land assessments for the two bridges were done and designs were revised to avoid private land requirements. SPIU informed that there is no land requirement for the bridges. It is agreed that the SPIU will submit screening report for the two bridges before December 15, 2017.
8. **SIA for Embankment:** The ToR has been shared with the PMU for conducting SIA and EIA studies for the proposed saline embankment. The PMU has not yet completed hiring the agency for conducting the studies. It is agreed that the PMU will hire the agency and complete the studies before end January 2018.

#### **WEST BENGAL**

9. **Initiate measures to implement RAP for Electrical Underground Cabling:** The draft RAP for electrical underground cabling at Digba was finalized based on the comments and the RAP is now put up for implementation. The report presents that there is no land acquisition and involves no displacements, except temporary relocation and access issues to adjacent properties. For implementation, the Discom has to undertake the following measures: (1) prepare (individual entitlement plans) Micro Plans (2) get necessary internal approvals for the budgets prepared based on Micro Plans (3) consult and inform the affected communities about the implementation schedules.
10. **Complete the approval process from different authorities for laying the UGC lines:** The UGC at many places is planned to be placed in the middle of the road wherever there other utilities such as underground drainage pipelines, etc are already located. The Discom will complete preparing drawings and obtain appropriate approvals from the departments.
11. **Recruitment of social specialist and community mobilisers:** The PMU has recruited social specialist and the specialist is expected to join the services before end November 2017. The process of recruiting community mobilisers to help in RAP implementation and managing MPSCs has not yet started. As this is important, the PMU will need to complete recruiting the mobilisers before end December 2017.
12. **MPSCs Management systems:** The PMU proposed local Panchayats to manage the MPSCs. As well, the PMU has also proposed for providing corpus fund for maintaining the shelters. Both the proposals are with Finance Department for its concurrence. Given the project time lines, the PMU will have to put systems in place before end December 2017.
13. **Submit screening reports:** Last agreed action submission of screening reports for 16 MPSCs will have to be completed before end December 2017. As the locations for these sites are changed, the screening has to be conducted for the new sites and reports to be submitted and disclosed on the website.
14. **Mutation of lands for MPSCs located on Private and Society lands:** This process is in progress. It has been emphasized that even for the lands belonging to societies/trusts, the formal agreements should be in place for using the lands for MPSCs.
15. **Training for shelter management committees:** The PMU has to initiate plans for imparting the training to the committees on first aid, safety and the management of the shelters.

## **KERALA**

16. **MPCSs Screening Reports:** The social screening completed for all 27 MPCSSs. Out of 27, for four MPCSSs the sites are not available due to locals resistance. The PMU decided that they will change the sites for these MPCSSs and submit consolidated final screening report along with Panchayat resolutions to the Bank before end December 2017.

17. **MPCSs Utilization and Management systems:** MPCSSs in Kerala will be built either in schools or open government lands and are planned to utilize for schools or community purposes. The PMU has to prepare utilization and maintenance plans for MPCSSs and also the corpus fund requirements before end December, 2017 and share with the Bank.

## **MAHARASTRA**

18. **The Project state Maharashtra is building cyclone shelters, roads, embankments and underground cabling under the project.**

19. **Saline Embankments:** Eight embankments are taken up for improvement under the project - six in Raigad district and two in Palghar district on the west coast of Maharashtra on the Arabian Sea. Existing embankments are eroded, and low in height, causing ingress of sea water. To strengthen and improve the embankments as per the DPR, the initial land surveys indicate that a total of 41.66 ha of land is required of which 32.15 ha belongs to private owners. About 92 private structures and 4 public structures will also be affected. The department is reworking on the alignment option based on ESIA consultants reports and this may change the land requirements. Land Details will change accordingly.

20. **SIA and RAP preparation:** The social and environmental consultants have submitted the draft ESIA reports for all the eight embankments. The PMU has to ensure completion of RAPs for all the embankments before end November 2017. All land intake will be completed through donation or agreed option before end January 2018.

21. **Multi-Purpose Cyclone Shelters:** A total of 11 MPCSSs will be built under the project. Out of 11 MPCSSs, for 5 MPCSSs the screening reports were submitted and for the other 6 the reports are under finalisation. Two MPCSSs, Kunkeswar and Saitenwale have road access issues which need to be built on private lands. The department informed that the land owners have agreed for donating these small strips of land for building access roads. It is discussed and agreed that the PMU will follow the provisions of the ESMF for taking the lands through donation. The PMU will submit the screening reports for remaining 6 MPCSSs before end December, 2017. The screening reports will need to be disclosed on departmental website.

22. **Shelter Management Committees:** Policy and approach for managing the cyclone shelters has not yet been finalised. This is very important and the PMU need to finalise the policy before end January 2018; and work plan on capacity building activities for communities and the committees will also be shared with the Bank before end March 2018.

**Underground cabling:** Alibagh, Ratnagiri and Saatpati are the three towns taken up for underground cabling under the project. The social and environmental assessments are under progress for Alibagh town and the draft RAP is submitted. The draft ESIA and RAP reports for other two will be submitted before end January, 2018.

## **GOA**

23. **The overall progress in preparing social safeguard documents is unsatisfactory. The below provides status and agreed actions:**

24. **Divar Saline Embankment:** This is an embankment taken up to protect the flood water ingress of Mandoveri river into island Divar. The existing embankment of around 8.5 kms around the island is

taken up for improvements under the Project. The preparation of DPR is at an advanced stage of completion. Though bund alignment and cross sections are prepared but are under revision.

25. **Land requirements and land surveys:** Land survey is in progress and has to establish the final list of land owners. The preliminary assessments based on design option of 10 mts width, it is assessed about 78809 sq mts of land is required affecting 34 structures partially or fully in four villages – Malar (36356 sq mts), Naroa (26953 sq mts), Goltim (12453 sq mts), Navelim (3047 sq mts). This includes both community (Communidade) and private lands.

26. **Displacement and R&R Issues:** The field visits during last mission to the embankment brings out that good number of the structures are located on existing bund and they are single to three storied pucca buildings. There are public structures like shelters, temples, etc. The department plans to avoid the displacement of the pucca structures and accordingly finalizing the cross sections and the drawings. The magnitude of displacement and R&R will only be finalized after the alignment and design options are frozen.

27. **SIA and RAP preparation:** The SIA and RAP preparation is taking long time. The preparation started almost 8 months ago. This was partially affected due to alignment revisions. Given the project timelines, it is essential to complete SIA and submit RAP before end November 2017. The WRD along with Revenue Department and with assistance from the RAP Consultants should finalise the land requirements and list of owners for further activities.

28. **Poinguinium and Loliem Embankment:** This is an embankment taken up to protect the flood water ingress of Galgibag river into agricultural fields of Poinguinim and Loliem villages. The project has taken up the improvement of the existing saline bund of 7.05 kms along the river in the two villages – bund length on Poinguinum side is 3.595 kms and on Loliem side 3.455 kms. The bund improvements includes restoration at some places and new formation at other places.

**Land Requirements and land surveys:** The preliminary assessments based on design option of 10 mts width, it is assessed about 69843 sq mts of land is required and the bund has no structures those will be affected. The land requirement in Poinguinium is 35569 sq mts and in Loilem 34274 sq mts. The discussions during previous mission with the Sarpanch and the locals indicate that the entire land belongs to private owners and the community.

29. **Displacement and R&R Issues:** The field visits to the bund brings out that the major part of the bund is covered with coconut plants owned by locals. At some lengths, the bund has well grown mangroves which needs to be protected and integrated into the bund alignment. The department shared thoughts that they will finalise the alignment based on the vulnerability of the stretch and the cross sections will be finalized that helps in protecting the mangroves. The magnitude of displacement and R&R will only be finalized after the alignment and design options are frozen.

30. **SIA and RAP preparation:** The SIA and RAP preparation is taking long time. The preparation started almost 8 months ago. This was partially affected due to alignment revisions. Given the project timelines, it is essential to complete SIA and submit RAP before end November 2017. The WRD along with Revenue Department and with assistance from the RAP Consultants should finalise the land requirements and list of owners for further activities. The WRD along with Revenue Department and assistance from the RAP Consultants will finalise the land requirements and list of owners.

31. **MPCSs:** The WRD has completed screening reports for 6 MPCSs and they are now proceeded for civil work procurement. The screening reports for others are in the process of finalization as lands for 3 MPCSs (Adarshnagar Vasco, Quitol/Quopem, Chalta ) are yet to be transferred; Junaswada MPCS requires CRZ clearance. The screening reports for these 10 MPCSs will be submitted before end December 2017

and the same will be disclosed before end January 2018. A consolidated report for all 16 MPCs will be submitted to the Bank before end February 2018.

32. **Underground cabling:** Underground cabling is taken up for three villages (Harmal, Anjina, and Keri) under the project. Rural Electrification Corporation has been entrusted with finalization of alignment and preparation of DPRs. These documents form the base for conducting social and environmental assessments. The department hired consultants for ESIA studies. The survey and RAP will have to be completed before end January 2018.

#### **GUJARAT**

33. The components for Gujarat include (1) improving 46 roads (2) constructing 112 MPCs and (c) electrical underground cabling in Gandhigram. The PMU has conducted environmental and social screening for all the sub projects; but they have not been finalized in terms of a report as suggested during previous missions. The discussions with the PMU indicates none of the sub projects require any private lands.

34. **Locational issues of MPCs:** The locational choices for MPCs appears mostly guided by the availability of vacant Government lands. While this is rational, what is more important is, MPCs usability and proximity to the communities in times of disasters. The PMU should submit the Consolidated Screening Report for the final sites to the Bank and disclose the report on the GSDMA website before December 15, 2017.

35. **Shelter Management Committees:** Draft guidelines on the lines of Odisha has been prepared and awaiting the formal approval. Local Shelter Management Committees will be formed which will run and maintain the Shelters. Following this capacity building activities for communities and committees will have to be undertaken. The Policy on Shelter Management will be finalized before end December 2017; and work plan on capacity building activities will be shared with the Bank end January 2018.

36. **Social Impact Assessment for Underground electrical cabling – Gandhigram:** The city Gandhigram is taken up for underground cabling for about 160 kms length. The draft SIA is prepared and the report will be finalized before end December 2017.

#### **SCREENING REPORTS**

37. The screening reports which are discussed above for all the states should contain the following – (a) Justification/vulnerability assessment for the proposed investment (which will also form the basis of the design); (b) Map (on a GIS platform) showing clearly the proposed location of the sub-project and the key social and environmental and other features such as water bodies, CRZ line, forest and protected areas (if any), settlements, roads etc; (c) Public consultation related documentation (consent letter; minutes of the meeting, with views/suggestions, if any; visual and attendance record/s); (d) Completed screening forms, and; (e) A summary/synthesis of the screening findings/results.

## **Annexure 6: State wise Procurement Performance Status and Observations**

### **PMU NDMA**

#### **Component C**

- a) NDMA has initiated selection of consultant for Multi-hazard risk modeling and assessment (sub-component C.1). Following REOI, the shortlisting of firms is at finalization stage;
- b) NDMA is also in the process of initiating selection of consultant for Design of a National Seismic Risk Mitigation Program (sub-component C.5).

### **GOA**

**Component A: EWDS design consultant.** The contract for designing EWDS system has been awarded to TCIL. The work is under progress;

#### **Component B**

- a) *Construction of 40 MPCS.* As of date, 16 MPCS are planned presently with allocated funds. Out of these, 7 works have been tendered and 5 contracts are processed for award while 3 contras will be tendered out in second week of November 2017. The remaining MPCS will be tendered before December 2017;
- b) *Rehabilitation of 30 kms of bunds.* DPR is completed, Environmental assessment report is completed and social assessment is on-going. It is expected tender will be initiated by December 2017;
- c) *Construction of UG cable works of 25 kms.* DPR is completed, EIA/SIA assessment is on-going under state fund;
- d) *Construction and rehabilitation of 30 kms of roads and bridges.* This sub-component has been canceled and the money will be used for construction of either MPCS or Saline embankment;

#### **Component D**

- a) *Staffing.* Most of staff are in place. Few additional staff will be on board by November 2017
- b) *EIA/SIA Consultant.* M/s TERI has been hired to conduct EIA/SIA assessment for Saline Embankment. The work is under progress;
- c) *Selection of TPQA consultant.* The selection of TPQA consultant is under progress. Currently, SPIU has completed pre-proposal concurrence and it is expected by December, the consultant will be on board.

The overall procurement performance is moderately satisfactory.

### **GUJARAT**

**Component A: EWDS design consultant.** GSDMA is still at finalization stage of technology options. Procurement has not been initiated yet.

#### **Component B:**

- a) *Construction of 112 MPCS.* As of date, 100 MPCS were planned with the available funds. Out of these, construction of 18 MPCS were completed, 8 are on-going, 45 MPCS are under bidding process and there are still 29 MPCS to be tendered out;
- b) *Construction of 170 kms of access roads and bridges.* With the available funds, a total of 43 roads are to be constructed or upgraded with total length of 156.74 kms. Construction of 69.13 kms of roads (consisting of 20 nos. of roads) has been completed; construction of 82.52 kms of roads (consisting of 19 nos. of roads) are on-going and 4 roads are yet to be tendered out;
- c) *UG cable works of 65 kms.* The EIA/SIA assessment is at finalization stage. Tender for UG cable works will begin only after approval of EIA/SIA assessment.

**Component D:**

- a) *PMC Consultant.* The PMC is on board. GSDMA has requested variations in scope of PMC contract and currently the Bank is in the process of reviewing the additional scope of work;
- b) *DSC Consultant.* The earlier DSC contract has been closed and currently, GSDMA is in the process of selecting new DSC consultant;

**Others**

- a) The Bank has initially insisted to have TPQA Consultant on board. However, GSDMA proposed that they will use PMC consultant to do TPQA works and Bank has agreed to it. During this mission, it was noted that quality of the works are below the standard. A separate report is provided by the technical team;
- b) Bank has received complaint from M/s Mukesh Associates alleging that GSDMA has withheld their payments. Bank has forwarded the complaint letter to GSDMA and advised GSDMA to resolve it and asked GSDMA to keep Bank informed on the resolution of the complaint.

The over-all procurement performance of SPIU Gujarat is rated as satisfactory.

**Karnataka**

**Component A: EWDS design consultant.** The SPIU is in the process of contract negotiation with TCIL and contract signature is expected within a month.

**Component B**

- a) *Construction of 11 MPCs.* As of date, 7 MPCs has been tendered and remaining ones (community model) are pending for design approval;
- b) *Rehabilitation of 11 kms of embankments.* DPR under preparation. No procurement initiated.
- c) *Construction and rehabilitation of 110 kms of roads and 3 bridges.* With the available budget, the SPIU is taking up 48 kms of roads (25 nos.) which are packaged into 16 packages. Currently, 4 roads (approximately 10 kms) have been tendered out while the tender for remaining road is expected to happen by December 2017. likewise, SPIU is taking up 2 bridges with the available budget and DPR is under progress.

**Component D**

- a) *Selection of EIA/SIA consultant.* The selection process is in progress. The technical proposal was opened on August 21, 2017. SPIU has been advised to expedite selection process;
- b) *Internal Audit.* REOI floated and currently at shortlisting stage;
- c) *Selection of TPQA consultant.* REOI floated and received only 2 EOIs. The SPIU is initiating advertisement;
- d) *Staffing.* Most of the staff in SPIU are on board except procurement officer. SPIU has been advised to expedite selection of process of procurement officer urgently.
- e) The overall implementation of procurement in Karnataka is moderately satisfactory.

**Kerala**

**Component A: EWDS design consultant.** ToR is at finalization stage. No Procurement as of date.

**Component B: Construction of 27 MPCs (including rehabilitation of 13 kms of access roads and footbridges).** Preparation of model DPR has been completed and is at finalization stage. No procurement has been initiated as of date.

**Component D**

- a) *Soil Investigation Survey:* consultant has been selected to carry out soil investigation survey;



- b) *Total station survey.* A consultant has been selected to carry out total station survey for the potential sites;
- c) *Staffing.* Procurement specialist is on board, while SPIU still needs to fill up the other sector specialist post.

The overall procurement performance in SPIU Kerala is unsatisfactory.

#### **Maharashtra**

**Component A: EWDS design consultant.** The contract for designing EWDS system has been awarded to TCIL and contract was signed on September 6, 2017 for a period of 16 months. The work is under progress;

#### **Component B**

- a) *Construction of 13 MPCS.* Model DPR was submitted the Bank June 16, 2017 and Bank as provided comments is at finalization stage. No procurement initiated as of date;
- b) *UG cable works of 130 kms.* DRP complemented, EIA/SIA completed and submitted to the Bank for comments and is at finalization state. No procurement done
- c) *Construction of 50 kms of saline embankments and bunds.* 8 bunds were considered with the allocated fund for construction of saline embankment and bunds. A Model DPR has been completed, but no procurement initiated as of date.

#### **Component D**

- a) *Project Management Consultant (PMC).* The PMC is on board and all the key personnel are in place;
- b) *EIA/SIA Consultant.* The EIA/SIA consultant is on board and work is under progress.
- c) *Consumer Survey Consultant.* The Consumer Survey Consultant is on board and the work is under progress;
- d) *Staffing.* Staffing in SPIU is still a problem, no procurement officer yet in place which is impacting the overall project performance.
- e) *TPQA Consultant.* The REOI for selection of TPQA consultant was initiated 6 months back and there is no progress on the selection process.

The overall procurement performance in SPIU Maharashtra is unsatisfactory.

#### **West Bengal**

**Component A: EWDS design consultant.** the selection of design consultant for implementation of EWDS is under progress. The shortlist of firms has been finalized. In the second round REOI, seven firms have participated but only 4 firms were shortlisted against the requirements of 6. The SPIU requested Bank to consider the 4 firms and Bank has agreed to it as third round of REOI would not bring much change to the shortlist. The Bank has also discussed on draft RFP and it is expected that RFP will be issued to these 4 shortlisted firms soon;

#### **Component B**

- a) *Construction of 150 MPCS and flood shelters.* The SPIU has already awarded contract for 14 packages consisting of 150 MPCS. There are 2 contractors. While the construction stage of cyclone shelters are at various stages, there are 2 sites where SPIU is not able to hand over it to the contractors. The mission reminded SPIU to resolved it at earliest. The construction duration for all the 14 packages are 18 months. In many cases, the contract duration has over-run and SPIU has issued time extension. However, it is noted that time extension for Package 8 has not been done and advised SPIU to initiate it at the earliest to avoid complications related to contract management. The mission also discussed on implication of GST to these contracts and SPIU informed that they are having dialogue with the government to resolve issues related to GST;

- b) *UG cable works of 60 kms.* Procurement for UG cable works are under progress. Pre-bid meeting for Package 2 has been recently completed. It is expected that by December 2017, the contractor will be in place.

***Component D***

- a) *TPQA consultant.* The TPQA consultant is on board. The SIPU reported that all staff are now in place and work flow is smooth. They have also extended TPQA contract by another 6 months. SPIU has been advised to submitted signed copy of amended contract copy to the Bank for record and future reference;
- b) *Staffing.* All SPIU staff are in place as of this mission date.
- c) The overall procurement performance of SPIU West Bengal is satisfactory.

## Annexure 7: Financial Management

### 1. Gujarat

**Budgeting and expenditure:** For NCRMP-II, in FY 2016-17 as against a budget of Rs. 263.50 crores, Rs. 127.5 crores were released for the project and Rs 95.86 crores was expended. For FY 2017-18, as of date budget releases (Central and State share) are nil and reported expenditure amounts to Rs 5.31 crores.

**Accounting and Book keeping:** There is a need for strengthening internal control especially in record keeping at Division level. Currently only Cash Book, Cheque register, pass book and Measurement book is being maintained. Since the bill payments is being made at Division level it is imperative that a package/ contractor wise bills/ work register should be maintained. It is suggested that a format should be developed and rolled-out at the earliest. Also, it is suggested that the feasibility of rolling out Tally up-till Division level for high transaction divisions should be explored.

**Internal Audit:** For NCRMP-II, the scope of Internal Audit is not fully delivered. The Auditors (for period October to March 2017) have reported that "due to constraint of time granted for executing the audit, we have primarily focused on the financial aspects of RA bills and Term of Bid". It is emphasized that the scope of Internal audit is much beyond the financial aspects. Internal Audit is an assessment of the adequacy of the Project management, financial management, and procurement system including internal controls. The mission request that moving forward it should be ensured that the scope is not underdelivered under any circumstances.

**External Audit:** For NCRMP-II, request to State AG for carrying out External Audit was made on June 20, 2016 and October 25, 2016 but no response was received. External Audit for the period July, 2014 to March, 2017 was completed and audit reports were submitted to NDMA. Appointment of External Auditor for the financial year 2017-18 as per the World Bank's guidelines is in progress. Expression of Interest (EoI) was published on September 12, 2017 and last date of submission of EoI responses is October 12, 2017.

The financial management performance rating for the State of Gujarat is *Moderately Satisfactory*.

### 2. West Bengal

**Budgeting and expenditure<sup>2</sup>:** For NCRMP-II, as against receipts of INR 385.58 crores from GoI and INR 44.27 crores from state government, an amount of INR 276.37 crores has been expended as of 31<sup>st</sup> June 2017. For FY 2017-18, an amount of INR 115.38 crores for central share and INR 15.78 lakhs for state share has been released till date against which expenditure amount to Rs.25.3 crores was reported till 30<sup>th</sup> June 2017.

**Accounting and Book keeping:** For West Bengal, the mission highlights with concern inadequate accounting and book keeping at the PIU. The PIU at present is only preparing a manual Cash/ Bank book for component D. No other accounting records / ledgers are generated. The Chart of Accounts as required for booking expenditures has not yet been adopted. In addition, required records like Fixed Assets register, Works and Contractor's register, Mobilization Advance register are either not maintained or in-adequately maintained at PIU.

<sup>2</sup> There are contradictions in the budget, releases, expenditure and unspent fund's figures provided by the PIU finance team. They have been requested to re-confirm and share the final figures. The same are awaited.

Consolidation of financial information for component B is also in-adequate. Other than IUFs from PMU, no other substantive information was available with PIU. The mission observed that the finance team at PIU is majorly focusing on Component- D only. The financial management aspects for component-B are being executed by PMUs with very minimal oversight by PIU.

Further the mission observed that PIU is preparing record manually. There is very limited usage of computers by finance team at PIU. Tally is also not being implemented. The mission strongly urges that financial aspects laid down in Financial Manual for NCRMP-II should be followed.

**Internal Audit:** In West Bengal, internal audit is under way. Out of the seven divisions and PMU, internal audit of 5 divisions has been conducted. The mission emphasized the need for consolidated report of key findings.

**External Audit:** In West Bengal, initial records have been sent to State AG for audit of FY 2016-17. It was informed to the project that audit report in respect of FY 2016-17 shall be due to be received by the Bank by December 31, 2017.

The financial management performance rating for the State of *West Bengal is Moderately Unsatisfactory* primarily on account of inadequate accounting, record keeping and consolidation of financial information at PIU.