

Safeguard Monitoring

As per the ADB Safeguard Policy 2009, an Initial Environmental Examination was carried out for the Gondi Modernization project. The IEE identified Environmental impacts that could occur during the construction activities. This involves aspects such as clearance of vegetation along the canals to give access working space for construction activities, safe disposal of excavated material from the existing canals, gravel surfacing of canal roads, concrete lining of canal surfaces, reconstruction of canal structures, and provision of concrete field channels or pipe outlets. Gondi modernization project does not pass through forests and is away from the reserve forests by a safe distance. However the Environmental Management and Monitoring Plan in the IEE has been adhered to in the construction phase.

PSC also ensured that action plans prepared by the contractor have been suitably modified to include all aspects of EMMP to comply with the environmental safeguards guidelines. The Environmental Specialist assessed the Contractor's EMP Implementation. Details of the safeguard measures and the evaluation and monitoring strategy is available as part of the Safeguard Monitoring Reports submitted by the PSC bi-annually.

PSC specifically made regular field visits for monitoring the implementation of Environmental Management Plan (EMP) of Gondi Irrigation System modernization project by the Contractor RPP Infra Projects. As part of the periodic reviews, PSC visited the Contractor's office, Batching Plant and the construction sites to look into the progress made by the Contractor in implementing the EMP. The review was made against the Contractor's EMP.

Environmental Indicators

PSC developed a set of environmental indicators to be used as part of the Project Monitoring Information System (PMIS) as given below:

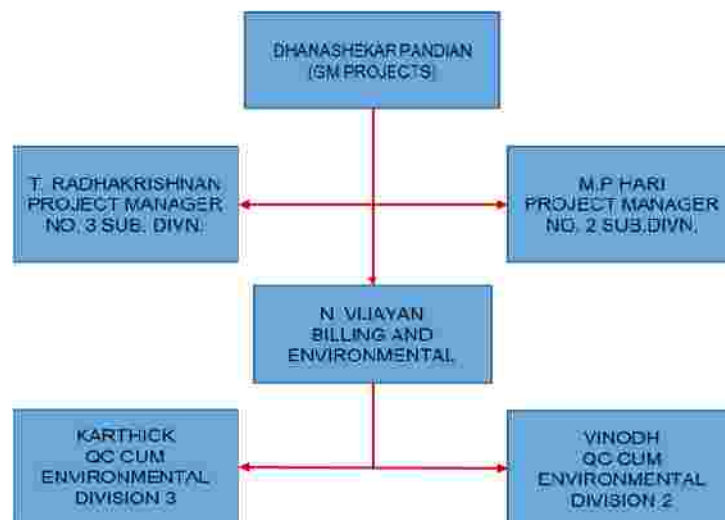
- i. Approvals provided by various agencies for carrying out the various activities under the project. This includes approval from Panchayat and KSPCB for establishing and operating the camp sites, Government approval for sourcing of required sand, panchayat approval for utilising the burrow areas, Government approval for sourcing material from quarry, Pollution Certificates for vehicles from Pollution Testing Centres and any other approvals of relevance.
- ii. Monitoring of Environmental Media
 - a. Analysis of Water Samples in the two campsites. The samples should be from groundwater used for drinking purposes as well as samples from wells surrounding the campsite. The results of the water analysis should be provided quarterly.
 - b. Analysis of Air Samples in the two campsites provided quarterly.
 - c. Monitoring of noise levels at the two campsites provided quarterly.
- iii. Details of Tree Survey and Plantation carried out.
- iv. Details of Waste Management at the campsites and the labour quarters, i.e., sanitation, septic tank, composting units and its maintenance.
- v. Details of restoration of construction sites with photographs prior to start, during construction and after construction.
- vi. Details of use of Burrow Areas with photographs prior to, during, and after, use.
- vii. Details of silt disposal including approvals obtained from land owners.
- viii. Details of Workers Safety including Health and Safety Equipment Provided to the workers;
- ix. Details of Medical Camps held;
- x. Details of Environmental, Health and Safety Awareness Workshops held for the Workers, Labourers and Local Community.

Subsequent to field visits/reviews, PSC usually shares its observations with the contractor and his staff in the field itself followed by submission of a Safeguards Monitoring Report. Subsequently, the contractor has complied with several safeguard requirements as given below. The Contractor has:

1. Obtained all approvals pertaining to vehicles and equipment used for the project activity;
2. Prepared EMP Manual for Land Management, Dust Management and Noise Management-recording approvals of the farmers/ land owners for disposal of silt; recording instances of water sprinkling for dust management and recording instances of noise issues raised by the community and the action taken by the Contractor to address the community concerns; Obtained approvals from the Quarry Owners;
3. Conducted survey of all trees along the construction route and identified the ones that are located in the encroached areas and need to be cut. Also, the contractor is in discussions with the local community and KNNL for cutting the trees, wherever necessary.
4. Kept a register for recording baseline information related to all construction sites and made arrangements to document the construction site closure.
5. Kept a register for documenting Health and Safety initiatives;
6. Installed appropriate safety sign boards along village roads for transporting materials through company trucks, and
7. Secured written approvals from the local community for locating the Batching Plant.
8. Cleaning Register to record the weekly cleaning activities carried out at the Staff and Office Quarters;
9. Environmental Checklist especially in terms of environmental issues at construction sites have been maintained;
10. Medical Camp Register to record the medical camp events carried out by the Contractor for the office staff, workers and labourers-Medical camp has been organized every month this quarter.
11. Safety Register;
12. Environmental Complaint / Suggestion Register.

The organizational chart presented by the contractor is reproduced below.

Contractor's Organization Chart for Implementing Environmental Management of Gondi Modernization Project



Other Mitigation Measures

During the reporting period, the Contractor also carried out mitigation measures in the following instances:

1. Undertook closure activities for one of the burrow areas, viz., Danayakapura. The burrow site has been rehabilitated to such an extent that the farmers in the area are now utilising the land for cultivating crops. A row of Arecanut trees have been planted at the former burrow location and the photograph of the same is provided below. The nearby farmers have appreciated the work of the Contractor.



Closed Danayakapura Burrow Area now used for cultivation

2. Installed the composting units for composting kitchen wastes at both the camp locations.



Composting Unit at the Kodihalli Campsite

Further, with respect to social safeguards, PSC has found that there are no resettlements and Indigenous People related issues. However, the contractor has been requested to maintain record of incidents of resettlement issues, if any, of Indigenous People, and conduct periodic awareness programs on HIV/AIDS.

The following are some specific actions initiated by the contractor:

1. Based upon the request from the local community and communicated to the contractor by the PSC, the contractor has initiated discussion with the local community at Holehonnuru for replacing a 'Bilva' tree (botanical name: Aegle marmelos) that was cut down. The 'bilva' tree is useful in temple rituals. However, the tree was initially located on encroached property and had to be cut down to make way for the modernization works.
2. Secure written approvals from the local community for locating the Batching Plant. The contractor has been obtaining verbal approvals.
3. Installation of appropriate safety sign boards for utilizing the village roads to transport vehicles.
4. Sought additional information from the quarry owners regarding the implementation of their EMP.
5. Organize awareness workshop on health and other project issues for labourers, workers and the local community to prevent any untoward issues during the project period.
