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INTERNATIONAL DEVELOPMENT ASSOCIATION

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December 1, 2008

2982  
4.12.08 → Er. S. K. Ray  
Engineer-in-Chief-cum-Secretary  
Govt. of Orissa  
Bhubneshwar  
Orissa  
Fax No. 0674-2391651

Dear Mr. Ray:

*India: Orissa State Roads Project (P096023):  
World Bank Mission – October 22-25, 2008*

We would like to thank the Government of Orissa (GOO) and the Orissa Works Department (OWD) for the kind support extended to the World Bank mission from October 22 to 25, 2008.

We are enclosing a note summarizing the activities undertaken during this interim mission as well as the bank team's observations, for your information. In particular, we would like to draw your attention to the fact that we are still awaiting the specific dates with regard to state government's endorsement of the Financial Management Manual, and constitution of the State Level Empowered Committee and the ISAP Steering Committee. We request you to arrange to share these dates with us as soon as possible, as they are required for finalization of the loan agreement.

If you need further clarification on any of the issues in the mission note, please do not hesitate to contact me at 011-41177841; e-mail: [stadimalla@worldbank.org](mailto:stadimalla@worldbank.org) or Mr. Binyam Reja, Tast Team Leader at [breja@worldbank.org](mailto:breja@worldbank.org).

With regards,

Sincerely,



Sri Kumar Tadimalla  
Sr. Public Private Partnership Specialist  
Sustainable Development Department (Transport)  
South Asia Region

Encl: Mission Note

Cc: Mr. J. K. Nayak, Chief Engineer, Govt. of Orissa, Fax: 0674-239 1476

## ORISSA STATE ROADS PROJECT (P096023)

### Note on Implementation Support [INTERIM] Mission (October 22-25, 2008)

1. A World Bank (Bank) team comprising Messrs/Mme Sri Kumar Tadimalla (mission leader and PPP specialist), Neha Vyas (environment specialist) and A K Swaminathan (transport specialist - consultant) visited Bhubaneswar in connection with the above mentioned project. The team met with the Chief Engineer (World Bank Projects) and other key officers of the Project Management Unit (PMU) as well as the Secretary of the Orissa Works Department (OWD). The team also met with the PPP transaction advisory consultant (PPTAC), the supervision consultant (SC) and the local JV partner of the contractors of Phase 1 roads.
2. The main focus of the mission was to
  - i. Discuss with OWD, the necessary formalities and requirements to be completed from their side before the legal agreements can be signed;
  - ii. Mention about the downstream process like project effectiveness requirements and the project launch workshop;
  - iii. Review the progress and have a quick look at the documentation submitted by the PPPTAC to the OWD;
  - iv. Do a quick technical review of the contract documentation prepared by the OWD for phase-2 roads;
  - v. Meet with the SC and contractor representatives to tell them about the project supervision framework which the Bank would follow to supervise and monitor the project; and
  - vi. Ascertain pending clearances and comments from the Bank.

#### *Information Required for the Loan Agreement and the Project Launch Workshop*

3. The mission informed OWD that, as part of preparation of the loan agreement, the Bank urgently requires the specific dates w.r.t. state government's endorsement of the Financial Management Manual, and constitution of the State Level Empowered Committee and the ISAP Steering Committee. In response, OWD informed that work is in progress on endorsement of the Financial Management Manual as well as the constitution of the State Level Empowered Committee and ISAP Steering Committee, and specific dates pertaining to these actions are likely to be made available before November 15, 2008.
4. The mission informed OWD about the usual practice of the client (state) governments organizing a workshop to launch the project and disseminate information regarding key components of the projects among important stakeholder groups. In line with this, the mission suggested that OWD too may consider a similar project launch workshop for the Orissa State Roads Project, after the loan becomes effective.

#### *Phase 1 Roads*

5. Of the 3 contracts - one of the contracts has been signed while the signing of the contracts for the other two is expected within the next fortnight. The supervision consultant contract has been signed. OWD reported that the supervision consultant mobilisation has been slow and the team leader or the other key persons like the resident engineers etc. have yet to mobilize. The mission made it clear to the SC team which was represented by temporary staff that full mobilization of the SC needs to commence soon before the contractors start work. The mission also requested the OWD to ensure the SC fully mobilizes in another fortnight. The mission also noted that M/s ARSS (a local firm) is a partner in all the three cases, in JV with different national firms.
6. The mission made it clear to the OWD, contractor and the consultant teams which were present, the Bank's supervision and monitoring system of periodic visits focussing on technical, safeguards, financial and procurement/contracting aspects. Further, it explained other aspects of complaint handling within the Bank where-in any stakeholder who is dissatisfied with any aspect of the project can complain to the Bank.

7. The mission also expressed its concern over the apparently slow progress in land acquisition, R&R, utility shifting and tree cutting. The delay in handing over encumbrance free land to the contractor as per the schedule mentioned in the contract documents would lead to contractual claims and delays. This needs to be avoided and minimised.

### *Phase-2 Contracts*

8. The Bank team reviewed the draft documents submitted to it by the OWD. It was observed that many of the technical comments of the peer reviewer (Mr Murahari Reddy) have yet to be complied with. Further, the Bank team requested the OWD team to clarify with the Bank's procurement specialist some of the commercial changes, especially on powers of Engineer for variations etc., suggested by the peer reviewer, since they did not seem to be in line with what would be permissible under the Bank guidelines. Some of the EMP related clauses need modification which the Bank team has now suggested. It was agreed with the OWD that the modified final draft contract taking care of the mission comments as well as the peer reviewer comments would be sent to the Bank by November 15, 2008. One important aspect would be to modify the specification for steel in the roads near the coastal zone to be compliant with the anti-corrosive requirement of the IRC specifications. Toll plaza specification would need to be a bit more detailed. OWD must need to ascertain the stability of slopes for high embankment and deep cuts in the hillsides.

9. As far as Phase-2 contracts are concerned, the mission strongly felt that inviting of bids should be held back till the LA/R&R, tree cutting, utility shifting activities are fairly well progressed so that encumbrance-free road lengths, as required by the Bank, can be handed over to contractor on award. As estimated by the Bank mission based on present situation, this would mean that the bids cannot be invited before February 2009. With ensuing elections in the state around this time, this may get further delayed.

10. Another area of concern for the Bank is the fact that there has been **no movement or decision** by the GOO regarding the construction of the Bansadhara bridge on the Bank financed Behrampur-JKPur road corridor. This bridge was washed out during the previous year's floods and needs to be reconstructed and has been provided for under our Bank loan as a design-build pilot. The GOO is now deliberating whether to construct the bridge under the Bank financing or on its own. Also, it is deliberating whether an extensive river modelling study needs to be carried out or not. Either way, a quick decision needs to be taken and communicated to the Bank to enable it to take a decision on further financing the Phase-2 roads. Bank mission also reminded the OWD that even if it is financed by the OWD, the fact that it falls on the Bank financed corridor would mean that the safeguards and design aspects would have to be reviewed and cleared by the Bank.

### *PPP Transaction Advisory services*

11. The consultant firm made a presentation of the essential findings of its services and shared a copy of the same with the Bank too. The mission did a quick review of the final feasibility report of the Sambalpur-Rourkela road. The mission was also informed the consultant firm had requested for a time extension on some of its deliverables which is being processed by the OWD. The annotated comments of the Bank team made on the report itself were left behind for OWD's reference. The preliminary project report is due for submission by the end of October 2008. Some of the important observations of the Bank on the presentation as well as the consultant report reviewed are –

- Enabling statutory framework like the Road/Toll act need to be passed to be able for OWD to start the PPP concessioning process on the roads.
- Progress on LA/R&R and utility shifting would be a very critical aspect of the project readiness before the concession bids are invited.
- Technical options and their implications for concessioning which the consultant may need to present to OWD, at the minimum, would be (i) giving complete freedom to the concessionaire to change all aspects of design like horizontal/vertical alignments and the pavement and structural designs; (ii) freezing all design parameters and insisting that the concessionaire follow the OWD design without any change (or with minor changes with prior clearance from OWD); and (iii)

freezing the design parameters in sensitive areas like reserve forests and other control points (where the clearance process takes time and the OWD will obtain them) while giving the concessionaire firm a free hand to change design parameters in other sections with the consequent risks of LA/R&R and other aspects to be borne by it. The PPPTAC would need to advise the OWD on the best option.

- The present proposal to stipulate a longer construction period of 36 months, mainly to allow more time for the government to mobilize resources required for fulfilling its obligations pertaining to land acquisition and making it encumbrance free, goes against the grain of the PPP approach which is aimed at improving investment efficiencies by completing construction sooner than later. Hence, the Transaction Adviser may be required to provide a comprehensive table delineating the underlying opportunity and actual costs and benefits, if any, in stipulating a longer construction period, so that the OWD and the state government can take a more informed decision in this regard. As part of this, the Transaction Adviser may be required to consider options such as, for example, allowing the concessionaire to toll major sections as and when they are completed.
- Since there is an alternate road where some of the through-traffic to the destinations may get diverted if the current road is tolled as per NHAI/toll maximisation principle, the traffic growth rate may be affected. The consultant needs to justify their projections in a more robust manner to the OWD.
- The Bank team discussed that one of the options for viability analyses would be to cost the infrastructure provision and maintenance costs catering to the most optimistic scenario of traffic and the revenue based on the most pessimistic traffic growth; and then looking at some intermediate values which are most probable to occur.
- Offhand, the increase in VGF requirement from 35% to 40% just by including the HTMS cost seems unlikely and needs to be reviewed by the consultant. Also, the PPPTAC would need to provide a cost break-up of the HTMS which they have calculated to enable the OWD to choose some of the essential features they might like to use.
- DSCR as per the computation of the consultant shows a value just bordering 1.0 even with a grant amount of 40%. In extreme situations of credit squeeze etc (like the present situation) the lenders may not have enough comfort with this. OWD and PPPTAC need to look into this in more detail.
- All Road over Rail/Road under Rail bridges would have to be designed with a footpath. Similarly all river structures and flyover systems near built up sections or key areas like hospitals and schools would need to provide for safe pedestrian movement (either on the structure or at the lower level slip road). This is missing in the present drawings of unidirectional flyover systems provided by the PPPTAC.
- Raising of roads in built up areas should be minimised to the extent possible to avoid drainage and other social difficulties to the wayside dwellers.
- It was observed that a minimum of 30 meters land is available at all sections except two. The mission suggested that looking into the option of concentric widening in rural sections where future (20 year horizon) traffic growth will not be very high, will reduce the land requirement and other aspects of utility shifting and tree cutting also. This will cut down on these costs and time requirement also. The present design envisages one-side widening in all places except in built-up areas.
- Even in built-up areas where the population is very less, the mission suggested to OWD to look at the option of providing a low-specification corridor of minimum 3.5m outside the footpath/drain which is shown in the existing drawing. The cross-section of the road for medium to high populated towns with the 5.5m service road is good and can be retained.

## **Environment Management and Safeguards**

12. *EA and EMPs for Year 2 Works:* The final EA Report along with the three corridor specific EMPs for year two works have been shared with the Bank. These reports have been prepared in line with the studies for year one works. The reports have been reviewed and cleared by the Bank.

13. *Bidding Documents for Year 2 works:* The mission reviewed the various sections of the Bidding Documents for year two works covering environment, health and safety aspects (including the EMP) in detail and left marked-up copies of the documents with PMU/OWD. A note listing the comprehensive

set of comments will be shared by the Bank by Nov. 15, 2008. The mission advised PMU/OWD to carefully review and incorporate corrections so as to avoid omissions and inconsistencies in such contractual documents.

14. *Regulatory Clearances:* The status with regard to regulatory clearances for both year one and year two works was reviewed in detail. The mission expressed concern regarding the slow progress in obtaining the necessary tree cutting permissions for the three year one works – this activity is now on a critical path. A table summarizing the current status with respect to initiation of the tree cutting process for year one works is provided below:

**Table 1: Key steps to be completed before tree cutting initiation**

Name of the Road	Step 1	Step 2	Step 3	Step 4	Step 5
	Joint Verification Survey	Tree Protection Marking	Collation of details (girth and species-wise)	Financial Estimates	Fund Release by PMU/OWD
Berhampur-Taptapani	Completed	On-going	Completed	- Estimate from OFDC received for km 0 to 29 - Estimate pending for km 29 to 41	To be done
Anandpur-Bhadrak -Chandbali	Completed	On-going	Completed	Full estimate received from OFDC	To be done
Khariar-Bhawanipatna	On-going	-	-	-	-

The following activities need to be initiated/completed and closely followed-up by PMU/OWD to avoid any further delays with respect to tree cutting and protection for year one contracts:

- Agree with OFDC the process and modalities of tree cutting (including transport, storage and disposal of tree material) by Nov. 30, 2008 and to prepare a step-wise time table for monitoring purposes.
- Complete joint verification survey for Khariar-Bhawanipatna road by Nov. 30, 2008.
- Complete tree protection marking for Anandpur-Bhadrak-Chandbali and Khariar-Bhawanipatna roads by Dec. 15, 2008.
- Obtain all pending (financial) estimates from OFDC/Forest Department through close co-ordination and follow-up.
- Release of funds by the PMU/OWD (as per agreed modalities) and agreement on a timeline for initiating and completing tree cutting with OFDC/ OFDC/Forest Department.
- Collect and collate girth-wise and species-wise information for all corridors for trees to be protected and trees to be cut as per EMP stipulations.

For the year two works, the mission reiterated that application for obtaining environmental and forest clearances (for diversion of forest land) must be filed at the earliest. Without the environmental and forest clearances in hand, award of contracts for year two works would get affected. Likewise, initiation of joint verification surveys for obtaining tree cutting permissions for year two works also needs to be initiated soon and followed-up on a regular basis.

15. *Meeting with Contractor and Supervision Consultant for Year 1 works:* The mission held discussions with the PMU/OWD, Supervision Consultant's team and the Contractor (ARSS's representative, a local firm, partner in all three cases) regarding the key requirements of Environmental Management Plan (EMP) for year-1 road works. An overview about the importance of EMP and its key elements including the supervision, monitoring and reporting system was provided by the mission. It was emphasized that the Contractor and the Consultant's team need to completely familiarize themselves and understand the requirements of corridor-specific EMPs, the compliance to which is also

a contractual obligation. Some of the key points discussed during the said meeting include the following:

- The mobilization plan of the environment officers in the Supervision Consultant's team was discussed at length. It was stated that the Environment Officer for Berhampur-Taptapani Road will be mobilized by mid-November 2008.
- The mission discussed the key responsibilities of the Environment Officer in the Supervision Consultant's team and emphasized about the required empowerment and support (including resource allocation) to enable him/her to successfully supervise and provide guidance regarding EMP compliance.
- Environment and safety officer/s have to be deployed by the Contractor for Berhampur-Taptapani Road at the earliest. The mission stated that personnel with the required qualification and experience should be deployed as per contractual provisions.
- It was stressed that staff sensitization/training, proper planning and timely action on various EMP requirements in line with the civil works programme will help in avoiding/minimizing unwarranted situations in future. Rectification and course correction due to poor and uncoordinated planning may have undesirable implications on cost and time, which should be completely avoided both by the Contractors and the Supervision Consultant.
- The Supervision Consultant and Contractor need to focus on certain key activities in the coming months. These include: (a) camp/plant site location selection; (b) lay-out and design of camp/plant/office facilities; (c) applying and obtaining NOCs, Consents and Permissions from OSPCB, Ground Water Dept. and other local agencies; (d) preparation of various plans such as those for emergency response, debris disposal etc, and; (e) identification of material sources (earth, sand, aggregate, water) in line with EMP stipulations.
- The mission also stressed that the EMP targets/requirements should be integrated and clearly reflected in the work programme to be prepared by the Contractor.
- Concerns related to worksite safety, wildlife and forest protection, child labour, children on work sites and compliance with regulatory requirements were discussed and it was stated that these issues will be closely monitored by the Bank.
- The mission emphasized that the supervision, monitoring and reporting protocols as framed for the project under the EMP should be followed in letter and spirit, both by the Contractors and the Supervision Consultant. Introduction of any new format/system has to be in consultation/approval of the Nodal Environment Officer (Executive Engineer), PMU/OWD and/or the Bank.
- An orientation programme for the Contractor's staff (after complete man-power mobilization) will be planned by the Supervision Consultant and PMU/OWD.

16. *PPP Component:* The mission reiterated that obtaining environment and forest clearances would be crucial to project readiness with respect to this component. Preparation of EA and integration of outputs emerging from the said process into EMPs, engineering design (PPR stage) and the bidding documents was also discussed in continuation with site visit findings of September 2008 mission.

17. *Institutional Arrangements:* The mission reviewed the current institutional arrangements for environment management aspects of OSRP and noted that the PMU/OWD has taken some steps regarding strengthening of the Environment Management Cell by deploying full-time staff. Apart from the Nodal Environment Officer (Executive Engineer level) and one Assistant Engineer, the PMU/OWD has hired two retired Forest Officials (one ACF level officer working as Nodal Forest Official and one Forester level officer), who are assisting the PMU in forestry related activities.

18. The OWD/PMU has initiated the procurement process for the recruitment of Environment Expert and has recently forwarded the RFP (including ToR and list of short-listed candidates) to Bank for clearance. The review of the document has been completed and comments will be shared with PMU/OWD soon.

19. In connection with the strengthening of the Environment Management Cell, the mission reiterated that sufficient experience and expertise should be considered during staff selection and recruitment.

20. *Disclosure of Documents:* The executive summary of the Final Environmental Impact Assessment Report and the EMPs for year 2 works are to be translated into Oriya; disclosed at the State

and local level; and uploaded on the OWD website. This activity is likely to be completed prior to Dec. 31, 2008.

21. *Key Agreed Actions:*

- Complete the endorsement process of Biodiversity Management Plan by the Department of Forests, GoO by Dec. 31, 2008
- Initiate tree cutting for year one works.
- Complete translation and disclosure of year two documents by Dec. 31, 2008.
- Revise Bidding Documents for year two works by Dec. 31, 2008.
- Submit environment and forest clearance applications for year two works.

*Pending procurement matters*

22. The following require immediate attention by OWD and Bank:

- The Bank has provided technical comments on the revised RFP. The OWD now needs to incorporate these comments, and re-send for procurement review and clearance.
- The TOR and cost estimates for ISAP implementation support were submitted. While the TOR is fine, the cost estimates appears to be significantly lower than originally envisaged. The OWD needs to ensure that internationally experienced Team Leader and key staff are included in the cost estimate. OWD needs to submit the RFP including TOR and cost estimate.
- OWD has submitted the technical evaluation for OPWD codes, and the Bank will give its comments soon.
- Bank will send comments/approval for the draft RFP for the hiring of environment specialist and EMP for 2nd year roads.
- The mission requested OWD to update the Procurement Plan and submit to the Bank.