

INDIA
National Cyclone Risk Mitigation Project- Phase I (NCRMP-I) (P092217) and
Additional Financing (P148870)
Project Implementation Support Mission

Andhra Pradesh – January 23 to 27, 2017

Odisha- April 10-13, 2017

AIDE MEMOIRE

1. A World Bank mission¹ visited the state of Andhra Pradesh from January 23 to 27, and the State of Odisha from April 10 to 13, 2017 to carry out a Project Implementation Support mission for the National Cyclone Risk Mitigation Project – Phase I and Additional Financing (NCRMP-I and AF). The mission had a wrap-up meeting with Mr. S.P. Tucker, Chief Secretary, Government of Andhra Pradesh (GoAP) on February 8, 2017, and with Mr. Pradipta Kumar Mohapatra, Managing Director OSDMA and Principal Secretary, Food Supplies and Consumer Welfare Departments, Government of Odisha (GoO) on April 13, 2017, to present the mission’s findings and recommendations. The mission would like to thank the GoAP and GoO for their time and support. This Aide Memoire summarizes the mission’s observations and the key agreed steps are presented in Annex 1.

I. Key Project Data (Andhra Pradesh and Odisha combined) (As of April 30, 2017)

	Project Data		Project Performance Ratings	
	NCRMP –I	Additional Financing		Summary Ratings
Board Approval	June 22, 2010	April 8, 2014	Achievement of PDO	Moderately Satisfactory
Effectiveness Date	March 30, 2011	October 01, 2015	Implementation Progress	Moderately Satisfactory
Credit Closing Date	October 31, 2017	October 31, 2017	Problem Flags	Slow Disbursement, Bifurcation of AP
Credit (original)	US\$255 million	US\$104 million	Safeguards	Moderately Satisfactory
Project age	6 years 11 Months	3 years 1 Month	Fiduciary	Moderately Satisfactory
% Disbursed	63.53%	38.82%		

II. Project Development Objective

2. The Project Development Objective (PDO) is “to reduce the vulnerability of coastal communities in Andhra Pradesh and Odisha to cyclone and other hydro-meteorological hazards.”

III. Overall Project Status and Issues

3. Under NCRMP-I 98% of roads, 92% of multi-purpose cyclone shelters (MPCS) and 50% of saline embankments have been completed. Under NCRMP –AF, progress is uneven

¹ The mission team was led by Deepak Singh (Task Team Leader & Sr. DRM Specialist), and comprised of Anup Karanth (Sr. DRM Specialist), Ignacio Urrutia (DRM Specialist), Peeyush Sekhsaria (DRM Specialist), Hyunjee Oh (DRM & Climate Change Specialist), Keiko Sakoda (DRM Specialist), Jared Phillip Marcadante (DRM Analyst), Deepak Malik (Operations Specialist, Consultant), Venkat Rao Bayana (Social Safeguards Specialist, Consultant), Jurminla Jurminla (Procurement Specialist), Prabir Joardar (Embankment Specialist, Consultant), Siddharth Kohli (Finance Management Specialist, Consultant), Murahari Reddy (Roads Specialist, Consultant), Manzoor Khan (Infrastructure Specialist, Consultant), and MA Dasarathi (Electrical Specialist, Consultant); Vaideeswaran S (Environment Specialist, consultant) and Malini Nambiar (DRM Specialist, Consultant),

between the States: Odisha completed 90% of roads and 50% of MPCs, while AP completed just over 50% of roads and is yet to complete any MPCs although all are under construction. All contracts under NCRMP I and AF have been awarded.

4. The Project Implementation Performance remains moderately satisfactory due to delays in work progress, mainly in AP. It is unlikely that all works will be completed by the current closing date of October 2017. The Bank received a request from NDMA and DEA requesting a closing date extension of the project till March 2018 that is under consideration.

5. *Quality of construction and closure of projects:* Deficiencies have been pointed out by the Third Party Quality Auditor (TPQA). Issues of contractual provisions including work programme, liquidity damages, extensions and variations, insurances and contract closure are not fully complied with.

6. *Formation and capacity building of Cyclone Shelter Management and Maintenance Committees (CSMMC):* As the construction of MPCs is expected to end by October 2017, it is important that formation of CSMMCs, provision of equipment, registration, bank accounts, corpus fund, their training programs on evacuation shelters, usage, operation and maintenance, etc.; are expedited. This is critical for timely handover of the buildings and ensuring sustainability of the system.

IV. Current Implementation Status and Issues

7. **Component A: Early Warning System and Coastal Communities Capacity Building.** In AP, the contract for this assignment was signed with M/s L&T Ltd. in October 26, 2016. There is however delay in implementation as AP has not been able to provide all the locations for installation of the system and that is cascading delay in obtaining licences.

8. In Odisha, installations of the towers have started. The mission visited a tower in Mayurpada village in Ganjam district, and suggested to: i) explore the option of using better paint on the tower like epoxy for longer life, ii) conceal cables, iii) use stainless steel for ladders, iv) have the ladder welded and not only bolted, and v) make the ladder as sliding and lockable for the first 6 feet.

9. **Component B: Cyclone Risk Mitigation Infrastructure:** The progress made under this component in Andhra Pradesh and Odisha is as follows:

Table 1: Investments under NCRMP I and AF

State	Projects	Works	Total	Completed (Feb-2017)	Work in progress
AP	NCRMP-I	MPCS	135	117	18
		Saline Embankments	2	-	2
		Approach Roads	163	163	-
		Roads to Habitations (RHB)	233	230	3
		Bridges	23	21	2
	NCRMP-I (AF)	MPCS	84	-	84
		Roads to Cyclone Shelters (RCS)	75	43	32
		Bridges	12	3	9

Odisha	NCRMP-I	MPCS	154	153	1
		Approach Roads	143	139	4
		Saline Embankments	12	7	5
	NCRMP-I AF	MPCS	162	89	73
		Approach Roads	100	90	10

Andhra Pradesh

10. *Multi-Purpose Cyclone Shelters (MPCS)*: Construction progress has to be expedited, for this it was agreed: i) to increase supervision in the field, ii) that the PMU will carry out meetings with contractors that are under-performing to determine actions to be taken; and iii) to expedite the process of releasing payments for completed milestones.

11. The mission visited 5 shelters in three project districts - Nellore, Prakasam and Krishna. The mission noted several good practices such as kitchen gardens, planted trees, built rainwater harvesting pits, and health clinics centre. Some issues to improve include: i) lightning conductor to be provided for all MPCS; ii) certain issues pointed out in earlier missions persist and need to be addressed at the earliest; iii) information boards on construction sites need to have complete information; iv) shelter utilisation plan needs to be developed for continuous use of shelter in normal times; v) workers' safety to be made a priority in all construction sites and regularly monitored by SPIU and TPQA. Detailed field observations are in Annex 2.

12. The most critical action for MPCS is formation and training of Cyclone Shelter Management and Maintenance Committees (CSMMCs). Under NCRMP I, 117 out of 138 MPCS have been handed over to committees. The Society for Elimination of Rural Poverty (SERP) has been entrusted with the formation of committees, training and transferring of corpus funds. The mission requested that a detailed update is shared with the Bank, on the hand-over process of the remaining MPCS including handover of equipment, release of corpus fund to the CSMMCs and capacity building programs conducted by SERP by June 15, 2017.

13. *Bridges*: The mission advised SPIU to take necessary measures for timely completion of ongoing works. Quality control and assurance measures were found to be insufficient and the TPQA is not recording these shortcomings. Records are not maintained adequately and at times the work carried out was not in accordance with the working drawings. Detailed observations are provided in Annex 3.

14. *Saline Embankments*: Both ongoing works may face delays in completion. Public safety at construction sites and quality of compaction remains a concern. The mission advised to expedite the construction work and take measures to ensure construction quality and public safety, and submit a revised work plan by May 31, 2017. Detailed observations on the field visits can be found in Annex 4.

15. *Approach Roads and Bridges*: Ongoing works are of good quality and despite delays in awarding of contracts are now in good implementation pace. Detailed observations on the field visits are given in Annex 5.

Odisha

16. *Multi-Purpose Cyclone Shelters (MPCS)*: The mission visited 3 shelters in Kendrapada and Ganjam districts. The mission observed good progress, but observations raised by TPQA are not yet systematically addressed. Some important issues to be addressed are: i) provision

of electricity and lightning conductors, ii) complete information boards, iii) compliance of contractual provisions such as updated work programs, liquidity damages, extensions, variations, etc.

17. As in AP, formation, equipment, and training of committees have to be expedited, including: registration, bank account, seed money and trainings. The SPIU will send a report on contract compliances, registration and trainings of committees and handover of MPCS by May 31, 2017.

18. *Saline Embankments:* Although the work for 7 embankments is complete and contracts are closed, however the documentation including measurements, as built drawings, and completion report including compliance with TPQA observations is not complete. The mission suggested to SPIU to ensure that: i) all the work measurements are taken during the contract period; and ii) penalties are levied if as built drawings as stipulated in the contract are not provided or the work at the time of closing the contract is incomplete or faulty.

19. The mission also visited ongoing works in Nimapara and Jagatsighapur. Some issues observed were: i) deficiencies in compaction of road surface or turfing works; ii) very poor finishing for about one Km near the Kathagudi sluice, and iii) half finished work in the extended portion beyond the Kathagadi sluice. These defects and any other defects pointed out by the TPQA Consultants must be rectified before the closure of contract.

20. *Approach Roads:* The physical progress of the 14 roads under construction is good. However, it was observed that: i) TPQA observations are not adequately addressed; ii) final bills are yet to be prepared for many completed/closed road packages; iii) signage's are not as per IRC 67-2012; iv) protection and dressing of embankment slopes for drainage are pending after completion of the project. It is agreed that TPQA observations along with contract compliance issues will be reviewed and complied with, on a regular basis, and a report will be shared with Bank by May 31, 2017; and signage's will be checked and will be replaced as per IRC 67-2012.

21. Component C: Technical Assistance for National and State Level Capacity Building and Knowledge Creation.

22. *Hazard Risk and Vulnerability Assessment:* RMSI, the consulting agency procured for this sub-component, delivered the final report and operational GeoNode based composite Risk Atlas in October 2016. NDMA has allotted the user name and password for the participant states to use the composite risk assessment on the web-portal. States are expected to use the assessment for mitigation and preparedness planning, and loss estimation post disaster. NDMA is now migrating the assessment on NIC portal.

23. *Preparing Long Term Training and Capacity Building Strategy for Disaster Risk Reduction in India:* SEEDS, the consulting firm procured for this work, completed the study and submitted their recommendations to NIDM and NDMA. NIDM has submitted an Operational Plan based on modules developed under the study. Subsequently, seven modules dealing with priority sectors have been developed and five trainings have been organized for Training of Trainers (TOTs). Other TOTs proposed to be completed by June 30, 2017.

24. A study on 'Post Disaster Need Assessment (PDNA)' was awarded to Asian Disaster Preparedness Centre (ADPC), Thailand. The objective of the study is to evolve standardized PDNA tools relevant to India, revamp the existing system of PDNA in India and integrating

the new PDNA tools. The final report on PDNA Tool along with draft Web-based portal has been submitted to NDMA. Although the ADPC contract has expired in January 2017, the final payment of the consultant agency, and concurrence on the PDNA tools from NDMA and NIDM are pending.

V. Environment Management and Safeguards

25. The overall implementation of environment management and safeguard aspects for NCRMP- I in Andhra Pradesh and Odisha continues to be moderately satisfactory. The following issues need attention of the SPIU and concerned line departments: i) *Saline Embankment*: Plantation work in saline embankments and the mangrove regeneration have to be ensured; iii) *Roads and Bridges*: Provide road safety measures like edge markings, rumble strips, road signage and information must be ensured, and iii) *Work site Safety*: Ensure proper worksite safety management on all sites where works are under execution – Continuous. For Andhra Pradesh, other detailed observations as well as key issues which require attention of the SPIU and concerned line departments are given in Annex 6.

VI. Social Management and Safeguards

26. *Andhra Pradesh*. The overall implementation progress of social safeguards aspects in Andhra Pradesh is satisfactory. The SPIU, however, is advised to increase its efforts to address all pending issues conclusively as the project is in its final phase, with special attention to operation and management arrangements for MPCs through management committees. The key agreed actions are: i) Develop a model utilisation plan of the shelters and possible tariffs for their utilisation depending on type of usage; ii) Complete handing over remaining 18 MPCs built under NCRMP by May 31, 2017 and initiate forming committees for shelters under NCRMP-AF; iii) Ensure the transfer of corpus funds to MPCs Committees built under main project before June 30, 2017; and for MPCs taken up under AF before end August 2017; iv) Ensure completing training programmes by Red Cross and SERP to MPCs committees before end August, 2017; v) Conduct orientation training for the social mobilisers before end February 2017; and vi) Complete performance audit for Shelters built under Main Project before end July 2017. Detailed observations as well as agreed action items are provided in Annex 7.

27. *Odisha*. Overall progress in Odisha towards completing agreed actions since last mission is slow. Key issues and agreed actions during the mission are: i) Committees for remaining 62 MPCs including registration and opening joint accounts to be completed before end June, 2017; ii) The process, planning, fund flow on the community development work for 47 embankment villages will be finalised and action plan will be developed by May end 2017; iii) Works will be identified by the Panchayat communities with the assistance of community mobilisers and nodal agency by end June 2017; iv) OSDMA will form the committees for embankments surveillance before end June 2017 with necessary orientation; v) OSDMA will submit Consolidated Information on Land donors for embankment sites before May 31, 2017; vi) OSDMA will submit the revised screening reports for the 5 replaced sites to the Bank before May 31, 2017 vii) OSDMA will complete recruiting additional 8 social mobilisers before end May 31, 2017 viii) OSDMA will make arrangements for strict enforcement of maintenance through Community Mobilisers and surprise visits by the PWD and OSDMA staff; ix) Training programs on Search and Rescue, First Aid at Shelter, shelter level equipment will be completed for all MPCs before September 30, 2017. Detailed observations as well as agreed action items are provided in Annex 8.

VII. Procurement

28. Almost all procurement under this project has been completed except MPCs Kits. In view of this, the procurement risk has been rated as “moderate” and overall performance of procurement has been rated as satisfactory. However, it is likely that completion period of some ongoing packages may slip over the project’s current closure date. Any expenses incurred after the project closure date is not eligible for payment from the project and the government was appraised to make necessary arrangements. Detailed observations are given in Annex 9 and 10 for Andhra Pradesh and Odisha respectively.

29. *Andhra Pradesh.* During the mission, it was noted that, contract management is very poor, with contract provisions not appropriately followed. The mission advised to invoke contractual provisions (LD, time extension, etc.) wherever applicable and advised to keep the contract agreements live at all times.

30. *Odisha.* It was noted during the mission that there is increased in scope of works in the EWDS component as there are requirements of additional towers. Although the variation is already proposed, the proposed Contract amendment is yet to be received by the Bank for clearance. OSDMA is also advised to secure the funds for additional works before signing amendment to the EWDS contract. While amending the contract, it is also suggested to modify the work program for completion of the EWDS system, failing which liquidity damage clause will evoke. It is also noted that there is an issue with DMR license and OSDMA is advised to expedite in obtaining DMR license from government of India. As per the contract (deliverables 5), TCIL is required to assist client in procurement of consultant for third party acceptance testing of the equipment and services. As of date, this has not been initiated and the mission advice to initiate procurement process as the both the EWDS contracts in AP and Odisha are under implementation stage.

31. *Procurement of MPCs Kits:* OSDMA had proposed to buy MPCs Kits for 154 Cyclone Shelters in earlier mission. It was discussed and agreed that there will be 6 packages and procurement will be conducted through NCB. However, procurement process was withheld due to non-availability of funds. OSDMA had requested supplementary funds from NDMA. It is noted during this mission that approval of funds for supplementary budget is still pending with Home Ministry. The mission urged OSDMA to follow up with NDMA.

32. *Complaint on delayed payment:* The Bank received a complaint from one Contractor stating that final payment has been withheld by OSDMA. The matter was raised in pervious mission (August to September 2016) and OSDMA was supposed to resolve this issue. It is noted that even after 6 months, the issue is still pending with OSDMA and it is urged to resolve soon from now.

33. *Post Procurement Review (PPR):* The Bank conducted a PPR during this mission for NCRMP I and NCRMP I-AF for the FY2017. One of the common findings of PPR is that most of the Contracts are not in effect as contract duration has been expired. There was no record for Extension of Time (EoT) despite Bank’s repeated reminders in the earlier mission. The detailed report of PPR will be shared with OSDMA for ascertaining correctness before finalizing it.

34. *Procurement Plan (PP)*: all procurement for both NCRMP I and NCRMP I – AF has been completed except procurement of MPCS Kits. Upon confirmation of fund availability, OSDMA will revise the PP for MPCS Kits and submit to the Bank for clearance.

35. *Revision of prior Review Threshold*: Bank has revised the prior review threshold beginning from July 2016. The revised prior review threshold for this project is as follows:

- Works (including turnkey, Supply & Installation of plant and equipment and PPP): all contracts more than US\$ 15 million equivalent;
- Goods (including information technology and non-consulting services): all contracts more than US\$ 4 million equivalent;
- Consultancy Services: above US\$ 2 million equivalent for firms; and US\$ 400,000 for individuals.
- The project is also informed that the above threshold values shall apply for Direct Contract/Single Source as well. The revision of threshold was communicated separately through email and it will come into effect from email communication date.

VIII. Financial Management

36. The Financial Management rating of the project continues to be moderately satisfactory.

37. *Andhra Pradesh NCRMP-I*. During the last mission, it was discussed that since the contract of the existing internal auditor - M/s Roy Ghosh and Associates, Chartered Accountants was only till July, 2016 the project was keen on extending the contract of the existing firm till the closure of the project. However, no further action has been taken in this regard. It is mandatory that internal audit is conducted at regular intervals and reports are submitted timely. It was agreed that the project would extend the contract immediately without any further delay and communicate to the World Bank.

38. *External Audit*: The project has submitted the audit report for FY 2015-16. Out of an amount of INR. 2.98 crores disqualified for FY 2014-15 pertaining to mobilization advance an amount of INR 0.97 crores has been recertified. During the mission, the project requested that the balance amount should not be treated as ineligible and efforts shall be made to get the same recertified by the AG. Further, other issues emanating out of the current audit report (FY 2015-16) shall be addressed by way of an audit review letter.

39. *Andhra Pradesh NCRMP-I Additional Financing*. It was agreed during the mission that the firm performing the internal audit function for NCRMP would also perform the same for the AF. This must be done without any delay.

40. *External Audit*: There was no expenditure incurred during FY 2015-16, hence the audit report was not furnished. It was agreed that the project would formally write to the Bank for waiver of the audit requirements for FY 2015-16. For FY 2016-17, the audit report shall become due to be submitted to the Bank by December 31, 2017.

41. *Odisha NCRMP-I*. Internal auditors for the project, M/s Tej Raj & Pal, Chartered Accountants were appointed during August 2016 for conducting the audit for FY 2015-16 and FY 2016-17. The report for the period April-Sept 2016 has not yet been submitted. It was shared with the Bank that the same shall be submitted latest by April 25, 2017. Subsequently, the report for the period from Oct-Mar 2017 shall also have to be submitted by the auditors at the earliest. Further, the project also informed the mission that the contract of the internal audit

would be extended till the closure of the project, i.e. October 31, 2017. It was agreed that the project would communicate to the Bank with the decision at the earliest.

42. *External Audit:* M/s SRB & Associates, Chartered Accountants have conducted the audit for FY 2015-16 and submitted the report. The auditors have issued a qualified opinion due to difference in audited figures vis-à-vis the figures at the utilization certificate and non-maintenance of asset register. It was agreed that the project would respond on the audit observations and take corrective actions. Since the project closes on October 31, 2017, the project wishes to extend the contract for the existing auditor for the audit of FY 2016-17 also. It was agreed that OSDMA would write to the Bank in respect of the same to obtain clearance.

43. *Project closing and payment of Goods, Works & Services:* Only those payments from the Bank in respect of which the liability becomes crystallized (i.e. goods have been received or services have been rendered) by the project closing date, can be claimed from the Bank up to the next four months after project closure. Therefore, disbursements from the Credit will be made for withdrawal applications received at the Bank's Chennai office by February 28, 2018 in respect of eligible expenditures made before the closing date.

44. *Odisha NCRMP-I Additional Financing.* IUFR up to March 31, 2017 have been submitted to NDMA, which shall be submitted to the Bank shortly.

45. *External Audit:* M/s SRB & Associates, Chartered Accountants have conducted the audit for FY 2015-16 and submitted the report. The auditors have issued a qualified opinion due to difference in audited figures vis-à-vis the figures at the utilization certificate. It was agreed that the project would respond on the audit observations and take corrective actions. The project informed the mission that the contract of the existing auditors shall be extended up to March 31, 2017. It was agreed that OSDMA would write to the Bank in respect of the same to obtain clearance.

IX. Next mission

46. The next mission is planned for September 2017.

**Annex 1a: Compliance of Key Agreed Action of last Mission for Andhra Pradesh
(September 6-9, 2016)**

Key Action	Agreed Time Line	Compliance timeline
Contract award to Ms L&T Ltd for EWDS	December 15, 2016	26.10.2016 (Agreement Concluded)
Complete the recruitment of Social Mobilizers	Immediately	15.03.2017
Sharing proposal including design, costing and implementation arrangements for lightening conductor in all MPCs	December 15, 2016	15.03.2017
Costing options comparing RCC floor slab and PCC floor slab with filling for a sample MPCs (for Konada) to be prepared and shared	December 15, 2016	20.03.2017
One MPCs sample design (for Konada) to be prepared showing location of Underground water sump, septic tank as within the plinth	December 15, 2016	20.03.2017
List of all MPCs that have access road issues and have not received administrative sanction	December 15, 2016	-Nil-
Contract wise report on all compliance issues	December 15, 2016	15.03.2017
Complete formation of Community Management Committees for Phase-I and AF MPCs	Immediately	31.05.2017
Manual in Telugu on MPCs Management and Maintenance	December 15, 2016	28.02.2017
Complete orientation programme for the MPCs Committee members	Immediately	31.03.2017
Share equipment list for MPCs including generators, first-Aid box and basic rescue equipment	December 15, 2016	15.04.2017
Decision on corpus fund for the CSMMCs	December 15, 2016	20.01.2017 (Completed)
Extension of time for the completion of the Kruthivenu and the Kona Saline Embankments, based on a realistic assessment of the revised implementation schedules;	December 15, 2016	30-06-2017
Revise the estimate for environmental action plan – particularly restoration of mangrove plantations – in consultation with the Forest Department, for saline embankments	December 20, 2016	31.03.2017
Furnish AG settlement in respect of audit disallowances of INR 0.15 crores for FY 2012-13	Delayed, to be recovered	Submitted to AG. Report awaited from AG.
Extension of existing service contract for (TPQA and Auditors)	Immediately	TPQA – 12.08.2016 (Agt Concluded) Auditor – 28.02.2017
Initiate/undertake plantation works (mangrove regeneration/restoration and trees) – saline embankments	Immediately	Entrusted to Forest Department by Line Department
Complete activities identified for bridges and prepare a ATR	December 30, 2016	Handed over on 27.01.2017
Complete handing over activity for balance 25 MPCs	December 30, 2016	Handed over - 117 Aug 2017

transfer of corpus fund for main project MPCSSs	January 31, 2017	Completed
transfer of corpus fund for AF project MPCSSs	May 31, 2017	In Process – 31 st May 2017
completing training programmes by Red Cross and SERP to MPCSS Committees	January 31, 2017	Trainings in Progress. Completion by May 2017
provide consolidated land donors data for two embankments	Immediately	No Private Donors
Appointment of Internal auditors	Immediately	28.02.2017
Furnish External Audit report to the Bank and get disallowances settled by AG	December 31, 2016	15.01.2017 Submitted

Annex 1b: Key Actions Agreed during this Mission for Andhra Pradesh

S. No.	Actions	Responsibility	Timeline
Project Management			
1.	Make workers' safety to be a priority in all construction works and monitor regularly	SPIU	Immediately
2.	Share the list of MPCS equipment including generators, first aid kits, basic rescue equipment and a simple manual in Telugu on MPCS Management and Maintenance	SPIU	May 31, 2017
3.	Streamline extensions of the expired/to be expired contracts.	SPIU	Immediately
Component A: Early Warning System and Coastal Communities Capacity Building.			
4.	Ensure EWDS to be commissioned	SPIU	June 30, 2017
Component B: Cyclone Risk Mitigation Infrastructure			
MPCS			
5.	Expedite the construction of balance MPCS	PRD	Immediately
6.	Expedite CSMMCs' training programs on evacuation, first-aid, shelters, usage, operation and maintenance, etc., especially for the handed-over MPCS	SERP	Immediately
7.	Provide detailed updates on the hand-over process of the remaining MPCS	PRD	May 31, 2017
8.	Provide lightening conductors for all MPCS, already completed, under construction and in the tendering process	PRD	Immediately
9.	Make sure the information boards on construction site have complete information on contractor contact details and grievance redressal mechanism	PRD	Immediately
10.	Develop a shelter utilisation plan for continuous use of shelter in normal times	PRD	Immediately
Kona Saline Embankment			
11.	Complete embankment road work.	WRD	May 31, 2017
12.	Finish earthwork on slopes and berm.	WRD	June 30, 2017
13.	Rectify gravel/moorum embankment road work and complete the turfing	WRD	July 31, 2017
14.	Complete all new drainage works.	WRD	May 31, 2017
15.	Submit a revised work plan and schedule to expedite the pace of construction for timely completion of work	WRD	May 31, 2017
Kruthivenu Saline Embankment			
16.	Ensure measures for public safety and quality of works; and submit a report to Bank.	WRD	Immediately
17.	Submit a revised work plan and schedule to expedite the pace of construction for timely completion of work	WRD	May 31, 2017
Roads and Bridges			
18.	Ensure submission of revised work plan by contractors	PRD	Immediately
19.	Take measures to expedite the pace of construction for timely completion of work	PRD	Immediately
20.	Ensure contract compliances including insurances, labour license, revised work plan, contract extension and closure	PRD	Immediately
Component C: Technical Assistance for National and State Level Capacity Building and Knowledge Creation			
21.	Complete sectoral TOTs on DRM	NDMA/NIDM	June 30, 2017
22.	Concurrence on PDNA tools	NDMA/NIDM	June 30, 2017

S. No.	Actions	Responsibility	Timeline
Environment Management and Safeguards			
23.	Finalization of Mangrove Plantations in Kruthivenu with Forest Department	WRD	Immediately
24.	Finish green turfing for slope protection	WRD	July 31, 2017
Social Management and Safeguards			
25.	Develop cross learning programs on good shelter management practices.	SPIU	Immediately
26.	Develop a model utilisation plan of the shelters and possible tariffs for their utilization depending on type of usage – renting for weddings/functions, local tutor centres, conducting meetings, etc.	SPIU	Immediately
27.	Complete handing over all MPCSSs built under main project	PRD	May 31, 2017
28.	Initiate forming committees for shelters taken up under AF	SERP	Immediately
29.	Ensure training programmes are completed by Red Cross	SPIU	July 31, 2017
30.	Ensure the transfer of corpus funds to MPCSSs Committees	SPIU	June 30, 2017
31.	Complete performance audit for shelters built under the Main Project	SPIU	July 31, 2017
Financial Management			
32.	Appoint internal auditors	SPIU	Immediately
33.	Write to Bank for waiver of audit requirement for FY 2015-16	SPIU	Immediately

**Annex 1c: Compliance of Key Agreed Action of last Mission for Odisha
(August 22-25, 2016)**

Key Action	Agreed Timeline	Compliance timeline
MIS system to be aligned with NCRMP – MIS	Immediately	Completed
OSDMA to share details regarding use of MPCS in normal times, corpus funds and training of CSMMCs	Immediately	MPCS wise report pending
Check and ensure shifting of utilities in approach roads and MPCS	December 15, 2016	Pending from the department
Contract wise report on all compliance issues for under – construction roads and MPCS	December 15, 2016	Agreed to be shared by June 15, 2017
Report on closed project contracts and extensions for approach roads	December 15, 2016	Agreed to be shared by June 15, 2017
Status report on completion of contracts for completed saline embankment works	December 15, 2016	Agreed to be shared by June 15, 2017
Complete all saline embankment projects	December 31, 2016	Pending
Complete and share internal audit for FYI 15-16	Immediately	Completed, yet to be shared with the Bank
Write to the Bank for clearance on appointment of external auditors for NCRMP I and NCRMP (AF)	Immediately	Appointed
Submit IUFRR for the quarter ending June 2016 for AF	Immediately	Completed
Formation of Cyclone Shelter Committees, registration and opening joint accounts to be completed, for both Main project and Additional Financing Project	December 31, 2016	In NCRMP 1, all 149 CSMMC have been formed, joint bank account opened and registration completed In NCRMP (AF), 100 CSMMC have been formed, joint bank account opened and registration of CSMMCs are under process.
OSDMA to finalize model and procedure for formation of embankment surveillance committees	December 15, 2016	Agreed to be formed by June 30, 2017
Recruitment of Community Mobilizers for works under Additional Financing	Immediately	Agreed to be appointed by May 31, 2017
Complete power connection in all MPCS	December 31, 2016	Pending
Provide consolidated information on land donors for embankment site to be provided to Bank	December 15, 2016	Agreed to be shared by May 31, 2017
Submit MPCS screening report for replaced sites	Immediately	Agreed to be shared by May 31, 2017
Initiate implementation of community development works in embankment village	December 15, 2016	Pending
Initiate/undertake plantation works (mangrove regeneration/restoration and trees)- Saline Embankments	Immediately	Under progress
Complete activities identified for evacuation roads and prepare a ATR	December 31, 2016	Under process

Annex 1d: Key Actions Agreed during this Mission for Odisha

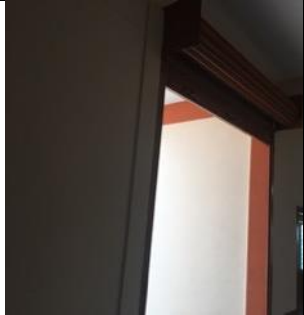

S. No.	Actions	Responsibility	Timeline
Project Management			
1.	Streamline extensions of the expired/to be expired contracts.	SPIU/OSDMA	Immediately
2.	Prioritize formation of CSMMCs in all target location, their bank accounts, transfer of corpus money and their training programs on evacuation shelters, usage, operation and maintenance, etc., especially for the handed-over MPCs	SPIU/OSDMA	June 30, 2017
3.	Ensure contract provisions including worker's safety for all constructions are complied with and send a report to Bank on compliances	SPIU/OSDMA	May 31, 2017
4.	Expedite procurement of equipment for MPCs	SPIU/OSDMA	May 31, 2017
Component A: Early Warning System and Coastal Communities Capacity Building.			
5.	Ensure timely installation of EWDS	SPIU	June 30, 2017
Component B: Cyclone Risk Mitigation Infrastructure			
MPCS			
6.	Expedite the construction of MPCs	RD	Immediately
7.	Provide detailed updates on the hand-over process of the remaining MPCs to the World Bank	RD	May 31, 2017
8.	Provide lightening conductors for all MPCs, already completed, under construction and in the tendering process	RD	Immediately
9.	Ensure contract compliances including information board, insurances, work plan, contract extension and contract closure; and submit a report on compliances	RD	May 31, 2017
Saline Embankments			
10.	Deficiencies identified by TPQA to be rectified before final payment or act as per contractual provisions before concluding the contract.	WRD	June 30, 2017
Roads			
11.	Deficiencies identified by TPQA to be fully addressed before final payment or act as per contractual provisions before concluding the contract.	RD	June 30, 2017
12.	Signage's to be ensued as per IRC 67-2012	RD	May 31, 2017
13.	Ensure protection and dressing of slopes for drainage before concluding contracts	RD	June 30, 2017
Environment Management and Safeguards			
14.	Complete embankment protection works	PIU	May 31, 2017
15.	Finish green turfing for slope protection	PIU	May 31, 2017
Social Management and Safeguards			
16.	Finalise the process, planning, fund flow and develop action plan on the community development work for 47 embankment villages	SPIU	May 31, 2017
17.	Works to be identified by the Panchayat communities with the assistance of community mobilisers and nodal agency	SPIU	June 30, 2017
18.	Form the committees for embankments surveillance	OSDMA	June 30, 2017
19.	Submit Consolidated Information on Land donors for embankments	OSDMA	May 31, 2017
20.	submit the revised screening reports for the 5 replaced sites	SPIU	May 31, 2017
21.	Recruit additional 8 social mobilisers	SPIU	May 31, 2017
Financial Management			
22.	Submit internal auditors report for Oct-Mar 2016-17	SPIU	May 31, 2017
23.	Extend internal auditors contract up to project closing	SPIU	Immediately
24.	Extend external auditors' contract for FY 2016-17	SPIU	Immediately






Annex 2: Field observations on MPCS in Andhra Pradesh

The mission noted that progress on the works of cyclone shelters is lagging in most of the ongoing package works. SPIU to work on case to case basis and ensure that constructions are completed before the closure of project. Some good practices were noted being implemented by the Cyclone Shelter Management and Maintenance Committees / Velugu – such as grown kitchen gardens, planted trees, built rain water harvesting pits, health clinics centre. It was also brought to the mission’s attention that some of the contractors’ payment has been delayed. The mission requested to expedite payments so as to not delay in the completion of works. The PIU was also advised that: i) Lightning Conductor to be provided for all MPCS, already completed, under construction and in the tendering process; ii) Some technical issues pointed out in earlier missions persist and need to be addressed at the earliest; iii) The information boards on construction site need to have complete information on contractor contact details and grievance redressal mechanism; iv) Shelter Utilisation plan needs to be developed for continuous use of shelter in normal times; v) Workers safety to be made a priority in all construction works and regularly monitored by PIU and Third Party quality auditors.

Functional/ Design issues noted during the visit:

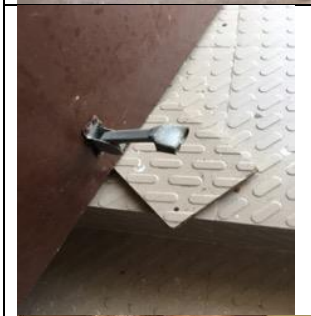
- a) Toilets still are having problems of level, drainage pipes etc. These shall be attended to. Approach ramp to physically handicapped toilets persons needs to be reduce. TPQA shall provide proper guidance.
- b) Access door to roof is found damaged due to rain beating. This to be replaced with aluminum sheet to avoid damage in future.
- c) In the toilets at urinals step width is very less and it is not serving the purpose. In case space is not available it can be avoided and accordingly the level of urinals adjusted.
- d) In the PCC pavement, water cement ratio to be controlled to avoid segregation and expose of aggregate. Joints to be treated properly
- e) Engineer shall carryout all the contract management issues as specified in the Contract like Monthly Management Meetings, Variation orders, work program, Extension of mile stones in case of delay etc.

Good Practices	
	<p>Some shelters have replaced the grilled doors leading to the ramp with pull-down shutters.</p>
	<p>Water harvesting been made available at MPCS site in Nellore</p>

	<p>Vegetable garden initiated by the Women SHG/ Velugu group that are also the CSMMCs was well appreciated</p>
	<p>Some MPCs are also providing spaces for Anganwadi workers and Health clinics.</p>
<p>Issues</p>	
	<p>Information boards need to have complete information including all project details, name and contact numbers of all implementing agencies, contractor, and grievance redress. Board to be prominently displayed and securely fixed</p>
	<p>The door opening to the ramps should be impervious to rain and wind.</p>
	<p>Disabled toilet width is not sufficient for wheel chair to be accommodated. The Disable toilet is accommodated only in the male toilets and not in the women toilets.</p>



A channel has been created at the base of the ramp to drain away rainwater, however this makes it inaccessible to the handicapped for whom it has been made. This needs to be corrected



All MPCS door and fittings to be verified on a regular basis and damages like the one in the pictures need to be replaced



Annex 3: Detailed observations during field visit to Campbell and Buckingham canal bridges

High Level Bridge across Campbell Canal at Bhavanipuram to connect Ullipalem at Km 22/8 of Machilipatnam – Kammavaricheruvu road, Andhra Pradesh

General information and status: The span arrangement of this 2 lane bridge comprise of 15 spans of 35m each. The Superstructure comprises of PSC post tensioned girders, 4 numbers per span, with cast-in-situ deck slab. The Superstructure is resting on Pot cum PTFE bearings. Foundation proposed comprises of 1.5m diameter bored cast-in-situ pile foundation, four numbers each under pier and six numbers each under abutments.

The status of the approach portion of embankment on Ullipalem side and Bhavanipuram side is as follows:

PILE FOUNDATION. Construction completed	:	68 NUMBERS
PILE CAP. Construction completed:		16 NUMBERS
PRECAST GIRDERS. Construction completed	:	48 NUMBERS
Construction in progress:		12 NUMBER
DECK SLAB. Construction completed:		5 NUMBERS
Construction in progress:		10 NUMBER
FINANCIAL PROGRESS:		68% (As reported)

General observations on quality of works: In general, the work progress is appreciable and the bridge is likely to be completed before the schedule. Test Certificates for Prestressing hardware such as anchorages, grips, bearing plate, etc. are not available at site. Test certificates from a laboratory fully equipped to carry out the tests shall be furnished to the Engineer as per clause 1803.3 of MoRT&H Specification (5th Revision). This is currently missing at site.

It is learnt that for grouting of ducts, the water used was mixed with ice, for controlling the temperature. This is an incorrect practice and should not be followed henceforth. Ice shall be put outside the grout storage container to control the temperature. In this regard reference may be made to Appendix 1800/III, Clause 7 (b) of MoRT&H.

The correctness of load considered for routine pile load tests carried out at site shall be re-confirmed from the Design Consultant and should be reported. The test has been carried out by considering a working load of 450 tonnes and 200 tonnes at top of piles for pier and abutment piles respectively.

Detailed drawings are necessary for the launching apron, particularly in zones where the wire crates are likely to interfere with the pile group of Pier P1.

The FBEC rebars are not properly stacked at site. Provisions of Clause 1009.3.2.1 g), h) and Clause 1605 (d) are violated. These require immediate correction. The Third Party Quality Assurance and Quality Audit Agency needs to be more active in this regard.

It would be necessary to prepare a detailed layout plan of the gabions – unit wise to facilitate the work which should not be taken up in a random manner. The work of launching apron at the semi-circular portion should commence from the base of the slope portion and continue outwards radially. Parallel rectangular pieces should be laid, and the triangular pieces should be constructed at the later stage. This way, the circular shape could be generated.

The field officers requested and the mission agreed to review the progress once again when the laying of the gabions have progressed. The IA promised inform the Bank when it would be appropriate and desirable to visit this site once again.

High Level Bridge across Buckingham Canal at Km 26/3 of RI Road at Skapalli, Andhra Pradesh

General information and status: The span arrangement of this 2-lane bridge comprises of 3 spans (12m, 45.1m and 12m in series). The central span of 45.1m is the navigational span in this case. The superstructure for the main navigational span comprises of PSC post tensioned girders, 4 numbers per span, with cast-in-situ deck slab. The Superstructure is resting on Pot cum PTFE bearings. End spans are proposed as RCC Slab type. The foundation proposed comprises of 1.2m diameter bored cast-in-situ pile foundation, six numbers each under pier and abutments.

General observations on quality of works: In general, the work progress is satisfactory. However, it is very likely that the target date for completion will be missed. This is due to inaction in procurement of bearings and pre-stressing hardware's. So far the manufacturer of these items have not been finalized. These items shall be taken up on priority to minimize the delay.

Routine load test on pile foundation is carried out using high strain dynamic pile testing equipment and method. The test report indicates low pile capacity. It is possible that the reporting is inappropriate and the actual reserve capacity is there. However, this requires clarification from the testing agency. It shall be ensured that the ultimate pile capacity is more than or equal to 2.5 times the safe load.

A number of samples of concrete cubes taken for various components cast do not satisfy the codal requirement. This is a serious non-conformance which has not been detected by QC staff of Contractor, TPQA as well as R&B department.

There is no record maintained for actual consumption and theoretical consumption of concrete in various components concreted so far. There is need for improvement of QA/QC staff for this bridge site. Lateral load capacity of pile foundation as recommended in geotechnical report is less than the lateral load as stated in the working drawing. The adequacy of existing pile foundation for reduced lateral load capacity shall be got confirmed from the Design Consultant.

The existing bridge is in a very bad state. Main reinforcement in superstructure is completely deboned from concrete and clearly the bridge is not safe for passage of heavy traffic. Bridge should be closed for traffic or shall be kept for light vehicles only. The new bridge is located in aggressive environmental condition, which can be termed as 'Very Severe' as per provision of IRC112. Therefore, the pier and abutments shall be cast with concrete grade of M40 as against M35 given in the working drawing.

Staging design for casting of Precast Girder shall be prepared by a Design Consultants and the drawings shall be approved by the Engineer before commencing staging works. This shall be taken up on priority.

PHOTOGRAPHS OF SITE VISIT: Bridges



**Photo – 1
Main Pier Pile Cap is cast and
Reinforcement of Pier projecting**



**Photo – 2
Existing Bridge in distress and
apparently unsafe. Requires
immediate attention**



**Photo – 3
The team who participated in the
Site Visit and Discussion, standing in
front of Abutment Piles**

Annex 4: Observations during Field Visit to Saline Embankments in Andhra Pradesh

Kona Saline Embankment

Key Issues

- a. The work restarted, but the pace of work is still very slow. The contractor needs to mobilize more field staff and equipment to expedite the progress so that all works (other than turfing) could be completed by June 30, 2017.
- b. The quality of compaction of road work (granular subbase) is rather poor resulting in uneven surface and bumpy ride over it. The concerned officers were advised to scarify the surface and use vibratory rollers to re-compact the road surface. The concerned field officers agreed to get the same done soon – (quality of work to be verified during the next mission).
- c. The barrel lengths of old existing sluices must be extended so that the same fits in to the width of the newly constructed embankment. If the condition of the old sluice structure is very poor which cannot be rectified/retrofitted, such structures should be replaced by new structures. A survey of these structures to be carried out for preparing a time-bound plan for retrofitting/replacement of damaged structures.
- d. The contractor has time upto June 30 to complete all works. However, additional time may be allowed for carrying out turfing works which must begin latest by June 2017. This work must be completed by July 31, 2017. The completion date of the works may therefore be suitably extended for this purpose only.
- e. All outstanding payments should be cleared, as early as possible.

Kruthivenu Saline Embankment: The work on this project is progressing reasonably well. GoAP has accorded permission to take up the work for the reach between 0 and 3.0 km of the saline embankment. The contractor has already started earthwork done significant progress on this stretch. Simultaneously, he has also achieved progress on the remaining stretches of the embankment, i.e., from km 9.00 to km 10.00 and km 11.00 to km 14.30 of the Kruthivenu Saline Embankment. On the whole, the quality of construction as well as progress of implementation appears to be satisfactory. The turfing works are proposed to be carried out during June-July 2017.

Key Issues:

- a. Restoration of this embankment involved destruction of mangrove plantations over an area of about 10 ha. However, on inspection of the site, the Forest Department that was entrusted with the compensatory afforestation activities, opined that there is very limited scope, space and need for compensatory mangrove plantation in the vicinity of Kruthivenu Saline Embankment. However, suitable land for mangrove plantation is available in the vicinity of the Kona Saline Embankment, and they proposed compensatory mangrove plantation for an area of about 40 ha in this area as against destruction of only about 13 ha of plantation by construction activities. Therefore, on the whole Forest Department proposed 40 ha of compensatory plantation as against aggregate destruction of only about 23 ha. This seems to be an acceptable approach.
- b. The mission raised the issue of public safety at construction sites. The team suggested that appropriate warning boards should be displayed at site discouraging people to come near the heavy earth moving machineries. The contractor (Kruthivenu) agreed to abide by this advice.

Description of works	Physical			Financial (Rs in Lakhs)			Remarks
	as per Agreement	as per Execution	% of work done	as per Agreement	as per Execution	% of work done	
Restoration of Kruthivenu Saline Embankment (Tidal Bank) to the original standard, from K.M. 0.00 to 14.300 in Kruthivenu Mandal of Krishna District (Revised estimate after adding work for 0 to 3.00 km)							
Earth work (in cum)	802500	647775	80.72	2989.32	2412.87	80.72	Extension of time up to 30-06-2017.
Restoration of Kona Saline Embankment (Tidal Bank) to the original standard, from K.M. 0.00 to 18.600 in Machilipatnam Mandal of Krishna District							
Earth work (in cum)	785000	618735	78.82	2266.95	1786.80	78.82	Extension of time up to 31-06-2017.

Discussions with the Engineer-in-Chief, I&CAD Department: The mission met the E-in-C on January 24, 2017 at his office in Vijayawada, when he was briefed about the status of both works, and specifically, the slow progress in implementation of the Kona Saline Embankment. The E-in-C promised to look into the matter and initiate appropriate actions to ensure that the progress of implementation of civil works for the Kona Saline Embankment is expedited, and the works (excluding turfing) are completed by June 2017. He also became aware of the poor quality of gravel road works in certain stretches of Kona Saline embankment. The E-in-C instructed the field officers to take urgent appropriate actions on this.

The TBL of both Kona and Kruthivenu Saline Embankments are about 4.5m to 5m above the ground level. However, with the project activities and construction of gravel/moorum sub-base, the embankments have now become a preferred road for transport of agricultural produce. A number of fishing farms are coming up on the countryside and are using the embankments as their main communication link. However, the top width of the embankment is only 3.5 m including shoulders. This makes it risky for heavy vehicles to ply over the embankment road particularly during the rainy season. Space or land is available in most places to widen the embankment – maximum up to 5.0m top width (3m gravel/moorum road and 1m shoulder on either side) – so that safety of heavy vehicles could be ensured. The contract of Kona Saline embankment will be having adequate surplus funds which could be used to widen the embankment, to the extent needed or possible. In view of the rapidly developing need of the beneficiary groups, this was also brought to the notice of the E-in-C during discussion, and was agreed to be considered subject to availability of fund and land for construction.

Annex 5: Observations during Field Visit to Roads in Andhra Pradesh

During the site visits in the districts of Nellore, Prakasam and Krishna, the focus was to assess the progress of works, general quality, contract management issues and time frame to complete the works. Meeting was organized with all the Engineers of the department, TPQA and PMU officials to know their problems and also to communicate the concerns of the World Bank on various aspects based on the site observations.

- a) Progress on the road works leading shelters and habitations is mostly on schedule or well ahead of schedule.
- b) As safety measures on the roads, the following are suggested
 - Provide rumble strips in the village limits instead of crude speed breaker
 - Provide adequate traffic signage's where ever required
 - Regrade the connecting roads where ever required.
- c) Work on the shoulder to be improved both in the quality of selected earth and compaction.
- d) Compaction of WBM/ WMM to be improved along with gradation.
- e) In R&B Road from Karumanchi- Ethamukkala-Motumala Road last 1,73 km is not included in the Contract. Engineers have informed that this was deleted at the time of sanction to restrict the amount. Mission suggests to assess the cost and send the proposals to the competent authority for taking up the balance length of road.
- f) Edge marking: It was agreed to provide edge marking but still some roads this was not done. This may be got it done if not in BOQ as a varied item.

Contract Management issues:

- Payment of bills: There is problem with funds as such no bills were paid to the Contractors since 2 months' period. All the Contractors expressed this and requested to arrange to pay the pending bills immediately. During the meeting with commissioner on January 27, 2017, mission was informed that the funds were released 2 days back and payments will be made on priority.
- Management Meetings: As per GCC sub clause 31, Engineer need to conduct monthly management meetings. But has not been done regularly in most of the packages. The Engineer is advised to conduct the management meetings with proper agenda and issue the proceedings duly fixing the responsibility to complete the event along with time frame. It is advised senior officers i.e. SE and CE to monitor so as to address/ resolve the critical issues for speedy completion of the works.
- Variation orders: It was reported that variations orders are pending because majority of the variation orders are approved by the competent authority. EEs are suggested to take advance action and obtain approval from the competent authority well in time.
- Extension of time for intermediate MS and the entire work: Competent authority granted EOT for the final mile stone or completion of the whole work only. But intermediate milestones i.e. MS1 and MS2 also need to be extended if compensation events had occurred. Engineer need to examine and take action in regularizing the same.
- Work program: As per the Contract, Contractor is supposed to submit the updated work program regularly on a monthly basis. However, this is not done. Contract has provision of imposing penalty for not updating the program. During previous missions also it was notified, but no action has been taken by department to ensure regular work planning.

- As built drawings: Contract provides for submission of as built drawings (Cl, 58) by the Contractor within 28 days of issue of completion certificate. Some of the road works are completed in Jan/ Feb 2014. But the Department has not taken any action in this regard. For ongoing contracts, Engineer should direct the contractor to provide as built drawing within 28 days, while issuing completion certificate. Failing which action should be taken as per GCC sub clause 58 and Contract data.

Annex 6: Detailed observations on Environment Management and Safeguards in Andhra Pradesh

Campbell canal bridge: During the site visit to the bridge works, the mission was informed that the SEMP plan was being implemented. Construction labor camps have water, toilet facilities and other basic provisions. Weekly safety meetings are held. This was further confirmed in discussions with the TPQA, who also indicated that PPEs were being used, water sprinkling was done to prevent dust and air pollution monitoring was being done. The mission noted that after the construction of the bridge it was possible to ensure the connectivity of the mangrove plantations on both the river banks. It was agreed that this would be done, and the Forest Department would be consulted in this regard.

Saline Embankments: During the site visit of the Saline Embankments work at Kruthivenu and Kona, the mission noted that the following had not yet commenced:

- mangrove plantation works;
- embankment protection works at vulnerable locations; and,
- slope protection through green turfing.

Mangrove plantations: Discussions revealed that the Forest Department had visited the site, and submitted a proposal (along with a budget) for mangrove plantations in Kona to the extent of 40 ha. This will compensate for 12 ha of mangroves that have been directly damaged due to the embankment works. For Kruthivenu, the Forest Department has indicated that there was no need for artificial regeneration at present as good natural regeneration was occurring.

However, the mission pointed out that about 10.19 ha of mangroves (Ref: TPQA Oct-Dec 2016 quarterly report) were destroyed due to the embankment works, and compensatory mangrove plantations should be done. Line Agency agreed to have a further discussion with the Forest Department to explore what is possible at Kruthivenu. For the plantations in Kona, the State PMU / Line Agency will be depositing the funds with Forest Department and the works are expected to be executed between April and June 2017. The embankment protection works at vulnerable locations will be done by April 2017, and the green turfing will be completed in June-July 2017.

The mission emphasized that the activity was repeatedly delayed, and should now be completed as per the aforementioned timeline. The mission also noted that there is a need for the Line Agency and the TPQA to re-emphasize to the contractor the importance of basic onsite safety provisions and precautions.

Annex 7: Detailed observations on Social Safeguards in Andhra Pradesh

The mission visited cyclone shelter, roads and bridge works in districts Nellore, Prakasam and Krishna. Below outline the key issues and agreed actions and timelines to complete the activities.

Good practices in shelter amenities and improvements required: The mission visited 5 shelters in districts Nellore, Prakasam and Krishna. The mission appreciates good practices followed in shelters visited in district Nellore. The Committees have taken measures to keep the shelter premises green – grown kitchen garden, planted trees, built rain water harvesting pits. Similarly, in one shelter in Machilipatnam the mission noted utilisation of the shelter as health sub centre. The SPIU through cross learning programs, should disseminate the good practices. The mission also noticed in some shelters poor up keeping - uncleaned floors, soiled walls. It is also noticed that communities have low awareness levels on revenue generation for shelter maintenance. The SPIU should develop a model utilisation plan of the shelters and possible tariffs for the utilisation of the shelters depending on the usage – renting for weddings/functions, local tuition centres, conducting meetings, etc. For all these reasons, the training assumes importance to train and teach communities in general maintenance and up-keeping of the shelters.

Formation of cyclone shelter management committees: The Village Organizations (VOs) of SHGs are responsible for running and maintenance of the shelters (GO No 5). Under the main project, 19 shelters out of 138 remained to be handed over to the Committees. The committee formation has not yet been initiated for shelters taken up under AF as the civil works have not yet been completed. Though civil works in progress, the formation of Committees can be completed. Involving Committees from early stages of construction would enhance community participation and ownership of the shelters. It is agreed that handing over activity for balance MPCs will be completed before end April 2017; and forming committees for shelters under AF will be initiated.

Release of Corpus Fund for MPCs Maintenance: The GoAP has released Corpus Fund to SERP. For each MPCs Rs 5 lakhs will be given towards maintenance. The SERP in turn will transfer the fund to the respective Shelter Maintenance Committees. For MPCs built under AF, the fund commitment is yet to happen. Opening up of the MPCs Bank accounts is important for completing the fund transfer. The fund transfer to the committees for all MPCs built under main project agreed to be completed before end May 2017, and for MPCs taken up under AF will be completed before the end of August 2017.

Training Activities for MPCs Committees: As the shelters are handed over and corpus fund in the process of transfer to VOs/Committees, the training program becomes critical to train and orient the communities on general maintenance of shelters. The training programs all have to be completed before end August 2017.

The training activities include developing appropriate material on MPCs and their management and maintenance, and conducting Orientation programmes for the committee members. The modalities for running the shelters are developed bilingually. The orientation program should explain the roles and responsibilities and also on the guidelines of MPCs maintenance. Red Cross and The SERP are the two selected agencies to impart the training. Red Cross will be conducting First Aid and Search and Rescue training for the committees. In October 2016, the Bank Social Specialist met and discussed with Red Cross representatives on their training implementation plans. The SERP will be conducting the training on shelter

maintenance and book keeping. Till date, Red Cross has conducted training for 36 MPCSSs. SERP has yet to start the programs.

Training to social mobilisers: The mission appreciates the SPIU for recruiting the 18 social mobilisers; and another three are in the process of recruitment. From the interactions with the mobilisers, it is noted that one-day orientation to the mobilisers on the project and their work would be very useful in enhancing their work performance. It is agreed that the SPIU will provide the orientation to the mobilisers before end February 2017; and the recruitment of balance three will be completed before end March 2017.

Audit of MPCSSs functioning: As agreed during previous mission, the progress towards undertaking MPCSS audit was reviewed. The audit essentially to improve the maintenance performance of the MPCSSs. These shelters will be audited for their physical, institutional and financial performance. Audit format is discussed with SPIU that to include utilization of the MPCSS, their up keeping, revenue generation and constitution and working of the committees. The audit will be initiated for MPCSSs in the main project in March 2017 and completed before July 2017.

Social Risks: The mission appreciates SPIU efforts to minimize social risks. Delays in forming committees and their handing over, would cause for possible misuse of the shelters. Lack of regular maintenance would affect the upkeep of the property and may result in possible thefts of the accessories and equipment's fitted in the shelters. The SPIU should take up this on top priority and finalize the custodian and build their capacity and knowledge.

Annex 8: Detailed observations on Social Safeguards in Odisha

The progress towards completing agreed actions since last mission is slow. Several measures have been initiated to complete the agreements made last few missions such as forming Community Development Fund, new sites screening reports, forming shelter committees. Below outlines the key issues and agreed actions and timelines to complete the activities.

Forming Cyclone Shelter Committees: Out of 311 MPCs taken up under the project (Main and AF), for 62 MPCs committees are yet to be formed. Though there is progress in committee formation and registration since last mission, it has made limited progress due to the changes in the committee structure. The president of the Committee is changed to Village Sarpanch from BDO which is in force till recently. It is agreed that all activities including registration and opening joint accounts will be completed before end June, 2017 for all MPCs. Delays in forming committees and handing over the MPCs to committees, may result in misuse of the shelters. Lack of regular maintenance would affect the upkeep of the property. The OSDMA should take up this issue on high priority and finalize the custodian.

Community Development works in embankment villages: It has been assessed and put up for internal approvals to provide the funds Rs 5 lakhs for each village for 47 villages. Consultations with the communities were conducted on the community development fund and on the works.

Works will be identified by the Panchayat communities with the assistance of community mobilisers and nodal agency by end May 2017. The process, planning, fund flow on the Development Fund will be finalised and action plan will be developed by May end 2017. The OSDMA is planning to conduct State level consultation workshop on the Development Fund Proposal.

Embankment Surveillance Committees: The proposal to form Surveillance Committees needs to make progress since last mission. It has been agreed that the OSDMA will form the committees for embankments surveillance with village people, Panchayat representatives, WRD staff, etc. The model and procedures will be finalized before end May 2017 and the committees will be formed before end June 2017 with necessary orientation.

Submit Consolidated Information on Land donors for embankment sites: Furnishing the consolidated summary data on land donors relating to embankments is pending since last mission. It is a small task but not yet completed. It is agreed that OSDMA will submit the data before May 31, 2017 without further delay.

Submission of MPCs screening reports for replaced sites: The small task submitting screening reports for 5 MPCs sites which were replaced has been delayed for long. It is agreed that OSDMA will submit the revised screening reports for these sites to the Bank without further postponement before May 31, 2017.

Community Mobilisers for works under Additional Finance and Salaries and Emoluments: The proposed recruitment of social mobilisers of about 8, as approved by the Steering Committee, has not made any progress till date. The mission expresses its concern in the delays in recruitment as the works under AF has already been started. It is agreed that the recruitment will be completed before end May 2017.

Present salary to the community worker including for inter block mobility is around Rs 10000 which is much less than the amount being paid to similar worker in the ongoing World Bank

assisted ODRP project. There has been no revision in the amount since last three years they been hired under NCRMP. It is agreed that OSDMA will review and undertake the necessary actions as required.

MPSCs - Electricity power supply service connection: Caution Deposit, providing Transformer, laying headlines all have to be completed for completing service connections. However, this has not been progressing as Discoms are demanding the power tariff for MPCs at commercial rates. The tariff issue has been put it to Power Regulatory Authority for resolving it to be make it at domestic tariff. Given the type of community activities and revenue generation with MPCs, the shelter committees will not be able to pay at commercial tariff rates. The activities are community in nature and run on no profit basis. The revenues will therefore be very meager. Presently generators have been installed in some of the MPSCs. OSDMA has to pursue vigorously with the appropriate authorities and complete power connections on priority7.

Maintenance and cleanliness of completed MPCs: As has been discussed previously, OSDMA should make arrangements for strict enforcement of maintenance through Community Mobilisers and surprise visits by the PWD and OSDMA staff.

Training programs: Training programs on Search and Rescue, First Aid at Shelter, shelter level equipment are in progress and planned to be completed for all MPCs before end August 2017.

Annex 9: Detailed Observations on Procurement for Andhra Pradesh

Component A: The Contract for procurement of EWDS was concluded with M/s. L&T Ltd. at the cost of INR 837,967,198 on October 26, 2016. The progress of this work is behind the schedule. It appears that in some cases, decision from the government is pending. It is suggested to expedite the implementation process as the project is scheduled to be closed in October 2017. The TTL also advised that if the implementation slips over the project closing time line, payment from the project may not be eligible after October 31, 2017.

Component B: the physical progress of infrastructures under component B are as follows:

- **MPCS** – Out of the 135 planned MPCS, 117 were completed and handed over to the communities and 18 are still under progress. During this mission, we have visited 2 sites and reviewed the contract agreement and noted that, contract management is very poor. As required by contract agreement, no regular program updates were made, payment has been pending for over 4 months, insurance was not taken as appropriately, adjudicators are not listed in the contract agreement. The mission advice the project to review the contract agreement, updated work plan and monitor it closely as the project is closing in 9 months' time.
- **Roads to Cyclone Shelters (RCS)** – all roads works were completed.
- **Roads to Habitations (RHB):** of the 233 RHB planned, 230 were completed; Contract concluded for 3 packages. It is quite likely that construction completion date may slip over project closing date (October 31, 2017) unless special attention is provided.
- **Bridges** – of the 23 bridges planned, 21 were completed while 2 works are under progress. It is expected that 1 bridge works will be completed in September 2017 and construction of 1 bridge work will slip over the project period. Payment from the project will not be eligible after the project closure date.
- **Saline embankments** – there are 2 saline embankments planned under this project. The pace of work progress is noted to be very slow. In the earlier mission (January 2016), it was noted that initial contract agreement period was expired. The mission advised to invoke contractual provisions (LD, time extension, etc.) wherever applicable and advised to keep the contract agreement live at all times.
- **Work under progress:** overall, there are 25 works under progress and it is very likely that construction period of 7 works would slip over the project closing date (October 31, 2017) as per the work program shared by PMU. The Project is advised that Project fund is not eligible for payments for any works after October 31, 2017.

NCRMP I Progress report

SI No.	Sector	No. of works sanction	No. of works completed	Works in progress
1	Multi-Purpose Cyclone Shelters (MPCS)	135	117	18
2	Roads to Cyclone Shelters (RCS)	163	163	-
3	Roads to Habitations (RHB)	233	230	3
4	Bridges	23	21	2
5	Saline Embankment	2	-	2

NCRMP I - Additional Financing

- **MPCS** – of the 84 MPCS planned, works for all are under progress. As per the contract agreement, it is expected that construction of all 84 MPCS will be completed by September 2017.

- **Roads to Cyclone Shelters (RCS):** there were 75 packages of which 43 are already completed. The remaining 32 packages are all entrusted and is at various stages, however, there is 1 package where Contractor could not start the work due to site issues (resistance from local people). It is likely that this package will be cancelled.
- **Bridges** - of the 12 bridges planned, works for 9 bridges are at various stages. It is likely that construction of 1 bridge may not happen as planned due to shortage in budget allocation. Among the 9 bridges under progress, it is very likely that construction period of 3 bridges will slip over project closing date (October 31, 2017) unless alternative effort is made to complete it by project closing date.

NCRMP I-AF Progress report

Sl No.	Sectors	No. of works sanction	No. of works completed	Works in progress	Remarks
1	Multi-Purpose Cyclone Shelters (MPCS)	84	0	84	1 at Donkuru in SKLM dist.; 1 at Suryaraopeta in EG dist; and 1 at Kondurupalem in Nlr dist.
2	Roads to Cyclone Shelters (RCS)	75	43	32	RCS road to cyclone shelter at YSR colony in Krishna dist.
3	Bridges	12	3	9	LOA issued for 1 package on 25.1.17

The selection process of TPQA has been completed and TPQA consultant is on board.

- **Post Procurement Review (PPR):** the project was informed that Bank will conduct FY17 PPR for the procurement activities initiated from July 2015 to June 2016 and requested to compile a list. Bank has received the contract list and PPR will commence March 2017 or earlier.
- **Extension of Internal Audit Contract:** the PMU had proposed to extend the service of internal auditors up to the project closure date. The Bank team reviewed the proposal and agreed for the proposal.
- **Overall performance:** The overall performance of the project is satisfactory. However, it is likely that completion period of 26 packages (7 under NCRMP I and 19 packages under NCRMP I-AF) may slip over the project closure date. Any expenses incurred after the project closure date is not eligible for payment from the project and the government was appraised to make necessary arrangements.

Annex 10: Detailed Observations on Procurement for Odisha

1) **Procurement of EWDS:** The contract for Supply, Installation and Commissioning of EWDS system was awarded to M/s. L&T Ltd. for INR 655,641,904 (US\$ 10,086,798²). The Contract agreement was signed on July 9, 2016. As per the Contract agreement, Supply, Installation and Commissioning works has to be completed within 9 months of Contract signature (i.e. April 10, 2017), however, it was noted during this mission that work is still under progress. The mission also noted that there is increased in scope of works as there are requirements of additional towers. The project has concluded a meeting and it was proposed for variation of scope of work leading to variations in Contract Amount by INR 95,295,704 (US\$ 1,466,087). The total contract amount after amendment would be **INR 750,937,608 (US\$ 11,552,886)**. The proposed Contract amendment is yet to be received by the bank for clearance. While amending the contract, it is also suggested to modify the work program for completion of the EWDS system, failing which liquidity damage clause will evoke. It is also noted that there is an issue with DMR license and OSDMA is advised to expedite in obtaining DMR license from government of India. The construction supervision works for civil works for tower was given to TPQA consultant M/s. Arkitechno Consultant for INR 1,592,000 through variation of orders. The amendment for variation orders has been cleared by the Bank. OSDMA is also advised to secure the funds for additional works before signing amendment to the EWDS contract. As per the contract (deliverables 5), TCIL is required to assist client in procurement of consultant for third party acceptance testing of the equipment and services. As of date, this has not been initiated and the mission advice to initiate procurement process as the both the EWDS contracts in AP and Odisha are under implementation stage.

2) **MPCS:** There were 154 MPCS planned under NCRMP I. As of the mission date, all the constructions were completed, and final payment for the 39 packages were under process. It is expected that this will be settled by end of April 2017.

3) **Roads:** there were 143 roads planned and construction of all roads were completed. Final payments for 43 road packages are under process and it is expected that by end of April 2017, all payments will be closed.

4) **Saline Embankment:** there were 12 Embankments planned and works of all packages were completed as of mission date. The final payment for 5 packages are under process and it is expected to be settled by end of April 2017.

5) **MPCS under AF:** There are 162 MPCS planned and 89 MPCS were completed while 73 are in work in progress at various stages and it is planned that by March 2017, construction of all remaining MPCS will be completed.

6) **Roads:** there were 100 (169.44 km) approach roads planned and 90 roads were completed as of this mission date. The progress of remaining 10 are at various stages and it is expected that all construction works for MPCS and approach roads under Additional Financing will be completed by June 2017.

7) **Procurement of MPCS Kits:** OSDMA had proposed to buy MPCS Kits for 154 Cyclone Shelters in earlier mission. It was discussed and agreed that there will be 6 packages and procurement will be conducted through NCB. However, procurement process was withheld due to non-availability of funds. OSDMA had requested supplementary funds from NDMA. It

² Exchange rate 1US\$:INR 65

is noted during this mission that approval of funds for supplementary budget is still pending with Home Ministry. The mission urged OSDMA to follow up with NDMA.

8) **Complaint on delayed payment:** Bank has received complaint from one Contractor stating that their final payment has been withheld by OSDMA. The matter was raised in pervious mission (August to September 2016) and OSDMA was supposed to resolve this issue. It is noted that even after 6 months, the issue is still pending with OSDMA and it is urged to resolve soon from now.

9) **Amendment for TPQA Contract:** OSDMA has submitted proposal to amend Contract for TPQA consultant as there is need to oversee quality assurance for EWDS civil works. The proposed contract amount is INR 1,592,000. Bank has reviewed the proposal and cleared as proposed as there is no advantage in going for the fresh selection process. OSDMA will submit signed amendment to the Bank for record.

10) **Post Procurement Review (PPR):** Bank has conducted PPR during this mission for NCRMP I and NCRMP I-AF for the FY2017. One of the common findings of PPR is that most of the Contracts are not in effect as contract duration has been expired. There was no record for Extension of Time (EoT) despite Bank's repeated reminders in the earlier mission. The detailed report of PPR will be shared with OSDMA for ascertaining correctness before finalizing it.

11) **Procurement Plan (PP):** all procurement for both NCRMP I and NCRMP I – AF has been completed except procurement of MPCs Kits. Upon confirmation of fund availability, OSDMA will revise the PP for MPCs Kits and submit to the Bank for clearance.

12) **Revision of prior Review Threshold:** Bank has revised the prior review threshold beginning form July 2016. The revised prior review threshold for this project is as follows:

- Works (including turnkey, Supply & Installation of plant and equipment and PPP): all contracts more than US\$ 15 million equivalent;
- Goods (including information technology and non-consulting services): all contracts more than US\$ 4 million equivalent;
- Consultancy Services: above US\$ 2 million equivalent for firms; and US\$ 400,000 for individuals

The project is also informed that the above threshold values shall apply for Direct Contract/Single Source as well. The revision of threshold was communicated separately through email and it will come into effect from email communication date.

Risk Assessment: almost all procurement under this project has been completed except MPCs Kits. In view of this, the procurement risk has been rated as “moderate” and overall performance of procurement has been rated as satisfactory.

Annex 11: Detailed Observations on Financial Management

Andhra Pradesh NCRMP-I

Budgeting and Expenditure: The original budgetary sanction for FY 2016-17 was INR. 70.68 crores; the project demanded another INR. 30 crores as supplementary budget grant, however no additional amount was sanctioned. The total expenditure till date³ for the year is INR. 84.69 crores, which is being met out of additional central share for FY 2015-16 which was INR 114.98 crores and from the state government budget share of NCRMP – additional financing (INRs 13.59 crores). The total expenditure incurred on the project till date is INR 665.49 crores. It was informed that the IUFs upto December 31, 2016 have been submitted to NDMA.

Staffing: The position of Financial Controller became vacant with effect from 31.10.2016, as the incumbent retired. The mission was informed that the Accountant, who is a retired Finance Department official, and working for the project since long took charge as Financial Controller.

Internal Audit: During the last mission, it was discussed that since the contract of the existing internal auditor - M/s Roy Ghosh and Associates, Chartered Accountants was only till July, 2016 the project was keen on extending the contract of the existing firm till the closure of the project. However, no further action has been taken in this regard. It is mandatory that internal audit is conducted at regular intervals and reports are submitted timely. It was agreed that the project would extend the contract immediately without any further delay and communicate to the World Bank.

External Audit: The project has submitted the audit report for FY 2015-16. Out of an amount of INR. 2.98 crores disqualified for FY 2014-15 pertaining to mobilization advance an amount of INR 0.97 crores has been recertified. During the mission, the project requested that the balance amount should not be treated as ineligible and efforts shall be made to get the same recertified by the AG. Further, other issues emanating out of the current audit report (FY 2015-16) shall be addressed by way of an audit review letter.

Andhra Pradesh NCRMP-I Additional Financing

During FY 2016-17, an amount of INR 97.20 crores (including state share of INR 30 crores) has been sanctioned. Expenditure incurred during the year (till January 24, 2017) is INR 46.50 crores.

Internal Audit: It was agreed during the mission that the firm performing the internal audit function for NCRMP would also perform the same for NCRMP – Additional Financing. This must be done without any delay.

External Audit: There was no expenditure incurred during FY 2015-16, hence the audit report was not furnished. It was agreed that the project would formally write to the Bank for waiver of the audit requirements for FY 2015-16. For FY 2016-17, the audit report shall become due to be submitted to the Bank by December 31, 2017.

³ Till January 24, 2017

Odisha NCRMP-I

Disbursements: The total disbursement (for entire project) in respect of NCRMP I stands at SDR 104.25 which is 63.53% of the total loan amount of SDR 164.1 million.

Budgeting and Expenditure: As against a sanctioned budget Rs 52 crores for the year 2016-17, an amount of Rs 40.06 crores was expended for Component B, C & D. Further, an amount of Rs 10 crores was transferred to the office of Special Relief Commissioner (SRC) for execution of Component A during August 2016. The mission was informed that an amount of approx. Rs 9 crores had been paid to the contractor by the SRC. It was agreed that the project could claim this amount from the Bank and obtain a utilization certificate from the SRC. For FY 2017-18, the sanctioned budgeted expenditure is Rs 300 crores. IUFs up to February 28, 2017 have been submitted to NDMA and have been reviewed by the Bank.

Internal Audit: Internal auditors for the project, M/s Tej Raj & Pal, Chartered Accountants were appointed during August 2016 for conducting the audit for FY 2015-16 and FY 2016-17. The report for FY 2015-16 has been submitted. Further, the report for the period April-Sept 2016 has not yet been submitted. It was shared with the Bank that the same shall be submitted latest by April 25, 2017. Subsequently, the report for the period from Oct-Mar 2017 shall also have to be submitted by the auditors at the earliest. Further, the project also informed the mission that the contract of the internal audit would be extended till the closure of the project, i.e. October 31, 2017. It was agreed that the project would communicate to the Bank with the decision at the earliest.

External Audit: M/s SRB & Associates, Chartered Accountants have conducted the audit for FY 2015-16 and submitted the report. The auditors have issued a qualified opinion due to difference in audited figures vis-à-vis the figures at the utilization certificate and non-maintenance of asset register. The report was discussed with the project. It was agreed that the project would respond on the audit observations and take corrective actions. Since the project closes on October 31, 2017, the project wishes to extend the contract for the existing auditor for the audit of FY 2016-17 also. It was agreed that OSDMA would write to the Bank in respect of the same to obtain clearance.

Project closing and payment of Goods, Works & Services: With the project closing date of October 31, 2017 only those payments from the Bank in respect of which the liability becomes crystallized (i.e. goods have been received or services have been rendered) by the project closing date, can be claimed from the Bank upto the next four months after project closure. Therefore, disbursements from the Credit will be made for withdrawal applications received at the Bank's Chennai office by February 28, 2018 in respect of eligible expenditures made before the closing date.

Orissa NCRMP-I Additional Financing

The disbursements in respect of NCRMP – AF stand at SDR 26.13 which is 38.82% of the total loan amount of SDR 67.3 million.

Budgeting and Expenditure: For FY 2016-17, the budgeted expenditure was Rs 300 crores and an amount of Rs. 78.50 crores was expended. Total Cumulative Expenditure incurred up to March 31, 2017 stands at Rs 322.18 crores. For FY 2017-18, the budgeted expenditure is Rs 87.20 crores. IUFs for the quarter ending December 31, 2016 have been reviewed by the

Bank. IUFR upto March 31, 2017 have been submitted to NDMA, which shall be submitted to the Bank shortly.

External Audit: M/s SRB & Associates, Chartered Accountants have conducted the audit for FY 2015-16 and submitted the report. The auditors have issued a qualified opinion due to difference in audited figures vis-à-vis the figures at the utilization certificate. The report was discussed with the project. It was agreed that the project would respond on the audit observations and take corrective actions. The project informed the mission that the contract of the existing auditors shall be extended up to March 31, 2017. It was agreed that OSDMA would write to the Bank in respect of the same to obtain clearance.