

The World Bank
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July 2, 2015

Mr. Gokul Chandra Pati
Chief Secretary
Government of Odisha
Secretariat
Bhubaneswar



*Are the W&B's
comments
OJ/10/11/15*

Dear Mr. Pati:

**India: Odisha State Roads Project (OSRP) - (Loan No. 7577-IN)
10th Implementation Support Mission, May 5-14, 2015**

I thank the Government of Odisha (GoO) and its various departments for extending support to the Bank's implementation support mission and particularly to you for chairing the wrap-up meeting and participating in the Institutional Development Workshop. The attached aide memoire summarizes the findings, discussions and agreements reached.

I was disappointed to learn from our team that project implementation has continued to slip across a range of fronts. While the progress of the Road Corridor Improvement Component is behind schedule especially on three works packages (P02, P04A and P04B) due to a variety of factors, the lack of traction on Quality Assurance has raised serious concerns for the sustainability of these investments, with negligible or no oversight from the Supervision Consultant and inadequate supervision from OWD. It seems likely that rehabilitation and upgrading of only about 110kms (packages P01A, P01B and P03) will be completed by the current loan closing date (June 30, 2016), while works on about 200 kms of roads under the three packages (P02, P04A and P04B) will not be completed, resulting in non-utilization of about US\$90m at loan closure.

Furthermore, our team observed that cross-drainage (CD) works were commenced at a very large number of locations by diverting the traffic through temporary diversions which are likely to be washed away during the ensuing monsoon, thus making the roads un-trafficable unless the CD works are completed together with approaches and/or such gaps in the roads are suitably restored. As a result of these circumstances, we have downgraded the rating for achievement of the project Development Objectives and Implementation Progress to Unsatisfactory.

Given this dire situation, we propose that the focus during the remaining implementation period be on packages P01A, P01B and P03 to ensure their timely completion and according to acceptable quality standards. It would be in the best interests of the project if GoO would finance the remaining three contracts (P02, P04A and P04B) from its own resources, allowing the resulting savings to be cancelled which would enhance the chances of achieving the project Development Objectives based on revised targets. We will be more than happy to provide all possible help and support to ensure that the R&R and LA in these road stretches are addressed in a satisfactory manner. If you agree with this position, please send us a request through DEA for cancellation.

*AP
3/13/07*

On a related matter, we just completed a restructuring involving cancellation of US\$33m due to currency fluctuation based on a formal request from DEA.

Our task team stands ready to assist the GoO and can participate in any review/discussion meetings that you may want them to attend. Should you require any clarifications, please do not hesitate to contact Mr. Rajesh Rohatgi, the Task Team leader for the project (email: rrohbatgi@worldbank.org).

With regards,

Sincerely yours,

A handwritten signature in black ink, consisting of a large, sweeping loop followed by a horizontal line and a small flourish at the end.

Onno Ruhl
Country Director, India

Enclosure

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Mr. Gokul Chandra Pati

-3-

July 2, 2015

cc: Mr. Subhash Chandra Garg, Executive Director (India), World Bank
Mr. L.K. Atheeq, Senior Advisor to Executive Director (India), World Bank

Mr. Vijay Chibber, Secretary, Ministry of Road Transport & Highways, Government of India
Mr. Bhaskar Dasgupta, Director (MI), DEA, Ministry of Finance, Government of India
Mr. S.G. Dastidar, Controller of Aid Accounts & Audit, DEA, Ministry of Finance, Government of India
Mr. S.N. Das, DG (Road Development) & Special Secretary, Ministry of Road Transport & Highways, Government of India
Mr. Upendra Nath Behera, Additional Chief Secretary, Department of Finance, Government of Odisha
Mr. N. K. Pradhan, Engineer-in-Chief-cum-Secretary, OWD, Government of Odisha
Mr. B. C. Pradhan, Chief Engineer (Roads), OWD, Government of Odisha
Mr. O. P. Patel, Chief Engineer, (World Bank Projects), OWD, Government of Odisha

INDIA: Odisha State Roads Project (Ln.7577-IN)

Implementation Support Mission

May 5 to 14, 2015

Aide Memoire

I. INTRODUCTION

1. A World Bank team¹ undertook an Implementation Support Mission for the Odisha State Roads Project (OSRP) during May 5 to 14, 2015. The objective of the mission was to ascertain the overall implementation status of the project. The mission visited all civil work sites and held discussions with the Project Management Unit (PMU), contractor, consultants and field divisions of Odisha Works Department (OWD).

2. A wrap-up meeting, chaired by the OWD Secretary, Government of Odisha (GoO) was held on May 14, 2015. The mission also met the Chief Secretary and briefed about overall project status and key issues. This aide-memoire summarizes mission assessment, the findings and recommendations to improve the implementation status of the project. The mission updated the status of action agreed during the previous mission (Annex 1) and suggested an action plan to resolve current implementation issues (Annex 2).

II. KEY PROJECT DATA & PERFORMANCE RATING

Key Project Date		Project Performance		
		Summary Ratings	At MTR	Current
Loan Amount:	US\$196 million	Development Objectives	MS	U
Board Approval:	Sep 30, 2008	Implementation Progress	MS	U
Effectiveness Date:	April 15, 2009	Risk Flags: Slow Disbursements		
Project Age:	73 months			
Disbursed:	US\$ 64.72million (33%)			
Closing Date:	June 30, 2016			

HS=Highly Satisfactory; S=Satisfactory; MS=Moderately Satisfactory; MU=Moderately Unsatisfactory; U=Unsatisfactory; HU=Highly Unsatisfactory; NA=Not Applicable; NR=Not Rated

III. SUMMARY

3. The overall project progress continues to remain very poor. In particular the civil works progress, has been abysmal. As such the project runs the risk of closing with a substantial amount of non-committed funds by the loan closing date of June 30, 2016. The institutional development component of the project, however, is progressing satisfactorily and GoO is committed towards adopting the initiatives developed under this component of the project. The following paragraphs describe key implementation issues, which need urgent attention from OWD/GoO.

¹ Consisting of Messrs/Mmes Rajesh Rohatgi (Mission Leader), Satya N. Mishra (Social Development Specialist), Sujit Das (Consultant - Highway Engineer), Rami Reddy (Consultant - Highway Engineer), Vinod Gautam (Consultant, Environment Specialist), Kevin McPherson (Consultant - Asset Management), N S Srinivas (Operations Analyst), Mohammed Khatouri (Operations Advisor), Radia Benamghar (Transport Specialist) and Aruna Aysha Das (Program Assistant)

4. *Loan Cancellation:* The Bank has recently processed cancellation of US\$33 million based on the request from the Government of India (GOI). This saving is mainly emerging out of the sharp devaluation of the Indian Rupee (INR) against US Dollars (US\$).

5. *Slow Works Progress* The overall progress of the civil works has been very slow. Out of the six packages, three viz; P01A, P01B and P03, are progressing reasonably well. P02, P04A and P04B are progressing very slowly. The physical progress in these contracts have been about 12.8%, 1.0% and 3.4% of the contract amount respectively in 67% (18 months), 60% (16 months) and 63% (17 months) of their respective works completion period. Out of these three packages, P04A contractor has demobilized from February 1, 2015, and OWD has issued a notice of termination on April 25, 2015. With regard to slow progress of these three contracts, while it could be attributed to poor planning and slow mobilization of the contractor, lack of availability of aggregates, sharp increase in prices of the aggregates from the sources available and high cost of contract-specified materials for embankment and subgrade have been major deterrents resulting in slow progress. The Mission noted that these 3 Contractors had won the contracts @ 11 to 12.5% lower than OWD's estimated cost. All these have affected the Contractors' cash flow adversely. The mission was informed that in view of the slow progress, OWD is considering contractual action for package P02 and P04B as well.

6. *Quality of Works and Supervision Quality:* The mission noted with concern the supervision of the works quality, or rather the lack of it, on all the contracts. The mission also expressed its concern on the unsatisfactory quality of works being carried out on all contracts. It appeared that there is a serious dearth in terms of the overall supervision of the works quality by the Construction Supervision Consultant (CSC) as well as the Employer. It was noted that the Employer continues to heavily depend on the CSC for monitoring the works with very minimal or no involvement from the Employer's Representative. The mission urged PMU to be actively engaged in the project as appropriate without interfering with contract administration by the 'Engineer' of the CSC and should also monitor the performance of the CSC. Furthermore, the mission also requested OWD to deploy full time staff at field for each of the works contracts.

7. *Trafficability and Safety on project roads during monsoon:* The mission observed that cross drainage works have been commenced at several locations with temporary diversions provided for traffic at low level having no waterway. These temporary diversions are likely to be washed away during the ensuing monsoon and as such the roads are likely to be non-trafficable unless the works are completed prior to monsoon and/or the roads are suitable restored. The prevailing situation, in particular on package P02, warrants urgent attention by the OWD and CSC and action by the contractor. In addition, existing pavement condition is poor in many stretches on various Project Roads. It was agreed that the affected roads will be restored to motorable condition by June 15, 2015.

8. *Availability of stone materials:* It was reported that following a Gazette Notification dated September 16, 2014, by the GoO, procurement of the required quantity of stone materials by the contractor has become a huge challenge. This issue is pertinent in the case of P02, P04A and P04B contracts and has adversely affected the performance of these contracts. The contractors informed the mission while the required quantity of stone materials might be available with some of the illegal quarry operators, the quarrying capacity of the present legal quarry lease holders is limited and are unable to supply the required quantity of aggregates. The mission clarified to OWD, CSC and the Contractors that the Bank does not support procurement of materials from illegal sources in the Bank financed works and urged that OWD should abide by the Bank policy.

9. *Quality Assurance and Management of Works Contracts:* The Bank wrote to the GoO on March 26, 2015, regarding weaknesses in Quality Assurance and Contract Management, following review of P02

and P03 by the Bank's Consultants in January 2015. The PMU discussed with the Bank Mission on the actions it has taken in this respect. The Mission suggested that a response should be sent by the GoO to the Bank describing the GoO's findings on the matters brought out in the Bank's Reports and an Action Plan to mitigate the weaknesses. The Mission noted many duplication of payment in P02Balance contract (similar to P03Balance contract, as communicated on March 26), details of which would be forwarded to OWD separately. Although the OWD has recently (effective March 2015) replaced the earlier poorly performing CSC for Phase I Roads with extension of the services of CSC for Phase II Roads, the Mission suggested to OWD to strengthen the CSC Team for proper quality control and contract administration.

10. *Implementation of Environment Management Plans (EMPs):* Since the last mission in August 2014, there has been significant improvement with regard to execution of the environment management plan. All the necessary statutory clearances and consents for operation of crushers, HMP, WMM and construction base camps have been obtained. The issue, at present, affecting the construction work is availability of mining lease for stone quarries. The requirements of The Odisha Minor Minerals Concession (Amendment) Rules, 2014 (which came in existence on 16 September 2014) needs to be fulfilled for obtaining mining lease and stone quarries operation. Presently, approved mining plan and environmental clearance are pre-requisite to grant of quarry lease for minimum 5 years through bidding. The contractors of P04B participated in bidding for stone mining lease to meet aggregate requirement for the project and won the bid. However, bidding was challenged in the court and matter is sub-judice.

11. *Adjustment / Deployment of Staffing of the CSC:* During the August 2014 and the subsequent missions, the Bank has been repeatedly raising the issue of excessive number of CSC's staff deployed for P04A and P04B, in comparison to the activities in these contracts. However, the issue continues to remain neglected by OWD/PIU as well as the CSC. The Mission again noted that a large number of technical staff are deployed for package P04B whereas the technical staff available for P01A, P01B and P03 are not commensurate with the ongoing activities which are much larger than P04B. The mission was concerned to note that neither OWD nor CSC had taken cognizance of this imbalance and had a logical reason to explain the situation. The Mission once again requested and strongly urged the OWD and the CSC to review the staffing for all contracts and deploy the staff in a reasonable manner among all the works contracts based on the quantum of work.

12. *Staffing of Asset Management Unit:* The mission was pleased to note that since the last mission in August 2014, substantial progress has been made with respect to the implementation of the Asset Management System. OWD has taken over the Asset Management Unit and has been imparting hands-on training on the various modules of O-RAMS to the staff of the AMS Cell. The AMS Cell staffing has also been strengthened with the deployment of additional staff to support the Executive Engineer heading the AMS Cell. In addition, data with respect to GSP Referencing, Inventory and condition data, traffic census, axle load data etc. for 2011 and 2012 have also been loaded into the AMS. Furthermore, the AMS is being effectively used for preparation of the maintenance plans and also for taking decisions related to improvements / widening etc. of roads using the pavement management system.

13. *Managing Social Safeguard Risks:* The land acquisition (LA) and resettlement and rehabilitation (R&R) process has been advanced with completing LA awards for 100% land plots and with relocating 98% of structures affected by Phase-1 roads. Of 2,797 structures affected by Phase-1 roads (including 463 residences, 1468 shops and 866 kiosks), 2738 or 98% of the affected structures (including 418 residences, 1454 shops, and 866 kiosks) have been relocated. However, a few outstanding resettlement challenges including court cases are threatening the completion of the relocation process, which is considerably delayed. The PMU is advised to resolve the outstanding LA and R&R challenges with exploring a flexible and negotiated approach to minimize time and cost overruns that far outweigh amounts payable to the affected land /structure losers. In order to accelerate the LA and R&R process, the PMU needs to expand its social development team with more contractual staff, extend the services of NGOs, improve coordination

with the LAOs. The OWD has developed a draft “gender and transport” strategy and has started implementing a livelihood restoration support plan, which is welcome. Going forward, in view of the need for elaborate planning activities required by the new LA Act, 2013, the OWD has agreed to establish a permanent Social unit as part of the RSID-driven organizational enhancements of the OWD, which will then also facilitate capacity building activities in this function for its engineering staff across the state. The issues requiring urgent attention include the following:

- Ensure full site handover for P03, and P02 (SH 53 and Tilo and Bonth in SH9) by June 30, 2015.
- Resolve remaining LA issues (actual disbursement) in close coordination with LAOs, with urgent attention to cases where structures have been dismantled prior to payment of compensation;
- Complete public notification asking absentee land losers to claim their LA compensation, advise preparation of data on actual and pending disbursements in agreed formats
- Resolve critical LA and R&R cases at Tanupur (P04B), Gokarnapur and Narayanpur (P03), Tilo and Bonth (P02), Chandbali, Achutapur, Bareipur, and Chandbali (P04).
- Issue a Government Order as an addendum to the OSRP-R&R Policy setting down that “LA compensation shall be paid as the new RFCT-LARR Act, 2013 for awards declared with effect from January 1, 2014 overriding earlier provisions of LA Act, 1894”.
- Draw an action plan to mitigate adverse impact of higher road embankments with adequate drainage, service road, and pedestrian underpasses, and with relocating earthen structures on the roads in order to prevent damage to them
- Address allegations of discrimination with regard to determining impacted area and providing R&R benefits at Bareipur/Panchapada (Chandbali), (P04B), Achyutpur (P04A), and Narayanpur (P03)

14. **Relevance and Achievement of Project Development Objective (PDO)** Overall, on both the outcome and intermediate results indicators, the targets have been partially achieved. For vehicle operating cost and vehicle speed the achieved outcomes are yet to be determined as the corridors are under construction. A detailed matrix showing the status of both the outcome and component-wise intermediate results indicator is attached as **Annex 6**. Based on the result monitoring, the mission assessed that the Project Development Objective “to remove transport bottlenecks in targeted transport corridors for greater investment and economic and social development activities in the State of Orissa” is still relevant but there are risks of this not being achieved by the loan closing date. The mission also discussed the need for modifications to the results framework to truly reflect the PDO, which shall be done in upcoming restructuring.

15. The status of the key actions agreed during the August 2014 MTR mission is provided in **Annex 1** and the key actions agreed during this mission are given in **Annex 2**.

IV. ROAD CORRIDOR IMPROVEMENT COMPONENT

16. This Component was planned to support Widening, Strengthening and selective Realignment of about 461 kms of existing Roads to double-lane standard. 3 Works Contracts comprising about 204 kms under Phase I started in November 2008 / February 2009, suffered from poor performance. P03 was terminated in September 2011, and P01 and P02 were terminated in November 2012. Value of Works carried out under P01, P02 and P03 until termination, as reported by OWD, was about 32.5%, 21% and 16% of the Contract Amounts respectively. The Project / Loan was thereafter restructured in January 2013, reducing the scope from 461 kms to 310 kms. Balance Works for all the 3 Works Contracts of Phase I were then undertaken under 4 Works Contracts (P01 divided into 2 Contracts – P01A and P01B). In addition, P04 of Phase II has been undertaken under 2 Works Contracts – P04A and P04B. Following paragraphs describe the status of the ongoing 6 Works Contracts and related CSC’s Services. More details about these are presented under **Annex 3**.

17. **P01A Bhawanipatna - Khariar Road.** The Works Contract for the Balance works of 65.2 km long Road amounting INR 845 million started on 21st August 2013 with 24 months works completion period. The Mission was informed that the physical progress of the contract has been about 73% of contract amount until end-April 2015 in about 85% of works completion period elapsed. The Mission noted with surprise that a large amount of about INR 330 million worth of permanent works have been carried out during last six months from November 2014 to April 2015, thus on average about INR 55 million (6.5%) of works per month. The Contract is being run without a suitable and knowledgeable Project Manager (PM) of the Contractor. The PM of Contract P01B has been nominated as the PM for this contract for record, but he did not appear to be running this contract.

18. The Mission noted unsatisfactory quality of Bituminous Concrete (BC) wearing course as well as unsatisfactory riding quality in some stretches. The Mission gathered that the Roughness Measurements and Surface Regularity Test of the BC top surface required as per the contract conditions have not been made, which need to be carried out at the earliest to ascertain acceptability of the BC works. The works on Shoulders and Embankment Slopes to satisfactory requirements are mostly remaining. The Mission noted that the Wet Mix Macadam (WMM) Plant is not operational for some time, and WMM mix is being produced otherwise. The Mission suggested to review whether such WMM works are permissible as per the contract specifications. The Mission suggested to re-check the characteristics of Granular Sub Base (GSB) materials for their adherence to the contract specifications and suitability to perform as drainage layer. The Mission expressed that while the contract has progressed fast in recent months in order to make up with its earlier shortfall, the PMU and the CSC need to ensure implementation of satisfactory quality works as per the contract requirements. It's presently expected that the contract works may be completed in all respects by October 2015.

19. **P01B Four Bridges over River Tel and the Approaches.** This Works Contract within the P01A corridor with the same Contractor as for P01A, amounting about INR 290 million started on 14th November 2013 with 24 months works completion period. The Mission was informed that the physical progress of the contract has been about 57% of contract amount until end-April 2015 in about 73% of works completion period elapsed. The Contractor is working on all 4 bridges. It has planned to complete the 2 bridges at Km 28+900 and at Km 29+400 including their approaches prior to onset of monsoon expected around mid-June, because the temporary diversions, through which the traffic is moving presently, may not be able to withstand the flood flows. The Contractor is required to complete the remaining works for these 2 bridges on war-footing. The Contractor is required to start the pre-stressing works as well as mobilize the Cranes required for erecting the precast girders immediately for this purpose. The Contractor is required to also erect the girders in the 2 spans in the deep channel of the longest bridge at Km 27+800 prior to monsoon, because it requires constructing temporary platform for crane operation in the deep water course. The Mission observed extremely poor arrangement for the laborers living in the site. The Mission was informed that the contract works may be completed in all respects by November/December 2015.

20. **P02 (Balance) Chandbali - Bhadrak - Anandpur Road.** The Works Contract for the Balance works of 88 km long Roads amounting INR 2481 million started on 1st November 2013 with 27 months works completion period. The Mission was informed that the physical progress of the contract has been only about 13% of the contract amount until end-April 2015 in about 67% of works completion period elapsed. The Contractor's Value Engineering proposal has not been found technically acceptable by both OWD and the Engineer. The Contractor's procurement of stone materials has been very poor due to the reasons elaborated under paragraphs 8 and 32 herein. In addition, reportedly, the Contractor's cost of Subgrade Construction with required 10% CBR materials is about 2.5 times its Quoted Rate. It was noted that the Contractor bagged the contract at about 11% lower price than the OWD's estimated cost.

21. The Mission noted that the Contractor carried out INR 45 million of works, highest in any month in this contract, in January 2015. The Contractor cited expiry of Quarrying Lease of its Stone Materials Supplier at end-March 2015 to be a reason for its present slow progress. It also stated that it cannot procure stone materials from longer distances requiring higher transportation cost. It also informed about non-availability of Sand since 1st April 2015, because the licenses for sand quarrying effective from 1st April have not been awarded yet. The Contractor however had no explanation for its about INR 40 million of works only in February and March 2015 together. It's reported that the Contractor has not been able to make some payments to its local service providers, and it's suffering from severe cash flow problem. Such poor performance of the contract cannot be continued further. The OWD and the Contractor together should resolve the issue of materials availability. The OWD may have to take remedial action(s) if so warranted. The OWD assured that encumbrance-free Section III (21.8 kms) would be handed to the Contractor by 30th June 2015.

22. The Mission observed that cross-drainage (C-D) works were commenced at a very large number of locations by diverting the traffic through temporary diversions at low level having no waterway. These diversions are likely to be washed away during the ensuing monsoon, thus making the Roads un-trafficable unless the C-D works are completed together with approaches and/or such gaps in the Roads are suitably restored. The Mission did not observe any mobilization or initiative by the Contractor for making such locations trafficable. This is an emergency situation, because of ensuing monsoon season starting 15 June. In addition, existing pavement condition is very bad in some stretches including in Section III not handed to the Contractor as yet. The OWD agreed to get the contract roads adequately trafficable before the monsoon. The OWD needs to take measures on an emergency basis on these.

23. **P03 (Balance) Berhampur – Taptapani Road.** The Works Contract for the Balance works of 41.228 km long Road amounting INR 969 million started on 24th January 2013 with 24 months works completion period, which has been extended until 15 June 2015 for the reasons beyond the control of the Contractor. The Mission was informed that the physical progress of the contract has been about 50% of the contract amount until end-April 2015. The CSC informed that there is a likely saving of about INR 90 million (exact amount to be worked out) of the contract amount, due to excess quantities provided in the contract. Physical progress is assessed as 55% of likely reduced contract completion cost. The OWD assured the Mission to hand over to the Contractor by 31 May 2015, remaining about 300 meter and about 5.38 km of hindrance-free road stretches under Section II and Section IV respectively. The CSC opined that, provided the remaining hindrance-free road stretches are handed to the Contractor by 31 May 2015 (which is just prior to the monsoon), contract works can be completed in all respects by February 2016.

24. The Mission noted that large amounts of works have not been completed in Section I which reportedly was taken over by the earlier 'Engineer' (not by the Employer / Owner OWD) in January 2015. The Mission was concerned to note that the present 'Engineer' (took over on 1st March 2015) is not aware of any 'snag list' prepared at the time of taking over. The Mission suggested to review whether the 'Engineer' can take over the Road or only the Employer / Owner can take over the Road from the Contractor. The Mission noted the Contractor's traffic management and safety measures at the construction sites are poor. The works on Shoulders and Embankment Slopes are required to be completed to satisfactory requirements. The Contractor agreed to mobilize a baby roller and a small loader by 13 May 2015. The 'Engineer' opined that the Contractor would need to mobilize an additional team for road works including a set of equipment (such as, soil compactor, excavator, grader, water tanker, etc) therefor as well as strengthen its supervisory staffing for completion of all road works within a reasonable time period. The Contractor is required to finalize, on priority, the methodology for construction of the Minor Bridge across a Water Supply Canal in consultation with the Canal Authority.

25. **P04A Jagatpur – Duhuria Road.** The Works Contract for 49 km long Road amounting INR 1513 million had started on 24th December 2013 with 27 months works completion period. The Mission was

informed that all machineries (except Concrete Batching Plant, Mobile Crusher and partially erected WMM Plant), apparently hired by the Contractor, were demobilized from 1st February 2015. All staff of the Contractor was also demobilized from site from 1st February 2015. The Mission was informed that the physical progress of the contract has been only 0.95% of the contract amount comprising embankment works in half width of 11.15 kms length and works on 16 hume pipe culverts, and no further work has been carried out by the Contractor since about mid-January 2015. The OWD has issued Termination Notice to the Contractor on 25th April 2015 following the contract provisions. The OWD is required to seek the Bank's 'No Objection' if in case it wishes to terminate the contract.

26. The Mission was informed that the contract suffered mainly from cash flow and inadequate mobilization by the Contractor, in spite of payment of Mobilization Advance of 5% of the Contract Amount in December 2013. As expressed by the August 2014 Mission, the Mission understood that the Contractor had initially attempted to carry out the whole works through another agency, which failed. Thereafter, the Contractor mobilized various hired machineries but could not progress on the works in absence of cash flow for the contract. Irrational provision of requirement of 10% CBR for embankment materials might have also affected performance of the contract. The Mission noted that the Contractor had bagged the contract at a price about 12.5% lower than the OWD's estimated cost. The Mission was informed that the Contractor might not have paid some amounts to its staff and local suppliers.

27. Repairing of the existing pavement in Sections I and II is required to be made in order for appropriate traffic movement during the ensuing monsoon. Encumbrance-free Sections III and IV (totaling 26.15 kms) were not handed to the Contractor. The proposed works include raising the Road level by around 1.5 m above the existing level except in built-up stretches. The Mission suggested to OWD to review the need of such raising of the Road level.

28. **P04B Duhuria - Chandbali Road.** The Works Contract for 56.5 km long Roads amounting INR 1704 million started on 4th December 2013 with 27 months works completeio period. The Mission was informed that the physical progress of the contract has been only about 3.4% of the contract amount until end-April 2015 in about 63% of works completion period elapsed. The Contractor lost the 1st working season until June 2014, and it started mobilizing slowly during the monsoon of 2014. The Contractor is still in the process of mobilization. The contract suffered from cash flow and inadequate mobilization by the Contractor, in spite of payment of Mobilization Advance in September 2013. The contract suffered from inadequate supply of subgrade materials and hume pipes, insufficient shuttering materials as well as inadequate and irregular supply of stone materials. The problems related to stone materials are discussed under paragraphs 8 and 32 herein. The Mission noted that the Contractor won the contract at a price about 11.5% lower than the OWD's estimated cost.

29. The Mission suggested OWD to review the need of raising the Road level by more than 1.5 m above the existing road level. The OWD has clarified in February 2015 that the Embankment Materials do not require to be of 10% CBR specified in the contract. The Mission noted that none of the OWD, the 'Engineer' and the Contractor earlier attempted to correct this irrational provision in the contract specifications. The OWD and the Contractor are now required to agree on a Variation of the Contract to this effect. The Mission was informed that the matter related to payment for Diversions being constructed by the Contractor for traffic movement, has been resolved in February 2015 in favor of the Contractor, thus could help the Contractor in accelerating its works progress.

30. Reportedly, the Contractor increased its mobilization of machinery in April and early May 2015. The CSC opined that the Contractor has shortfall of Grader and Tippers. The Mission was informed that the Contractor had submitted a Program in mid-April 2015, of carrying out INR 26.8 million, INR 54.9 million and 12 million worth of works for 3 months for mid-April to Mid-May, Mid-May to Mid-June and Mid-June to Mid-July 2015 respectively. However, it again submitted a revised Program on 9th May 2015,

of carrying out INR 38.7 million and INR 46 million worth of works in May and June 2015 respectively. The Contractor presented its intention of having an agreement with a Quarry Operator and establishing its own Crusher, but later informed that the concerned Quarry Operator's license is sub-judice. Such poor performance of the contract cannot be continued further. The OWD and the Contractor together should resolve the issue of materials availability and any other issue externally affecting performance of the contract. The OWD may have to take remedial action(s) if so warranted.

31. The August 2014 Mission had observed that the participation of the Lead Partner of the Joint Venture Contractor appeared either absent or minimal. The Mission again suggested to OWD to investigate into the matter and take contractual actions if warranted. Encumbrance-free Sections III and IV (totaling 28.6 kms) have not been handed to the Contractor as yet.

32. **Availability of Stone Materials for P02Balance, P04A and P04B.** The Mission was given to understand that these 3 Contractors did not plan to have their own Quarrying License and had planned the contract works to be carried out by either crushing procured boulders from Quarrying License holders or with procured crushed stone materials. It's also understood that GoO's amended Rules dated 16 September 2014 related to Minor Minerals as well as process of awarding Quarrying License have adversely affected availability and price of stone materials in the area. The GoO's facilitation for the Contractors having their own Quarrying License has not helped, due to reported unwillingness of the Contractors as well as difficulty in leasing Quarry.

33. **Slope Protection Works.** The Mission noted a lack of and variation in understanding by the field staff about use of Slope Protection Measures at various situations. The Mission recommended that the PMU reviews the matter and advises all the works contracts on applicability of various Slope Protection Measures such as Turfing, Dry Rubble Masonry / Stone Pitching, Mortared Stone Pitching, etc, in different conditions. It must however be ensured that the embankments and the slopes are built up using appropriate cohesive materials as per contract specifications.

34. **Permanent Traffic Engineering and Safety Measures.** The Mission noted placement at inappropriate location(s) and/or of inappropriate Road Signs in P03Balance contract. The Bank's Consultants had noted the same during their January 2015 visit also. The Bank's Team noted in both January and May 2015 an apparent lack of understanding by the field staff about appropriate traffic engineering measures. The Mission suggested and the PMU agreed to mobilize suitable traffic engineering expertise through the CSC to review and finalize all permanent traffic engineering measures including Road Signs, Road Markings, Junction Designs, Safety Measures like use of Crash Barriers and/or Guide Pillars, etc, for all works contracts.

35. **Construction Supervision Consultants (CSCs) Services.** The OWD did not extend the services of the CSC for Phase I Roads (works contracts P01A, P01B, P02Balance and P03Balance) beyond 31st January 2015, because of the Consultant's unsatisfactory services. The OWD had nominated its officers as 'Engineer' for these 4 ongoing works contracts for the month of February 2015, and extended the services of the CSC for Phase II Roads (works contracts P04A and P04B) to include these 4 ongoing works contracts of Phase I effective 1st March 2015.

36. The Bank Team has been repeatedly observing, since August 2014, on excessive number of CSC's staff deployed for P04A and P04B, in comparison to the activities in these contracts. The Mission again noted that 24 technical staff are deployed for P04B, whereas only 13 and 9 technical staff are deployed respectively for P01A+P01B together and P03Balance wherein the ongoing activities are much more than P04B. The mission was concerned to note that neither OWD nor CSC had taken cognizance of this imbalance and had a logical reason to explain the situation. The Mission noted shortcomings in the CSC's services specifically for works contracts P01A and P03Balance. The Mission again requested the OWD

and the CSC to review the staffing for all contracts and deploy the staff in a reasonable manner among all the works contracts.

37. The Mission suggested and the OWD agreed to nominate the Team Leader (replacing the Resident Engineers - REs) of the CSC as the 'Engineer' for all 6 ongoing works contracts and the REs to perform as 'Engineer's Representative', for better administration of the works contracts.

38. *Issues relating to Quality Assurance by the Contractors and Quality Control by the CSCs as well as Quality of Works.* In view of issues come up as communicated by the Bank through its letter dated 26th March 2015 and otherwise, the OWD agreed, as part of its follow-up Actions, to urgently engage a competent agency to undertake an Audit of the Quality Management systems as well as of the Quality of Works carried out under the Project.

39. The Mission suggested the present CSC to re-check all materials being incorporated in the permanent works under its supervision, even though such materials might have been approved by the earlier CSC, because it would be certifying the quality of works under its supervision.

V. SOCIAL SAFEGUARDS MANAGEMENT

40. **Overview:** The mission reviewed the efficiency and quality of the land acquisition (LA) and the resettlement and rehabilitation (R&R) process since the last mission of August 2014, and noted the following: (a) no further progress in LA compensation awards for 4A and 4B roads; (b) relocation of 98% affected residential and commercial structures for Phase-1 roads; (c) preparing and acting on livelihood restoration action plan; (d) preparing a gender action plan, (e) notifying the affected absentee landlords to claim their compensation through newspaper advertisements, (f) relocating 177 of 222 affected community property resources, (f) establishing database systems for planning, implementation and monitoring resettlement process; and (g) advancing relocation of affected structures along P03.

41. **Progress in Land Acquisition (LA):** There has been no further progress in award of LA compensation since August 2014. PMU has informed that 100% LA compensation has been awarded for (205.288 acres) for the Phase-1 roads. In case of P04 A and B, LA compensation was awarded for 105.154 acres of total 116.784 acres required (the latest update reports a decrease in LA requirements to 116.214 acres), and there has been no further progress since then. In case of P02 and P03, during field visits, it was observed that LA award disbursement has not been completed as reported at a few places including Lanjia, Narayanpur, Gokarnapur, and Digapahandi (P03) and at Tilo, Bonth etc. (P02). In case of P-04 A and B, LA awards have not been disbursed at Tanupur, Chandbali, Nischintakoili, etc. The PMU is yet to furnish data regarding the actual disbursement of LA award to land losers as requested during the last mission. It was noted that wherever LA awards have been declared after January 1, 2014, awards have been made at new rates in compliance with the new LA R&R Act, 2013. The LA requirement data for P04 has been reduced from 116.784 to 116.214 acres. The PMU is advised to revisit the stated LA data and confirm the actual requirement keeping in mind the junctions to be taken up.

Summary of Progress in Land Acquisition (May 1, 2015)

Road Package	Number of Villages	Land Required (in Acres)	Award in Acres Aug 25, 2014	Award in Acres May 1, 2015
P01	46	82.940	82.940	82.940
P02	80	70.195	70.195	70.195
P03	32	52.153	52.153	52.153
P-1+2+3	158	205.288	205.288	205.288
P04 A& P04B	105	116.784	105.154	105.154
Total	263	322.07	310.442	310.442

42. **Resettlement and Rehabilitation (R&R) of Affected Persons (PAP) losing Structures:** In case of Phase-1 roads, since the last mission of August 2014, additional 98 structures (83 residences, 14 shops, and 1 kiosk) have been relocated with the provision of resettlement benefits taking the tally to 2,738 (418 residences, 1454 shops, and 866 kiosks) which is 98% of the total 2797 structures affected (463 residences, 1468 shops and 866 kiosks). In case of P-01 (Bhawanipatna-Khariar Road), all of the 248 affected structures have been relocated. In case of P-02 (Andpur-Bhadrak-Chandbali road), of the 1756 affected structures all but 47 structures (including 39 residences and 8 shops) have been relocated. In case of P-03 (Berhampur-Tatapani Road), of 792 affected structures, all except 12 structures (including 6 residences, 6 shops) have been relocated. *A few PAPs already shifted are yet to receive eligible R&R payments. This is an issue which not been fully addressed since the last mission.* A squatter structure affecting relocation of a CPR at Punjigaon has been successfully shifted with providing R&R benefits as discussed during the last mission. Major impediments for P02 is at Tilo. The PMU has committed to complete the site handover with completing R&R of the remaining structures for Phase-1 roads by July 31, 2015.

Status of Resettlement and Rehabilitation of OSRP PAPs

Status of Resettlement and Rehabilitation of OSRP PAPs															
1-May-15															
Sl. No.	Name of the Package	Total No. of PAPs (R+C+K)	Affected Structures (R+C+K)	Residential Structures			Commercial Structures			Kiosk			Total (R+C+K)		
				No. of Affected Structures	Shifted after getting R&R Assistance	Rehabilitated	No. of Affected Structures	Shifted after getting R&R Assistance	Rehabilitated	No. of Affected Structures	Shifted after getting R&R Assistance	Rehabilitated	No. of Affected Structures	Shifted after getting R&R Assistance	Rehabilitated
1	Bhawanipatana- Khariar (PO-1) SH-16	237	248	75	75	72	116	116	114	57	57	49	248	248	235
2	Bhadrak-Chandbali-Anandpur (PO-2) SH-9 & SH-53	1701	1757	139	100	65	1002	994	727	616	616	425	1757	1710	1217
3	Berhampur-Tatapani (PO-3) SH-17	776	792	249	243	140	350	344	157	193	193	105	792	780	402
Phase-1 Roads		2714	2797	463	418	277	1468	1454	998	866	866	579	2797	2738	1854
4A	Jagatpur-Duhuria (0-49 km)	2692	2692	332	72	41	2019	474	314	341	334	203	2692	880	558
4B	Duhuria-Chandbali (49-106 km)	2547	2547	408	59	29	1499	189	83	640	207	111	2547	455	223
Total (P01+P02+P03+P04)		7953	8036	1203	549	347	4986	2117	1395	1847	1407	893	8036	4073	2635

As per verification, the affected PAPs for P04 A&B are a total of 3388 (including 410 residences, 1722 shops, and 1256 kiosks) of which 1335 have been relocated (including 131 residences, 663 shops and 541 kiosks) with eligible LA and R&R benefits provided to them.

43. **Coordination with Civil Works:** In the first year roads, site hand over for P01 has been completed. In case of P02, site has been handed except for 47 structures yet to be shifted at a few stretches for milestones-3 and 4. In case of P03, remaining impediments in Milestone 3 and 4 include land, 12 structures, and electrical utilities at Gokarnapur, Narayanpur, Lanjia, and Digapahandi. In case of P04, site hand over has been completed for Milestone-1. The handover of Milestone 2, 3 and 4 has been delayed on account of delay in completion of R&R and delay in civil works. Delay in alignment demarcation and progress in civil works is affecting the structure relocation process. The PMU has been therefore advised to urgently demarcate the alignment for P-04 with special attention to junction and habitation areas. The PMC, PIA, and the Contractor (P04B) have been asked to complete land survey and place cylindrical RCC pillars with illuminous paint to minimize accident risks. The PMU is advised to disseminate the PAP lists with their R&R entitlements including stamp duty reimbursements through the Village Level Committees (VLC) at habitation areas. The PMU should inform all land losers regarding the *reimbursement of stamp duty on purchase of alternative land within one year in the name of the PAP or his/her spouse or son/daughter/daughter-in-law of the affected family.*

44. **Outstanding Issues:** The PMU needs to resolve outstanding LA related issues and complaints with exploring flexible and out of court solutions wherever possible in order to complete the project on time, minimizing time and cost overruns. The following are a few cases that require urgent attention.

- P03 Gokarnapur:** The PMU has gone to the Court against an earlier LA award questioning award of LA compensation for agricultural lands at par with habitation areas. The few affected land losers have objected to site hand over and the PMU had decided to construct a retaining wall to support the embankment without having to take the farm land required. **Action:** Remove dumping of earth on farm lands and ensure that those permanently affected due to road work are paid compensation as per law.
- P03 Narayanpur:** There were several allegations made by people regarding arbitrary and discriminatory manner in which the eligibility lists were prepared for the award of resettlement benefits to the affected families in the residential category. It was also alleged that the local resettlement committee (LRC) decision making had been monopolized by two individuals who acted in an arbitrary and non-transparent manner. The PMU informed that it has constituted a committee to investigate into the corruption allegation. **Action:** The PMU is advised to constitute a high level grievance resolution committee comprising the SEMU Chief, the Joint Secretary (Land Acquisition), local Tahsildar, LAO, and the Resident Engineer to complete the R&R eligibility verification in a transparent manner with holding a community grievance hearing camp. A few private land parcels required for the project also need to be purchased through private negotiations as the LA process under the new RFCT-LARR Act, 2013 may demand a longer time span.
- P04: Tanupur (67+500 to 73+000 of P-04):** the mission along with the PMU team discussed with the farmers their concerns. The 78 plot owners (about 200 families) have appealed to the High court demanding award of compensation at land rates at par with the neighboring villages of Belatala and Kasanta. The High Court has directed the concerned District Collector to address the farmers' concerns within six weeks. **Action:** The PMU should recommend to the District Administration that it will not oppose payment of equitable compensation for the farmers of Tanupur, given that their lands have comparable physical characteristics.
- P04 Achyutpur:** Consultation with the affected people during field visits indicated that there was conflict of opinion regarding the appropriateness of marking of the affected structures with allegations regarding a lack of transparency in respect of fixing the middle line of road. A total of 40 structures are affected here. LA notification has not been served in a few cases presuming the land to be government land. **Action:** (a) PMC should urgently carry out a land survey and transparently mark out the affected structures; (b) SLC should provide guidelines for purchase small parcels of land required as acquiring land under the new LA Act will require considerable time.
- P04 Chandbali:** The PMU has sought to resolve the concerns of some land and structure losers (101+000 to 101+100 of P-04B) in front of river Baitarani by deciding to work with the existing road alignment and with promising to undertake a bypass later. This step is in line with the earlier discussion that the PMU should explore sustainable engineering solutions including planning for supplementary bypass that will help to minimize displacement impact on historic structures and minimize accident risks while improving the road within road width easily obtainable.
- P04 Bareipur (Chandbali):** Popular dissatisfaction regarding arbitrary marking of the affected structures has led to people refusing to accept the LA compensation at Bareipur, near Chandbali market. There was allegation that LA Award had been withdrawn to favor a few property owners on the Bariepuri (RHS) side, and that an attempt was being made to shift the road to the panchapada side (LHS). **Action:** To dispel the confusion, the PMU was advised to carry out a joint impact survey in the presence of PMC, PIA, NNGO, INGO, LAO, and Tahsildar and complete the markings. PMU is also advised to investigate into factors behind withdrawal of the LA notifications for a few structures on Bareipur side prior to final land survey for civil work.
- P02 Tilo:** No civil work is possible in the diversion stretch covering Tilo village due to refusal of some PAPs to receive compensation and a couple of land disputes, which need to be resolved. **Action:**

The PMU should try to complete LA and RR for Tilo village by July 31, 2015, failing which, it should carry out civil work on the existing alignment and drop the diversion option.

- **Structures on Endowment Lands:** Along P-04 A and B, 125 residential and commercial structures established and occupied by people on endowment lands. These PAPs need to be relocated with the provision of R&R benefits as squatters and in line with process adopted for P-03.

- **Manage adverse impact of higher embankments of 1.5 mt high or more:** It was observed that at several places embankments designed and being built for P04 are up to 1.5 meters. This could cause flooding during monsoon in habitations adjacent to the road and make access to the residences and shops difficult. **Action:** The Project needs to (a) provide adequate drainage, service road, and pedestrian underpasses, (b) include in PAP eligibility list and relocate earthen residential structures on the ROW of roads in order to prevent them from collapsing during rain due to drainage issues.

45. **Relocation of Community Property Resources (CPR):** Since the last mission of August 2014, only six more CPRs have been shifted. Of a total 87 CPRs affected by Phase-1 roads, mostly religious structures, 86 have been shifted with land/and structure compensation deposited with the revenue department, which the latter transfers to the local custodians once they have identified alternative private lands for building the new structures. So far, reconstruction of 36 structures has commenced /completed. In case of P-04 A and B, of 134 CPRs affected, 92 structures have been shifted with paying compensation. Reconstruction of 56 structures have commenced of which 29 have been completed.

Status of Relocation of Community Property Resources (CPRs)

Status of Relocation of Community Property Resources (CPRs)						
1-May-15						
Road	Affected CPR	Compensation Paid in Million Rupees	Shifted	Balance	Restruction started/ Completed	
P01	4	0.316	3	1	3	
P02	60	9.546	60	0	28	
P03	24	6.219	24	0	5	
Year1	88	16.081	87	1	36	
P04A	44	6.076	23	21	6	
P04B	90	12.955	67	23	50	
Year-2	134	19.031	90	44	56	
Total	222	35.112	177	45	92	

46. Key Issues in R&R Implementation

(i) **Site Allowances for Squatters:** The PMU has been able to complete disbursing site allowance to all but 62 eligible squatters for Phase-1 roads as per the revised Entitlement Matrix including occupiers of endowment lands.. Site allowance has been paid to 1855 squatter structure owners compared to 1576 structures until the mission of August 2014. Site allowance in case of commercial cum residential category is paid as applicable for the residential category. The site allowance for P-04 is paid as a part of R&R package for the eligible PAPs. PMU hopes to complete disbursing site allowances to the remaining PAPs by December 2015.

Status of Payment of Site Allowances to Squatters of Phase 1 Roads

Status of Payment of Site Allowances to Squatter Structures (Phase I Roads)						
Roads	Residential Structures	Commercial Structures	1-May-15 Structures Eligible for Site Allowance	No of Cases Processed	No of Structures Provided Site Allowance	Balance
P01	75	116	191	191	191	0
P02	139	1002	1141	1131	1093	38
P03	249	350	599	595	571	24
Total	463	1468	1931	1917	1855	62

(ii) **Agricultural Allowances:** The mission noted progress made in disbursing agricultural allowances to the land losing farmers. Earlier, as advised, the PMU had delegated the responsibility to identify and distribute agricultural allowances to the concerned Land Acquisition Officers (LAO). The agriculture allowance shall be paid by the LAOs for P04A and P04B concurrently with LA awards. So far, such allowance has been provided to a total of 1159 land loser PAPs (including 597 for P04A, 212 for P04B, and 350 for P02). The PMU has reported that it has extended logistic support for PAP verification and disbursement of this allowance for P01 and P03. have been The PMU is advised to follow up with the concerned LAOs in order to accelerate and complete the disbursement of agricultural allowances by focusing attention on farmers physically present and hitherto cultivating lands acquired for the road works.

(iii) **Information Dissemination and Grievance Redress Mechanism:** Filed visits indicated that Information dissemination had been formally completed for Phase-1 roads, but the outcome had been uneven, especially in P03 and P04 A and B. Disclosure of eligibility lists in the village has not been effective especially in some villages alongside P03 and P04 A and B. Several complaints were heard in villages such as Narayanpur against the manner in which the eligibility for R&R benefits residential Of the 312 complaints received (175 from P-04), 153 cases have been resolved, 53 are in the hearing process and 61 yet to be taken up. Since the last mission of October 2013, 73 new cases were received, of which 29 are resolved, 13 are in process, and 31 await hearing.

Status of Grievance Redress Mechanism				
October 9, 2019- May 1, 2015				
Road	cases Received	Cases Resolved	Cases In hearing	Cases Pending
P01	3	3	0	0
P02	102	62	11	29
P03	46	29	3	14
P04A&B	254	108	81	65
Total	405	202	95	108

(iv) **Follow up Action on Safeguards Review:** The following is the status of follow up actions addressing concerns raised in the safeguards review carried out in 2013 regarding restoring livelihood of poor and tribal families, and enhancing implementation capacity.

- The services of NGOs and social mobilization staff have been extended with financial provisions.
- The PMU has prepared and is implementing a livelihood support plan for the affected tribal and poor households with the help of NNGO/INGOs.
- It will expand the Resettlement Database Management System to apply it to other projects with integrating the Grievance Redress mechanism.
- The PMU has been advised to link up a few very poor tribal households left untouched at Patapur, Cuttack (P-04) with social housing schemes of the government, so that they are able to have permanent

shelter comparable to their neighbors enabled to build concrete housing with resettlement assistance provided under the Project.

(v) **Documentation and Monitoring:** The PMU has developed a Resettlement and Rehabilitation Database Management System (R&R DBMS) to document, process, approve, and monitor R&R activities online. The system, commissioned in April 2014, has enabled on line preparation and approval of entitlement files for all eligible PAPs of P-04 road. The PMU is advised to expand the database incorporating all LA and R&R information relating to the Project including final payment of LA compensation to land owners affected. The database should also be utilized to record all data relating to the Phase-1 roads. *The PMU has prepared the draft RAP Implementation Report for Phase-1 roads, which it will finalize incorporating the Bank comments.*

(vi) **Gender Strategy and Livelihood Restoration Plan:** In order to enhance gender and social inclusion outcomes of the road sector programs, the PMU has drafted a gender strategy through stakeholder consultations at select locations. The gender and Transport strategy will be further developed with technical support provided by the Bank. As a part of the Gender Strategy, the Project will rehabilitate the water bodies located alongside/affected by the OSRP roads with providing bathing facilities for women as CPR rehabilitation civil works and shall be handed over to the community after maintenance. The PMU has taken welcome steps to implement a livelihoods restoration action plan. The livelihood action plan needs to be expanded with including left out people such as tenants.

VI. SECTOR POLICY AND INSTITUTIONAL DEVELOPMENT, AND IMPLEMENTATION SUPPORT COMPONENT

47. The mission noted that since the last mission reasonable progress has been made under the Road Sector Institutional Development (RSID) component. The comprehensive final IDS report was delayed under an OWD / Bank agreement that it should await the results of an additional 'final GOO high-level RSID decision-making Workshop' conducted during this mission. Most of the other RSID activities and deliverables envisaged under the component have been satisfactorily completed by the consultants and submitted for GOO decisions and implementation action, so that the RSID consultancy services program is now substantially completed. However, such GOO endorsements and decision-making are still only at the 'in-principle' stage and substantive action by the GOO and the OWD to complete and implement the recommended measures is still pending on several of the RSID deliverables. In parallel, the IT-ICT-MIS Strategy and Action Plan study has finally reached decision-making and implementation stages, after considerable lags between the consultants, OWD and concerned GOO areas over 2013-2014. The mission expressed particular concern at the limited follow-up action by the OWD to achieve **actionable results** in each of these consultancies. The current status of each of the deliverable is provided below.

48. **OPWD Code and Manual:** The final Works Code and Manual have been approved by the ISAP review Committee but are still awaiting clearance / concurrence by the Law and Finance departments of the Government following which the code and manual will be deliberated once more during the Code Revision Committee meeting for final acceptance. The mission urged OWD and the GOO to urgently complete the pending actions to enable early acceptance and operationalization of the revised OPWD Code and Manual.

49. **Road Sector Policy:** The Road Sector Policy was finalized and cleared by the ISAP Review Committee in July 2014 and then circulated to the stakeholder GOO departments – approximately 17 departments - seeking suggestions / comments. However, no response has been received till date. The mission was informed that reminders have been sent to the respective departments again in May 2015 and are awaiting response. The mission expressed concern over the delayed follow-ups by the OWD with only one reminder having gone between July 2014 and May 2015. Given that the draft Highway Act/Bill 2015 submitted by the RSID Consultant also needs to be deliberated prior to finalization of the road sector policy

and that this policy requires cabinet level approval, the mission urged that OWD closely follows up with the respective departments within a firm overall deadline and then takes appropriate actions for early submission of the Policy to the cabinet.

50. *Road Safety Action Plan:* The final report on the road safety action plan has been submitted by the consultants and the same has been approved during the ISAP review meeting in July 2014. Under the advice of the State Level Empowered Committee, the road safety action plan has been shared with the stakeholder department for comments and suggestions. The mission was informed that based on a recent Supreme Court order, a Road Safety Council has been formed in the state with the Transport Department being designated as the nodal department leading the road safety initiative and the council comprising of members from some of the key departments viz; Works, Home, Health, Education. The mission was informed that a Road Safety Cell has been formed within the OWD. In view of the Road Safety Council formation in the state, the mission suggested that OWD should collate the comments received on the Road Safety Action Plan and share the same with the Transport Department and also set-up transparent arrangements between the OWD road safety cell, the Transport Department and the new R S Council to share the implementation responsibilities for the reforms appropriately.

51. *Setting up of HRD and Training Cell:* The mission was informed that the draft HRD policy and Training Plan was approved by the ISAP Review Committee in February 2014, following which a Resolution on the HRD Policy for Works Department has been approved by the GOO in April 2015 and a Gazette notification will be issued shortly. The mission was also informed that a HRD Cell will be created under the Engineer-in-Chief (Civil) with the Superintending Engineer (Training) as in-charge, by end-2015. In terms of next steps, over the new 4-6 months a separate budget allocation for training and HRD activities needs to be provided and HRD & Training Experts need to be hired for effective functioning and capacity building of the new HRD cell.

52. *Road Network Master Plan:* The mission was informed that the Road Network Master was approved by the ISAP Review Committee in July 2014 and referred to a review meeting chaired by the Chief Secretary, where it was decided that all the recommendations provided in the Main Report should be actively considered by OWD. As a first step, GIS Maps for rural road connectivity are being developed and the 2014 / 2015 proposal that these rural roads - currently with the Rural Roads Department - be transferred to the OWD for upkeep and maintenance is now being taken up between the two Departments.

53. *Road Funds:* The mission was informed that the final report submitted by the RSID consultants has been approved by the ISAP Review Committee and now needs clearances from the Finance and Law departments of GOO to enable the OWD to seek cabinet-level approval for establishment of a new Road Fund as per the RSID consultants' recommendations, particularly with regard to tapping the identified sources of funding for generating revenue and creating funds for road maintenance.

54. *IDS Workshop:* During the mission a half-day workshop, chaired by the Chief Secretary, was held to discuss the findings and recommendations of the 'RSID status & overview' report submitted by the RSID consultants. One of the key RSID recommendations was to create a new state-level 'road development corporation' and based on analysis of upcoming challenges of road and infrastructure development and management in Odisha, the report recommended a choice between two options to achieve such a RDC, namely (i) creation of a n autonomous entity or (ii) revamping of an existing entity already 'owned' by the GOO. In this context, the workshop deliberated on the prevailing Odisha Bridge Construction Corporation (OBCC), a government company formed under the Companies Act 1956 with an objective to carry out all road related activities ranging from construction and maintenance of roads and bridges to toll collection including surveying and testing. However, since its inception OBCC was not being utilized to its full potential and as such the company is gradually losing its status and importance in the overall scheme of infrastructure development in the state. During the workshop, the Chief Secretary decided the preferred option was to restructure / re-organize the existing OBCC into an Odisha Roads Development Corporation and charged OWD with preparing a note in this regard to the state cabinet.

55. *IT-ICT-MIS Strategy & Action Plan Consultancy:* Since the last mission, the IT-ICT-MIS Strategy Report has been finalized after incorporating the comments received from the Bank and the IT Department of GOO. The final report was submitted to the GOO for approval in September 2014 and the decision is still awaited. The mission expressed concern over the inordinate delay in the approval of the strategy report which in turn is delaying the procurement of the System Integrator (SI). The mission requested OWD to proactively and closely follow-up the required GOO approval and then to initiate the SI procurement at the earliest. In terms of modules, originally 9 modules were developed. However, two modules viz; Human Resource Management System and Estimation Tool have since been dropped out as the same are being developed at the state-level. In terms of implementation plans, the mission was informed that OWD proposes to distribute the hardware and software up to sub-divisional level offices. Also, the consultants have proposed three patterns of implementation plan to OWD viz; Minimum, Desirable and Recommended plan, of which the recommended plan is estimated to cost around INR 566.29 million. After further deliberations and dropping of some of the applications the revised plan is estimated at INR 439.16 million. It was agreed that the revised implementation plan and the revised estimate will be shared as soon as possible with the Bank for review and comments. The mission indicated that subsequent action by the OWD and the Consultants will need to proceed much more quickly and effectively than so far in this activity, if the roll-out and operationalization of planned new IT-ICT-MIS applications, equipment and facilities are to be achieved in OWD by Project closure.

Asset Management System (AMS) Consultancy

56. *AMS Status:* Since the last mission considerable progress has been achieved on the Asset Management System component. The mission was informed that Exor/TIG software has been configured and operational acceptance test for the core software applications viz; RIS, BIS, RMMS and PMS was completed in December 2014. Final acceptance of these applications, including technical audit and cyber security clearance, is awaited from NIC. The mission was informed that the pending clearances / approvals are expected to be received by July 31, 2015. The mission was pleased to note that GPS referencing, Inventory and condition data, benkelman beam deflection (BBD) data and traffic census data for the period 2011-2012 of the OWD road network have been collected and uploaded into the database. OWD also informed that maintenance plans for roads and bridges and finalization of road works for the year 2015-16 are also being prepared using the software applications being prepared under the AMS.

57. *AMS Cell Staffing:* The mission was informed that the AMS cell has been further strengthened with the inclusion of additional staff in the cell. As of date the cell comprises of 8 staff of which 3 staff are from the department and 5 of them are hired through NICS. Despite the prevailing staffing arrangements, going forward the cell would need to rely upon outside resources for data collection and as such it is imperative to make adequate provision in the state budget to cover expenditure related to this aspect.

58. *Training:* The mission was informed that till date training has been imparted to 64 staff at the Chief Engineer, Superintending Engineer and Executive Engineer level, 65 staff at the Assistant Executive Engineer, Assistant Engineer and Junior Engineer at the divisional level and 28 staff at the Assistant Executive Engineer, Assistant Engineer and Junior Engineer at the HQ level. OWD also proposes to impart "train-the-trainer" type of courses. The mission suggested that since the entire concept of AMS being new to OWD and to the staff working in the AMS Cell, OWD (AMS Cell) should develop a training calendar under which refresher courses or subject-wise courses can be imparted to the staff working in the cell and across the OWD on a regular basis and training also becomes one of the mainstreamed function of the AMS Cell.

VII. ENVIRONMENTAL MANAGEMENT AND SAFEGUARDS

59. During the mission, detailed discussions were held with OWD/PIU, Construction Supervision Consultant (CSC) and Contractors on the status of implementation of environmental management plan in

and that this policy requires cabinet level approval, the mission urged that OWD closely follows up with the respective departments within a firm overall deadline and then takes appropriate actions for early submission of the Policy to the cabinet.

50. *Road Safety Action Plan:* The final report on the road safety action plan has been submitted by the consultants and the same has been approved during the ISAP review meeting in July 2014. Under the advice of the State Level Empowered Committee, the road safety action plan has been shared with the stakeholder department for comments and suggestions. The mission was informed that based on a recent Supreme Court order, a Road Safety Council has been formed in the state with the Transport Department being designated as the nodal department leading the road safety initiative and the council comprising of members from some of the key departments viz; Works, Home, Health, Education. The mission was informed that a Road Safety Cell has been formed within the OWD. In view of the Road Safety Council formation in the state, the mission suggested that OWD should collate the comments received on the Road Safety Action Plan and share the same with the Transport Department and also set-up transparent arrangements between the OWD road safety cell, the Transport Department and the new R S Council to share the implementation responsibilities for the reforms appropriately.

51. *Setting up of HRD and Training Cell:* The mission was informed that the draft HRD policy and Training Plan was approved by the ISAP Review Committee in February 2014, following which a Resolution on the HRD Policy for Works Department has been approved by the GOO in April 2015 and a Gazette notification will be issued shortly. The mission was also informed that a HRD Cell will be created under the Engineer-in-Chief (Civil) with the Superintending Engineer (Training) as in-charge, by end-2015. In terms of next steps, over the new 4-6 months a separate budget allocation for training and HRD activities needs to be provided and HRD & Training Experts need to be hired for effective functioning and capacity building of the new HRD cell.

52. *Road Network Master Plan:* The mission was informed that the Road Network Master was approved by the ISAP Review Committee in July 2014 and referred to a review meeting chaired by the Chief Secretary, where it was decided that all the recommendations provided in the Main Report should be actively considered by OWD. As a first step, GIS Maps for rural road connectivity are being developed and the 2014 / 2015 proposal that these rural roads - currently with the Rural Roads Department - be transferred to the OWD for upkeep and maintenance is now being taken up between the two Departments.

53. *Road Funds:* The mission was informed that the final report submitted by the RSID consultants has been approved by the ISAP Review Committee and now needs clearances from the Finance and Law departments of GOO to enable the OWD to seek cabinet-level approval for establishment of a new Road Fund as per the RSID consultants' recommendations, particularly with regard to tapping the identified sources of funding for generating revenue and creating funds for road maintenance.

54. *IDS Workshop:* During the mission a half-day workshop, chaired by the Chief Secretary, was held to discuss the findings and recommendations of the 'RSID status & overview' report submitted by the RSID consultants. One of the key RSID recommendations was to create a new state-level 'road development corporation' and based on analysis of upcoming challenges of road and infrastructure development and management in Odisha, the report recommended a choice between two options to achieve such a RDC, namely (i) creation of a n autonomous entity or (ii) revamping of an existing entity already 'owned' by the GOO. In this context, the workshop deliberated on the prevailing Odisha Bridge Construction Corporation (OBCC), a government company formed under the Companies Act 1956 with an objective to carry out all road related activities ranging from construction and maintenance of roads and bridges to toll collection including surveying and testing. However, since its inception OBCC was not being utilized to its full potential and as such the company is gradually losing its status and importance in the overall scheme of infrastructure development in the state. During the workshop, the Chief Secretary decided the preferred option was to restructure / re-organize the existing OBCC into an Odisha Roads Development Corporation and charged OWD with preparing a note in this regard to the state cabinet.

55. *IT-ICT-MIS Strategy & Action Plan Consultancy:* Since the last mission, the IT-ICT-MIS Strategy Report has been finalized after incorporating the comments received from the Bank and the IT Department of GOO. The final report was submitted to the GOO for approval in September 2014 and the decision is still awaited. The mission expressed concern over the inordinate delay in the approval of the strategy report which in turn is delaying the procurement of the System Integrator (SI). The mission requested OWD to proactively and closely follow-up the required GOO approval and then to initiate the SI procurement at the earliest. In terms of modules, originally 9 modules were developed. However, two modules viz; Human Resource Management System and Estimation Tool have since been dropped out as the same are being developed at the state-level. In terms of implementation plans, the mission was informed that OWD proposes to distribute the hardware and software up to sub-divisional level offices. Also, the consultants have proposed three patterns of implementation plan to OWD viz; Minimum, Desirable and Recommended plan, of which the recommended plan is estimated to cost around INR 566.29 million. After further deliberations and dropping of some of the applications the revised plan is estimated at INR 439.16 million. It was agreed that the revised implementation plan and the revised estimate will be shared as soon as possible with the Bank for review and comments. The mission indicated that subsequent action by the OWD and the Consultants will need to proceed much more quickly and effectively than so far in this activity, if the roll-out and operationalization of planned new IT-ICT-MIS applications, equipment and facilities are to be achieved in OWD by Project closure.

Asset Management System (AMS) Consultancy

56. *AMS Status:* Since the last mission considerable progress has been achieved on the Asset Management System component. The mission was informed that Exor/TIG software has been configured and operational acceptance test for the core software applications viz; RIS, BIS, RMMS and PMS was completed in December 2014. Final acceptance of these applications, including technical audit and cyber security clearance, is awaited from NIC. The mission was informed that the pending clearances / approvals are expected to be received by July 31, 2015. The mission was pleased to note that GPS referencing, Inventory and condition data, benkelmam beam deflection (BBD) data and traffic census data for the period 2011-2012 of the OWD road network have been collected and uploaded into the database. OWD also informed that maintenance plans for roads and bridges and finalization of road works for the year 2015-16 are also being prepared using the software applications being prepared under the AMS.

57. *AMS Cell Staffing:* The mission was informed that the AMS cell has been further strengthened with the inclusion of additional staff in the cell. As of date the cell comprises of 8 staff of which 3 staff are from the department and 5 of them are hired through NICS. Despite the prevailing staffing arrangements, going forward the cell would need to rely upon outside resources for data collection and as such it is imperative to make adequate provision in the state budget to cover expenditure related to this aspect.

58. *Training:* The mission was informed that till date training has been imparted to 64 staff at the Chief Engineer, Superintending Engineer and Executive Engineer level, 65 staff at the Assistant Executive Engineer, Assistant Engineer and Junior Engineer at the divisional level and 28 staff at the Assistant Executive Engineer, Assistant Engineer and Junior Engineer at the HQ level. OWD also proposes to impart "train-the-trainer" type of courses. The mission suggested that since the entire concept of AMS being new to OWD and to the staff working in the AMS Cell, OWD (AMS Cell) should develop a training calendar under which refresher courses or subject-wise courses can be imparted to the staff working in the cell and across the OWD on a regular basis and training also becomes one of the mainstreamed function of the AMS Cell.

VII. ENVIRONMENTAL MANAGEMENT AND SAFEGUARDS

59. During the mission, detailed discussions were held with OWD/PIU, Construction Supervision Consultant (CSC) and Contractors on the status of implementation of environmental management plan in

the various contract packages. Site visits were undertaken to contract packages P01A, P01B, P02, P03, P04A and P04B to examine and review the status of implementation of environmental management plan.

60. **Statutory Clearances:** Necessary statutory clearances and consents for package P01A, P01B, P02, P03 and P04B are in place for operation of crushers, HMP, WMM and construction base camps. In package P02 and P04B, mining lease for stone quarries is serious issue which is affecting progress of construction work. The requirements of The Odisha Minor Minerals Concession (Amendment) Rules, 2014 (which came in existence on 16 September 2014) needs to be fulfilled for obtaining mining lease and stone quarries operation. Presently, approved mining plan and environmental clearance are pre-requisite to grant of quarry lease for minimum 5 years through bidding. The contractors of P04B participated in bidding for stone mining lease to meet aggregate requirement for the project and won the bid. However, bidding was challenged in the court and matter is sub-judice.

61. **Institutional Capacity and Operational Arrangement:** OWD has designated DFO for review of status of implementation of environmental management plan in all the contract packages. The performance of CSC in terms of supervision of implementation of environmental management plan needs attention for improvement. The CSC has not deployed Environmental Experts in Contract packages P02 and P03. The contractors in all packages except P01A and P01B are having Environment & Safety Officer. Regular inspection, supervision and monitoring of implementation of environmental management plan by Project Management Unit (PMU) and Environmental Experts of CSC need to be strengthened.

62. **Online Environmental Management System with IT-ICT MIS:** IT-ICT MIS is being formulated and implemented by OWD. Environmental Management System (EMS) Module needs to be incorporated in IT-ICT MIS appropriately. EMS modules should include environmental management and enhancement measures implemented in the roads, trees felled and plantation carried out through Forest Department, etc.

63. **Implementation of Environmental Management and Safeguards:** The mission visited the contract packages P01A, P01B, P02, P03, P04A and P04B during the mission to examine the status of implementation of environmental management plan. During the field visits in the various contract packages, the mission revealed gaps noted regarding implementation of EMP at road construction sites and base camps. Package 1A & 1 B and Package 3 are expected to be completed in coming months, therefore, environmental management and enhancement measures including disposal of scarified materials, debris disposal, slope protection by stone patching and turfing, cleaning of culverts and drainage channels, enhancement measures for ponds, control of erosion of shoulders, bus bays and footpath with bus shelters, restoration of camps site at the time of demobilisation of camps, etc need be ensured as per EMP by the contractors. Environmental Experts of CSC need to put a higher degree of due-diligence and supervision to ensure proper implementation of environmental management plan.

64. The observations noted regarding implementation of environmental safeguards during the site visits are given in **Annex 4**.

Rating

65. The implementation of Environmental Management and Safeguards in OSRP is rated as *"Moderately Satisfactory"* and needs attention for improvement and implementation.

VIII. FINANCIAL MANAGEMENT

66. **Disbursement Status:** The project has disbursed USD 64.724 million against the revised Loan allocation of USD 196 million which represents 33.02% disbursements as of May 25, 2015. Once the proposed cancellation of USD 33 million is processed, the disbursement will stand revised to 39.07% of

the revised Loan. The funds disbursed to date includes (a) PPF expenditures of USD 0.547 million (b) IBRD Front end fee of USD 0.625 million (c) reported and documented expenditures of USD 40.372 million representing reported expend up to 31-Dec-2014 and (d) outstanding advance of USD 13.821 million.

67. At current exchange rates, the undisbursed balance of USD 98.276 million [post cancellation of USD 33 million] will allow project expend of approx. Rs.781 crores in the remaining project life [factored for 80% Bank share of reported eligible expend].

68. *Budgets, fund flows and Financial Reporting:* Against the budget provision of Rs. 189 crores for the project in the State budget for FY 14-15, the project has reported expend of Rs. 106.245 crores (with Bank's share of Rs 71.749 crores) during the three quarters ended 31-Dec-2014. The cumulative project expenditures stand at Rs. 533.927 crores (with Bank's share of Rs. 288.803 crores). The financial progress is summarized as follows:

Project Components	Expend reported during Apr-2014 to Dec-2014			Cumulative Project Expend Reported till date		
	Bank Share	GoO Share	Total	Bank Share	GoO Share	Total
Road Improvement Component	610,988,423	152,747,106	763,735,529	2,306,012,539	903,842,872	3,209,855,411
PPP Component	0	0	0	11,575,974	12,610,864	24,186,838
ISAP and Operating Costs	76,968,347	19,242,090	96,210,437	268,625,787	71,904,465	340,530,252
Rehabilitation & Resettlement	29,534,625	7,383,656	36,918,281	301,813,232	124,751,739	426,564,971
Land Acquisition, utility shifting and other non-eligible expend	0	165,594,166	165,594,166	0	1,338,136,489	1,338,136,489
Total	717,491,395	344,967,018	1,062,458,413	2,888,027,532	2,451,246,429	5,339,273,961

All figures in Indian Rupees

69. *Financial Management Rating:* The overall assessment of the financial management performance is rated as 'Satisfactory'.

IX. PROJECT RATINGS

Field	Rating	
	Last Mission	Current Rating
Road Corridor Improvement Component	MS	U
Sector Policy and Institutional Development, and Implementation Support Component	MS	MS
Environmental Safeguard Management	MU	MS
Social Safeguard Management	MS	MS
Project Management	MS	MS
Financial Management	S	S
Procurement quality/timeliness	MS	MS

HS highly satisfactory, S satisfactory, MS Moderately Satisfactory, MU Moderately Unsatisfactory, U unsatisfactory, NA not applicable.

30. The next full mission is proposed to be held in November 2015.

Annex 1

Status of Action Agreed during the Previous Mission (MTR)

No.	Action Required	Agency	By Date	Status
Project Management and Civil works				
1	Resolve the issue relating to Approval of Mining Plans and Granting Permission for Stone Quarrying	GoO	Earliest	Pending and urgent
2	Works Contracts P04A and P04B – Fully mobilize including Camp, Plant and Equipment, Laboratory, and Arrangements for Materials	Contractors	Sep 30, 2014	P04A – Govt. initiated termination proceedings; P04B – Partially complied.
3	Works Contract P01B Balance Works – Mobilize Project Manager and exclusive Resources for the Contract	Contractor	Sep 15, 2014	Project Manager (PM) mobilized, but sharing resources and PM with P01A.
4	P02 – Repair of Existing Road	OWD / Contractor	Sep 15, 2014	Complied but required again.
5	Construction Supervision Consultant for P01A, P01B, P02 and P03 (Balance Works) – Improve quality of Supervision including Staffing and Mobilization of Team Leader	Consultant / OWD	Sep 30, 2014	Services terminated, and another CSC mobilized.
6	Value of Works to Implement during Sep 2014 to Mar 2015 (7 months) P01A Balance Works – INR 284 million P01B Balance Works – INR 110 million P02 Balance Works – INR 752 million P03 Balance Works – INR 230 million P04A – INR 512 million P04B – INR 534 million	Contractors	Mar 31, 2015	Not achieved except for P01A.
7	Hand Over unencumbered Section-III of P02 Balance Works, P04A and P04B, and Section-IV of P03 Balance Works	OWD	Earliest	Not achieved.
8	P04A and P04B - Review Utilization of the Mobilization Advance paid to the Contractors	OWD / Consultant	Sep 30, 2014	No report received by the Bank.
9	P04A - Review Role of the Contractor in contract implementation	OWD / Consultant	Sep 30, 2014	Reportedly, Contractor had started its own operation from around September 2014 or so
10	P04B – Review Role of the Lead Partner of the Joint Venture Contractor in contract implementation	OWD / Consultant	Sep 30, 2014	Pending.
11	Submit enquiry report on allegation of F&C on one of the supervision staff on P03	OWD	Nov 15, 2014	Pending
Institutional Strengthening				
1	RSID - Approval for setting up of HRD & Training Cell	GOO / OWD	October 31, 2014	Achieved.

2	RSID – Reorganization and Strengthening of OWD	GOO / OWD	October 31, 2014	Proposal for constituting Odisha Road Dev. Corporation accepted in-principle by Chief Secretary. Restructuring proposal for OB&CC to be prepared.
3	RSID – Formation of Road Safety Council	GOO / OWD	November 30, 2014	Achieved.
4	RSID – Implementation of Vehicle Axle Load Management	GOO / OWD	November 30, 2014	Report finalized; action pending
5	RSID – Finalization of Road Network Master Plan	OWD	December 31, 2014	Report finalized; action pending.
6	RSID – Draft and Final Report on medium to long term institutional framework for road sector	Consultant	Sept. 10, 2014 & Oct. 31, 2014 respectively	Partially Achieved. Draft Report submitted, workshop organized, final report to be submitted.
7	IT-ICT-MIS – Establishment of IT Cell	OWD	December 31, 2014	Proposal finalized; action pending.
8	IT-ICT-MIS – Initiate procurement of System Integrator and award of contract	OWD	Sept. 10, 2014 & Dec. 15, 2014 respectively	IT-ICT-MIS report finalized; action pending.
9	IT-ICT-MIS – Initiate procurement of Goods (Hardware & COTS Software) & finalize contract	OWD	Oct. 15, 2014 & Dec. 15, 2014 respectively	Pending.
Asset Management System				
1	Project Plan for remainder of project, with a view to OWD taking ownership of the RIS and PMS by end of October 2014, and completion of the AMS consultancy by early May 2015.	AMS Consultant	September 5 2014	Achieved.
2	Data Collection Strategy including indicative costing, for bringing O-RAMS up to complete operational status, and then for future sustainability.	AMS Consultant	September 5 2014	Achieved.
3	Implementation Plan for OWD to take ownership of O-RAMS.	AMS Consultant	September 5 2014	Achieved.
4	Staffing Plan for Asset Management Unit (Based on the detailed Implementation Plan and Skills Requirements to be submitted by AMS Consultant).	OWD Asset Management Unit	September 12 2014	Achieved.
5	OWD Annual Report for 2014 – 15.	OWD Asset Management Unit	September 26 2014	Pending.
Environment Management and Safeguard Issues				
1	P01A, P01B and P04B - Deployment of Environment & Safety Specialists	Contractor	Immediate	Partially complied.

1. *Mobilization by the Contractor.* Only 15 of the 52 girders have been cast. The Mission was informed that, with 2 sets of shuttering presently available, production of the girders could be a Girder in 2 days. However, if required, the Contractor may need to mobilize additional shuttering set to expedite girder casting.
2. *Quality of Materials.* Structural reinforcement steel apparently procured from unapproved source (Concrete TMT 500) lying in the site came to the notice of the Mission, which might have been used in the permanent works. None of the CSC's and the Contractor's personnel available could confirm whether the said source was an approved one. This needs to be urgently reviewed and action taken as appropriate.
3. *Quality Assurance.* Reliable curing arrangements need to be set up at all bridge sites.

Contract P02 (Balance): Chandabali-Bhadrak-Anandapur Road

1. *Mobilization by the Contractor.* (i) The Contractor's Concrete Batching Plant (CBP) and Wet Mix Macadam (WMM) Plant on SH-09 and CBP and Hot Mix Plant (HMP) on SH-53 are in operation. The WMM Plant on SH-53 is in breakdown condition. (ii) The Bank's Consultants had seen in January 2015 that the roof of the Contractor's Laboratory on SH-09 had gone off by the wind force. The Mission was informed that although the same was reinstated, it has gone off again by the wind force.
2. *Provisions in the contract roads.* The proposed locations of Saucer Drains are to be judiciously finalized / modified considering the site conditions.
3. *Quality of Materials.* The Mission noted that wet lumped materials from borrow areas were dumped on earthen bed around Km 0+800 on right hand side (RHS) where clearing and grubbing (C&G) were done some time back where grass have grown. The Mission suggested to re-check the properties of the borrow materials for its conformity with the required specifications.
4. *Maintenance of the Project Road.* Condition of SH-09 is very bad; it's not being repaired and maintained by the Contractor. Part of Section III (not handed to the Contractor yet) in SH-09 is also bad. OWD needs to ensure that all parts of the contract are adequately repaired prior to onset of monsoon season in mid-June.

Contract P03 (Balance): Berhampur – Taptapani Road

1. *Quality of Works.* (i) The Mission noted continuance of the non-compliant Shoulder and Embankment Slope works, as observed by the August 2014 Mission. Shoulders have not been developed properly. The Mission observed loose materials lying in the Shoulders apparently for some period. (ii) Protection works on the Embankment Slopes should be incorporated satisfactorily, with joints in the stone masonry tightly filled in as appropriate. (iii) Works on Shoulders, Embankment Slopes and Slope Protections are required to be carried out in right earnest prior to the ensuing monsoon. (iv) The Mission observed poor finish of the concrete works in the Minor Bridges, apparently could be due to poor quality of shuttering materials. (v) Parapet walls of the Culverts have been constructed inconsistently. Those should be of uniform height.
2. *Provisions in the Works.* Bituminous pavement needs to be extended for Bus Bays at the existing bus shelter locations.

Contract P04A: Jagatpur – Duhuria Road

1. *Mobilization by the Contractor.* (i) The Contractor has operated CBP. It has established a Mobile Crusher at the Quarry site and had a trial run. It has erected parts of a WMM Plant. HMP has not been mobilized by the Contractor. (ii) The Contractor had applied on 1st July 2014 for long-term License for Quarrying, but did not comply with the requirements. Following the GoO's amended Rules related to Minor Minerals dated 16th September 2015, the Contractor applied on 28th November 2014 for short-term permit for Quarrying, which it received on 5th December 2014 for quarrying of a total of 5000 cum within 3 months. However, the Contractor did not utilize this permit.

Contract P04B: Duhuria – Chandbali Road

1. *Mobilization by the Contractor.* The Contractor is operating CBP, commissioned the WMM Plant, and presently in the process of erecting the HMP. Although the Contractor hired a Cone Crushing Unit, but could not utilize it because it could not quarry or procure Boulders. (ii) The Contractor mobilized Vibratory Compactor, Pneumatic Tyred Roller and Mechanical Paver in early May 2015.
2. *Procurement of Materials.* The Contractor is presently procuring about 400 cum of ready stone materials per day for Granular Sub Base (GSB) and Concrete works.
3. *Work Specifications.* The Mission was informed that the Concrete Pavement works are required to be carried out following the Specifications of the Ministry of Rural Development (MoRD) and not of Ministry of Road Transport and Highways (MoRTH), as per the Contract.
4. *Works Methodology.* It appeared to the Mission that no Work Methodology for embankment construction has been prepared by the Contractor and approved by the CSC, although embankment construction is ongoing at a few locations. The Mission emphasized on the need of having prior approved Methodologies for various items of works.

Annex 3

Note on Ongoing Civil Works Contracts

[This Note does not repeat the matters included the main Aide Memoire (AM). The observations herein are in addition to those mentioned in the main AM. The observations herein are illustrative and not necessarily comprehensive.]

General, for all Contracts

1. The Contractors have not made any platform for stacking of the materials. Platforms should be made prior to stacking the materials so as to avoid foreign materials impregnating into the mother earth. Similarly, no material should overflow or spill over the mother earth.
2. Materials for Shoulders should satisfy the required specifications. Similarly, the Embankment Slope top materials are required to be suitable for proper slope stability. It should be ensured that the materials used in the Shoulders and as Embankment Slope top satisfy the required characteristics.
3. Shoulders and Side Slopes should be built in layers well compacted as specified with proper level and camber / slope, simultaneously with the pavement layers, instead of laying materials in the Shoulders and Slopes after completion of pavement works, and finished to required width.
4. Roughness measurements and Surface Regularity tests of the Bituminous Concrete (BC) wearing surface should be carried out as early as possible as per the contract requirements, for acceptance of the BC works.
5. Wherever the black-topped pavement reduces from 10 m to 7 m, the pavement needs to be gradually reduced, appropriate Road Signs to be placed, and guide pillars or delineators or crash barrier need to be erected. The OWD may consult the traffic engineering expert in this respect.
6. Earthen drains to be completed along the toe of the embankments for free flow of rain water to avoid stagnation of water abutting the road formation.

Contract P01A : Bhawanipatna – Khariar Road

1. *Quality of Works.* (i) Shoulders and embankment have not been developed by the side of the bituminous pavement in many stretches. These should be developed prior to and together with the pavement construction. Materials being used in the Shoulders and in Embankment Slopes may be checked for its suitability. In addition, slope protection measures may be incorporated as and where required. (ii) The Mission noted depressions along the centre of the newly laid Bituminous Concrete (BC) wearing course. The August 2014 Mission had observed the poor riding quality in some stretches. Present Mission also observed poor riding quality in some lengths (for example, km 62-63). August 2014 Mission had observed hump and jerk while travelling across the Culverts. Present Mission also observed hump and jerk at a few culvert locations and at few other places. Unacceptable works are required to be rectified using satisfactory method.
2. *Contract Administration.* Cutting of the hills has been done in the realignment between km 58 and km 59 without classifying the type of excavation (in soil, soft rock, hard rock, etc). The CSC could not clarify how these would be determined afterwards. Attempt may be made to utilize the materials generated from cutting in permanent works.
3. *Disposal of Materials.* The Mission noted large amounts of scarified bituminous materials lying along the Road, which need to be appropriately disposed off.
4. *Construction Supervision Consultant (CSC)'s Services.* The CSC needs to mobilize its Highway Engineer (key professional) at the earliest.

Contract P01B : Bhawanipatna – Khariar Road – Four High Level Bridges across River Tel

6	Draw an action plan to mitigate adverse impact of higher road embankments with adequate drainage, service road, and pedestrian underpasses, and with relocating earthen structures on the roads in order to prevent damage to them	July 31, 2015
Environment Management		
1	Collection and disposal of debris including scarified materials lying along road side to be completed on P01A and P03.	June 10 2015
2	Clearing of drainage channels at culverts in P01A, P02 and P03	June 10 2015
3	Comply with the gaps noted in implementation of EMP during field visit as mentioned in Annex 4	June 30 2015
Institutional Strengthening		
1	RSID – engage HR/ Training experts and operationalize new HRD & Training Cell (GOO / OWD)	December 31, 2015
2	RSID (OWD Reorganization & Strengthening): Restructuring proposal for OB&CC to be submitted to Cabinet	September 30, 2015
3	Finalize GOO decisions for implementation of (RSID) Vehicle Axle Load Management proposals (GOO / OWD)	August 31, 2015
5	Submit (RSID) Road Network Master Plan proposals for full GOO clearance/decisions (OWD)	August 31, 2015
6	Submit / clear 'post-Workshop' Final RSID Report/s on Medium to Long-Term Institutional Framework for Road Sector (Consultant / OWD and Bank)	July 31, 2015
7	IT-ICT-MIS – establish / staff dedicated IT Cell in OWD	October 31, 2015
	IT-ICT-MIS – finalize Implementation Plan and associated revised cost estimates in OWD and get Bank review / clearance	August 15, 2015
8	IT-ICT-MIS – Initiate procurement (as per approved IT-ICT-MIS plan) of System Integrator and then award SI contract	September 30, 2015 & December 15, 2015
9	IT-ICT-MIS - Initiate procurement of Goods (Hardware & COTS Software) & finalize contract	September 30, 2015 & November 30, 2015

2	P01A, P01B, P02, P03, P04A and P04B – Improvements in the overall implementation of environmental safeguards	Contractors/ Consultants/ OWD	September 15, 2014	Ongoing.
3	P04A –Seek “Consent to Establish” and “Consent to Operate” from Odisha State Pollution Control Board (OPSCB	Contractor	Immediate	Achieved and continuous.
4	Improve work site safety and traffic safety on all civil works packages	Contractor	Immediate	Continuous.
Social Development Issues				
1	Complete R&R for the remaining structures for Phase-1 roads	OWD	October 30, 2014	Pending for P03.
2	Package P04A – Removal of remaining encumbrances from MS-1 and MS-2	OWD	November 30, 2014	Achieved.
3	Complete disbursing of site allowances for remaining PAPs	OWD	October 30, 2014	Paid in P04A and P04B.

Action Agreed during the Mission

<i>No.</i>	<i>Action Required</i>	<i>By Date</i>
Project Management and Civil works		
1	Undertake required works to restore connectivity and safety during the monsoon	June 15, 2015
2	Facilitate resolving the issue of material availability to the contractors	Immediate
3	Take appropriate contract management measures to expedite the progress of works on P04A, P04B and P02	June 30, 2015
4	Submit a detailed response on the complaints on P02 and P03 including the Enquiry Reports and action plan to mitigate these risks	June 30, 2015
5	Submit a detailed response and action plan to address quality assurance and contract management weaknesses communicated by the Bank in March 2015	June 30, 2015
6	Finalize the Terms of Reference (ToR) for Quality Auditor to audit the quality assurance of works on all contracts	June 15, 2015
7	Appoint full time employers representatives on packages P02, P04A and P04B	July 31, 2015
8	CSC to estimate the value of remaining works for P01A, P01B and P03	June 15, 2015
9	Carryout review of junction designs, traffic engineering and safety measures on all contracts and issue appropriate instructions to the contractors	June 30, 2015
10	Designate the TL of the CSC as the "Engineer"	June 30, 2015
11	Remove all encumbrances and handover balance stretches for P03, and P02 (SH 53 and Tilo and Bonth in SH9)	P03-May 31, 2015 P02-June 30, 2015
12	CSC to deploy qualified and experienced Environmental Experts in P02 and P03	June 15 2015
13	Enhance traffic management during construction to improve safety in Package P02	May 30 2015
14	Shoulder, Embankment Slopes and Slope Protection works to be done on priority on all ongoing works	June 30 2015
15	P01B – Completion of Bridges at Km 28+900 and Km 29+400 including approaches and allow traffic	June 15 2015
	Place CSC's staff at various works contracts according to the work-load (reduce staffing at P04B substantially, and increase at P01A, P01B and P03Balance as required)	May 31, 2015
	Review and rectify all quality issues in P01A and P03Balance	Jun 15, 2015
	Issue guidelines on applicability of various types of Slope Protection Works in different conditions	May 31, 2015
	Carry out Roughness measurements and Surface Regularity tests of the Bituminous Concrete (BC) wearing surface	Jun 15, 2015
	Forward to the Bank the findings on Utilization of Mobilization Advance paid to P04A and P04B contracts	Jun 15, 2015
	P04B – Review Role of the Lead Partner of the Joint Venture Contractor in contract implementation	Jun 30, 2015
	Restructure and Cancellation of US\$ 33 million from the Loan	Jun 30, 2015
Social Safeguard		
1	Ensure full site handover for P03, and P02.	June 30, 2015
2	Resolve remaining LA issues (actual disbursement) in close coordination with LAOs, with urgent attention to cases where structures have been dismantled prior to payment of compensation;	July 31, 2015
3	Complete public notification asking absentee land losers to claim their LA compensation, advise preparation of data on actual and pending disbursements in agreed formats	July 31, 215
4	Resolve critical LA and R&R cases at Tanupur (P04B), Gokarnapur and Narayanpur (P03), Tilo and Bonth (P02), Chandbali, Achutapur, Bareipur, and Chandbali (P04).	July 31, 2015
5	Issue a Government Order as an addendum to the OSRP-R&R Policy setting down that "LA compensation shall be paid as the new RFCT-LARR Act, 2013 for awards declared with effect from January 1, 2014 overriding earlier provisions of LA Act, 1894".	June 30, 2015

ORISSA STATE ROADS PROJECT

Status of Road Corridor Improvement Component Civil Works, end-April 2015

Contract	Road Stretch	Length (km)	Estimated Cost (Indian Rupees Million)	Contractor	Original Contract Value (Indian Rupees million)	Contract Start Date	Original Works Completion Period (Months)	Original Works Completion Date	Extended Works Completion Date*	Time Elapsed** (% of Works Completion Period)	Value of Works Done (Indian Rupees million)**	Physical Progress (% of Contract Amount)
P01	Bhawanipatna to Khariar (Km 2/00 to Km 70/00 of SH-16)	68	1034.4	Patel - ARSS JV	1,055.1	Feb 20, 2009	30	Aug 19, 2011	Oct 28, 2011	Contract Terminated on Nov 21, 2012	342.6	32.47
P02	Chandabali-Bhadrak-Anandapur (Km 0/00 to Km 45/00 of SH-09 and Km 0/00 to Km 50/00 of SH-53)	95	1943.1	Som Builders - ARSS JV	2,162.3	Feb 03, 2009	30	Aug 02, 2011	May 28, 2013	Contract Terminated on Nov 21, 2012	455.3	21.06
P03	Berhampur to Taptapani (Km 0/00 to Km 41/00 of SH-17)	41	753.4	Backbone - ARSS JV	819.7	Nov 22, 2008	24	Nov 21, 2010	Oct 31, 2012	Contract Terminated on Sep 15, 2011	130.0	15.86
P01A Balance Works	Bhawanipatna to Khariar (Km 2/00 to Km 27/20 and Km 30/00 to Km 70/00 of SH-16)	65.2	856.2	Barbrik Project Limited, Chhatisgarh, India	845.1	Aug 21, 2013	24	Aug 20, 2015		85	619.7	73.3

P01B Balance Works	Bhawaniapatn a to Khariar (Km 27/20 to Km 30/00 of SH-16) – Four Numbers of High Level Bridges Over River Tel with Approaches	2.8	272.8	Barbrik Project Limited, Chhatisgarh, India	289.7	Nov 14, 2013	24	Nov 13, 2015	73	164.14	56.7
P02 Balance Works	Chandabali- Bhadrak- Anandapur (Km 0/00 to Km 45/00 of SH-09 and Km 0/00 to Km 43/00 of SH-53)	88	2792.0	Corsan Corviam Construction S.A., Spain	2481.2	Nov 01, 2013	27	Jan 31, 2016	67	317.9	12.8
P03 Balance Works	Berhampur to Taptapani (Km 0/00 to Km 41/228 of SH-17)	41.228	925.0	RKD Constructions Private Limited, Bhubaneswar , India	968.8	Jan 24, 2013	24	Jan 23, 2015	95	480.3	49.6 (about 55% of likely completi on cost)
P04A	Jagatpur to Duhuria (Km 0/00 to Km 49/00 of MDR)	49	1728.0	Valecha Engineering Limited, Mumbai, India	1513.1	Dec 24, 2013	27	Mar 23, 2016	60	14.4	0.95
P04B	Duhuria to Chandbali (Km 49/00 to Km 99/00 of MDR and Km 45/00 to	56.5	1927.5	DPJ – NKC Joint Venture, Gurgaon, India	1704.3	Dec 04, 2013	27	Mar 03, 2016	63	57.7	3.4

Annex 4

Environmental Management and Safeguards

1. During the mission from 5th -14th May 2015, detailed discussions were held with PMU, Construction Supervision Consultant (CSC) and Contractors to have an understanding of status of implementation of environmental management plan in the various contract packages. The intensive site visits were also undertaken in the contract packages P01A, P01B, P02, P03, P04A and P04B to examine and review the status of implementation of environmental management plan.

2. The mission was concerned to note that in the contract package P04A, no construction work is going on and construction base camp is also abandoned since Feb 2015. The CSC for package, P01A, P01B, P02 and P03 was terminated for its unsatisfactory performance. The CSC for P04A and P04 B has been given assignment to provide construction supervision consultancy services in P01A, P01B, P02 and P03 from March 2015 onwards.

3. The key findings noted during the mission regarding implementation of environmental safeguards are given below.

I. Statutory Clearances

4. Necessary statutory clearances and consents for package P01A, P01B, P02, P03 and P04B are in place for operation of crushers, HMP, WMM and construction base camps.

5. In package P02 and P04B, mining lease for stone and sand quarries is serious issue which is affecting progress of construction work. The contractors of P04B participated in bidding for stone quarry mining lease to meet aggregate requirement for the project and won the bid. However, bidding has been challenged in the court and matter is sub-judice in the court.

6. As per The Odisha Minor Minerals Concession (Amendment) Rules, 2014, the following are key requirements for obtaining mining lease for stone and sand quarries.

- No quarry lease shall be granted for a period less than five years.
- Quarry lease shall be granted through open bidding process only in favor of applicant who has quoted the highest rate of royalty.
- Mining plan is pre-requisite to grant of quarry lease. No quarry lease shall be granted by Competent authority unless there is a mining plan prepared by recognized persons and duly approved by Authorized Officer (Director of Mines or Director of Geology or any officer of the Directorate of Geology duly authorized by the State Government in writing for the purpose) for development of the mineral deposit in the area concerned.
- No quarry lease for minor minerals shall be granted without obtaining environmental clearance.

7. Environmental clearance for minor mineral quarries shall be obtained as per EIA Notification 2006 & subsequent amendments depending on mining lease area. Duly filled Form 1, approved mining plan and pre-feasibility report are pre-requisite for obtaining of environmental clearance from Odisha State Environmental Impact Assessment Authority (SEIAA).

II. Institutional Capacity and Operational Arrangement

8. The mission noted that OWD has designated DFO for review of status of implementation of environmental management plan in all the contract packages. The performance of CSC in terms of supervision of implementation of environmental management plan is lacking and attention for improvement. The CSC has not deployed Environmental Experts in Contract packages P02 and P03. The

CSE should immediately deploy experienced Environmental Experts in both the contract packages and need to actively perform their duties on day to day basis to ensure proper implementation of environmental management plan. Regular inspection and monitoring of implementation of environmental management plan by Project Management Unit (PMU) and Environmental Experts of CSC need to be strengthened. The contractors in all packages except P01A and P01B are having Environment & Safety Officer. The Contractor of P01A and P01B need to deploy Environment & Safety Officer as construction work in both contract packages is near to completion and important environmental management measures have to be implemented at the stage.

III. Online Environmental Management System with IT-ICT MIS and e-Nirman

9. IT-ICT MIS are being formulated and implemented by OWD. Environmental Management System (EMS) Module needs to be incorporated in IT-ICT MIS. EMS modules should include engineering environmental management and enhancement measures implemented in the roads, trees felled and plantation carried out through Forest Department, etc.

IV. Implementation of Environmental Management and Safeguards

10. The mission visited in the contract packages P01A, P01B, P02, P03, P04A and P04B during the mission to examine the status of implementation of environmental management plan. The mission has also had detail discussions with OWD/PMU and CSC regarding status of implementation of EMP which are part of contract agreement.

11. During the field visits in the various contract packages, the mission revealed gaps noted regarding implementation of EMP at road construction sites and construction base camps. It was strongly conveyed during the review meetings that Environmental Experts of CSC need to put a higher degree of due-diligence and supervision to ensure proper implementation of environmental management plan.

V. Contract Package – Specific Status of EMP Implementation And HSE Issues

12. During the Mission, field visits were made from 06th May to 9th May 2015 in Package P01A, P01B, P02, P03, P04A and P04B by the mission. The package wise key observations are given below:

Package P01A & P01 B (Khariar-Bhawanipatna Road and Bridges)

13. The following observations were noted during the field visit in the packages:

- All the necessary permissions and consents are in place.
- At Km 69.520 hand pump is located within left hand side shoulder of road and creating unsafe condition for users of hand pump and road. It needs immediate attention for shifting.
- Along the road, heaps of debris are laying, which need to be collected and disposed at identified locations.
- Scarified bituminous wastes are laying at places along the road. Same need to be collected and disposed as per EMP.
- Shoulder protection work is required, as earth is loose and prone to soil erosion during rains.
- At culverts and bridge construction sites, debris and earth are laying and blocking drainage channels. Same needs to be cleared before rains.
- At slope of embankment, turfing needs to be carried for stabilization of earth and to control erosion.
- Many ponds are located close to the road. Proper steps for people and ramp for cattle need to be provided on the bank on ponds.
- Bus shelters have been constructed in populated areas. Quality of workmanship is poor and same needs attention for improvement. Proper footpath and bus bays need to be provided with bus shelters. Village name and other information need to be displayed at bus stands as per prescribed format of OWD. Bus

- shelters need to be handed over to village Panchayat after proper consultation for its cleaning and maintenance.
- Zebra crossings on the road for pedestrians have been painted in non-populated areas. The contractor needs to provide Zebra crossings in populated area, near schools and between bus stops, etc so that it will be useful for safety of pedestrians.
 - At bridge construction sites on Tel River, there is no arrangement of drinking water and toilets for workers. Same needs attention.
 - At the construction base camp, the following observations were noted regarding implementation of EMP:
 - DG sets are being operated without stack (chimney). The chimney needs to be provided at DG sets as per CPCB/OSPCB guidelines.
 - Waste management practice at the camp site needs to be improved as per EMP.
 - Electrical earthing pits have been provided for DG sets, high voltage electrical control panels, electrical motors, etc.
 - Danger signages have been displayed on electrical panels and electrical equipment.
 - Labour accommodation rooms have been provided. House keeping was found satisfactory.
 - At HMP plant, settling pit has been provided. Oily water is stored in earthen pit, which is contaminating soil, runoff and ground water.

14. In the coming months, it is expected that construction works will be completed in this package and base camp will be demobilized. The PMU and CSC need to ensure that contractor take necessary environmental measures for restoration of camps and WMM plant sites.

Package P02 (Anandpur-Bhadrak-Chandbali Road) (SH 9 + SH 53)

15. The following observations were noted during the field visits in package P02 (SH 9 and SH 53):
- All the necessary permissions and consents are in place.
 - At road construction site, safety is lacking in this package.
 - At places in SH 09 and SH 53, culverts construction locations have been excavated, however, no construction activity in place at the sites. It is creating unsafe conditions to the traffic on the road.
 - At culvert strengthen locations in SH 09 and SH 53, steel roads are exposed up to edge of carriage way, creating accident danger for road users. Safety signages like barrier, flag or retro refractive tapes need to be provided immediately to improve road safety.
 - At Km 37.320, CD structure on natural drain has been removed to construct new structure. Due to excavation for foundation, deep water pond has been formed, which is creating unsafe condition to moving traffic.
 - At the construction base camp (Km 5.00 on SH 53), the following observations were noted during the field visit.
 - Waste collection bins have been provided, however, there is no segregation and disposal of waste as per EMP. It needs immediate attention.
 - Stack (chimney) provided at the DG set is not as per CPCB/OSPCB guidelines. 325 kVA capacity DG set for hot mix plant is being operated without chimney. Stack needs to be provided with DG set as per CPCB/OSPCB guidelines.
 - It was communicated that PPEs have been provided to workers and staff. However, many workers were found without safety shoes at the plant.
 - Electrical earth pits have been provided to DG sets, three phase motors and electrical equipment.
 - House keeping near HMP and worker rooms needs attention for improvement.

Package P03 (Berhampur-Taptapani Road)

6. The mission was happy to notice that two banyan trees along the project road at Dharampur (Km 94.750), which are colony of bats, (flying mammal) have been saved. During the field visit in this package, the following observations were noted:

- All the necessary permissions and consents are in place.
- At places scarified materials are laying along the project road and same need to collected and disposed properly as per provision made in EMP.
- Bus shelters have been constructed at the populated area. However, debris are laying in front of bus shelters. Bus bays and foot path need to be provided for bus shelters to strengthen safety of pedestrian.
- Erosion was observed at places along the road on the shoulders due to rains. Shoulder slopes stabilization and embankment protection through turfing and stone patching need to be provided.
- At places, shoulders and embankment have been constructed by granular materials. Hence, it is difficult to provide turfing without spreading fertile top soil on the slope of embankment and shoulders. Same needs immediate attention so that turfing can be done in rainy season.
- At Km 5.770, box culvert has been constructed without parapet. It is creating danger of falling of vehicle moving on the shoulder especially in night.
- At Km 7.230, pond bank protection has been provided though stone patching, however, excavated earth has been left in the pond. Same needs to be cleared from the pond.
- At Km 9.465, dry stem of large tree has been left within the shoulder on sharp curve. Same is unsafe for moving traffic, especially in night. It has to be cleared in view of safety of road users.
- At Km 11.400 and Km 15.290, debris are laying road side. It needs immediate attention.
- At Km 20.920 near Anagpur village and other places, ponds are located along the road. Pond bank protection and steps need to be provided as environmental enhancement measures.
- At Km 21.020, left hand side of road, soil erosion was observed. Necessary corrective measures are required at this location.
- Broken pieces of hume pipes are laying along the road at places. Same should be collected and disposed properly.
- In populated areas, carriageway has been constructed without shoulders, therefore, there is level difference between carriageway and ground creating danger for road users and pedestrian.
- At the Maula Bhanja construction camp (Km 28.000), following observations were noted:
 - There was improvement in housekeeping at the camp site.
 - It was found that still wood is being used for cooking of food by laborers. Use of wood for cooking of food should be immediately stopped. The contractor needs to provide LPG cylinders to labourers for cooking of food.
 - Bathing facilities have not been provided for workers at this camp. Same needs attention.
- At the main construction base camp at Km 7.000 (Near Village Padripalli), the following observations were noted during the visit:
 - Danger signings have provided in electrical panel and equipment.
 - Electrical earthing pits have been provided for DG sets, high voltage electrical control panels, electrical motors, etc.
 - Used oil is collected in drums and it was informed that it is sold to authorised waste oil recyclers.
 - There is no chimney at the DG set at crusher as per CPCB/OSPCB guidelines. Chimney should be provided as per CPCB/OSPCB guidelines.
 - Waste management bins have been placed at the camp site. However, disposal of wastes after segregation is required as per EMP.
 - Toilets and bath rooms are available for workers at the camp site.
 - Emergency numbers have been displayed at the entrance of the camp.

Package P0 4 A (Jagatpur-Duhuria Road)

- In this package, construction base camp has been abandoned by the Contractor and no construction activity at the site. OWD has issued contract termination notice to the contractor.

- At pipe culverts construction locations, hume pipes are laying near the carriage way and creating dander to road users in the night. OWD needs to take necessary safety measures like placing retro-refractive tapes on pipes and shifting of pipe away from carriage way.

Package P0 4 B (Duhuria -Chandbali Road)

17. The following observations were noted during the site visit in this package:

- All the necessary permissions and consents are in place.
- The mission noted that road construction site safety has been improved slightly in this package by providing, diversion display boards, retro-refractive tapes, sand bags, bamboo delineators, etc. Same need to be maintained and strengthened further at new work fronts also.
- Some places scarified materials was observed laying along the road. Same needs attention and disposed properly.
- The observations noted at the construction base camp during site visit:
 - DG sets need to be provided verticals stack (chimney) with canopy as per as per CPCB/OSPCB guidelines.
 - Safety signages need to be provided at work shop.
 - Red colour bone skull danger signages need to be provided at DG sets, electrical panels and equipments.
- Waste management bins have been provided at the camp site. Wastes are being collected in bins but needs to be disposed after segregation as per EMP.

Status of Results Monitoring Framework

Outcome Indicators	Actual Value	Target Values / Achieved Values (as of May 2015)					Data Collection and Reporting		
		2013	2014	2015	June 2016	Frequency and Reports	Data Instruments	Collection	Responsibility
1.1 vehicle operating costs in project corridors reduced (Rs./km.)	Baseline (2006)								
	Cars - 4.29	5	-	-	4.6	EOP, High Priority Network Condition Reports	RAMS		OWD/PMU
	Trucks - 10.22 Buses - 8.70	16 17			14 15				
1.2 vehicle-speed in project corridors increased (Km./hr.)	Baseline (2006)								
	Cars - 45	47			54	EOP High Priority Network Traffic Reports	RAMS		OWD/PMU
	Trucks - 35 Buses - 40	46 47			53 53				
1.3 Road User Satisfaction Index Improved	-	2.38				User satisfaction surveys - Baseline and EOP	Survey		OWD/PMU
1.4 Improvement in Network Congestion Indices (%)	-	(Based on 2011-12 Traffic data)				EOP	Surveys, Secondary Data Collection		OWD/PMU
(i) Congestion free CRN		(i) Congestion Free 90%							
(ii) Congested CRN		(ii) Congested 2%							
(iii) Over Congested CRN		(iii) Over Congested 8%							

Outcome Indicators	Actual Value	Target Values / Achieved Values (as of May 2015)					Data Collection and Reporting		
		2013	2014	2015	June 2016	Frequency and Reports	Data Instruments	Collection	Responsibility
1.5 RTI Compliance Ratio of PMU Maintained at 100%	Baseline (2006) -	100% / 100%	100%	100%	100%		Secondary Data Collection	OWD/PMU	
4.1 Improved Road Policy and Legislative Framework put in place	Nil	Ongoing	Study completed	Policy and Legal Framework approved by GOO	GOO-approved Policy and Legal Framework enhancements in place.	Study report and final report	In-house reporting	OWD/PMU	
Results Indicators for Each Component									
Component 1 (Road I Corridor Improvement Component)									
1.1 310 km of state highways widened and upgraded efficiently	0 Km	0 Km	30 Km	240 km / 110 km (achieved)	310 Km	Monthly reports, quarterly FMRs	In-house certification of quantities by CSC	OWD/PMU/CSC	
Component 2 (Sector Policy and Institutional Development and Implementation Support)									
3.1 Road Asset Management, Road Safety and Environment and Social Management functions operational and IT/ICT/MIS functions and assets operational	Nil	Ongoing	RAMS Operational ES operational	Road Safety Cell operational IT/ICT/MIS 50% rollout	IT/ICT/MIS 100% rollout	Semi-annual progress report	In-house reporting	OWD/PMU	

Outcome Indicators	Actual Value	Target Values / Achieved Values (as of May 2015)					Data Collection and Reporting		
		2013	2014	2015	June 2016	Frequency and Reports	Data Instruments	Collection	Responsibility
4.2 Sustainable road maintenance financing options developed	Nil	<i>Ongoing</i>	Study Completed	GOO decisions taken on new Road Maintenance Financing option(s).	GOO-endorsed changes to Road Maintenance Financing implemented	Annual report	In-house reporting		OWD/PMU
4.3 Road Safety Action Plan put in place	Nil	<i>Ongoing</i>	Study completed	GOO decisions taken on new state-level Road Safety Action Plan and its implementation	New Road Safety Policy, Action Plan and supporting institutional arrangements established and under Implementation.	Study report and final report	In-house reporting		OWD/PMU

Status of Governance and Accountability Action Plan (GAAP)

Risk(s)	Action(s) to be Taken to Mitigate Risk	Level*	Timeline	Entity	Current Status
A. Actions to reduce collusion, fraud and corruption					
Risk of collusion in procurement and fraud and corruption (F&C) in contract execution.	Foster use of e-procurement in project works once e-procurement system is satisfactorily assessed by Bank.	P	Implementation	PMU/Bank	All suggestions of Bank incorporated in the e-Procurement system, and it is now ready for use in bank funded contracts as well.
	Creation of a database on procurement related information (number of bids, bid prices, unit prices, specifications, time and cost overruns) for benchmarking of related indicators.	P	Starting with the first contract	PMU/Consultants	All bid related information is now online. PMU has started to compile performance related indicators as well.
	Third-party quality and quantity reviews of project works.	P	Continuous	Third parties	This would be done as part of the third party monitoring on all OWD works, which is under active consideration by GOO.
Risk of cost and time overruns due to weak project preparation and monitoring.	Reporting of all allegations of F&C on OSRP to Bank along with follow-up action taken on the same by PD/OWD/CVO	P	Continuous	PMU/OWD/CVO	P-02 and P-03 enquiry under process; World Bank Mission appraised on 11.05.2015; Reports will be submitted within 07.06.2015
	Sharing of annual or other periodic report of CVO to OWD Secretary on systemic deficiencies (once approved by GOO) with Bank	S	Annual by June each year	OWD	Ongoing.
	Introduction of systematic third-party monitoring on all OWD works.	S	December 2013	OWD	Under active consideration of the GOO.
B. Actions to enhance Transparency and road user input					

Risk(s)	Action(s) to be Taken to Mitigate Risk	Level*	Timeline	Entity	Current Status
Lack of transparency and accountability that may adversely affect project outcomes.	Develop local language (Odia) version of existing OSRP Website.	P	June 2013	PMU	Based on the Odia content supplied by Odia Bhasa Pratisthan NIC has developed and hosted the bilingual website for OSRP. However the updation of content are under progress.
Risk of insufficient citizen oversight/inputs into the planning process due to weak complaint handling procedures.	Initiate awareness campaigns on online Complaint Handling System (CHS) in coordination with the Information and Public Relations Department.	S	December 31, 2012	OWD/PMU, I&PR	Ongoing.
	Roll out CHS to entire OWD.	S	December 2013	OWD	Included in the IT-ICT-MIS strategy of OWD computerisation.
	Conduct independent review of RTIA requests to identify systemic deficiencies.	P	Annual starting September 2013	PMU	Preparation of draft TOR and finalize same by September 2015;
C. Actions to enhance quality and sustainability	External review of the complaint handling process with report on performance, systemic issues & remedial action(s).	S	September 2013, September 2015	PMU/OWD	Preparation of draft TOR and finalize same by September 2015;
	Risk of poor sustainability due to weak project management, quality control, asset maintenance.	S	Annual in June	OWD/PMU	Proposed to be included in the induction training by RDQP.
	Establishment of a road cost database to review and compare cost estimates in future projects based on analysis of OWD works in the last ten years on procurement indicators, cost and time overruns, number of variation orders to remedy defective work.	S	December 2013	OWD	Ongoing -- as part of the IT-ICT-MIS consultancy services.

*S: Sector/entity level; P: Project level