<u>Diversion of 75.92 ha Forest Land for construction of Screening Plant, Tailing Dam, Slurry Pipeline corridor & Water Pipeline corridor at Donimalai Complex of NMDC Ltd., over an extent of 75.92Ha.</u>

Revised Cost Benefit Analysis for Forest land diversion -2017

Table-A: Cases under a cost benefit analysis for forest diversion required:

1 abie-4	A: Cases under a cost benefit analysi		
Sl. No.	Nature of Proposal	Applicable/ Not	Remarks
		Applicable	
1	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectares in hills	Not applicable	These proposals may be considered on a case-to-case basis and value judgment
2	Proposal for defense installation purposes and oil prospecting (prospecting only)	Not applicable	In view of National Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use.
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest.
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations centers, TV towers etc.	Applicable	These are cases where a cost- benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

Table-B: Estimation of cost of forest diversion

Sl.No.	Parameters	Rs. In Lakhs	Remarks
1	Ecosystem services losses due to proposed forest diversion.	609.6	Economic value of loss of ecosystem services due to diversion of forests shall be the Net Present Value (NPV) of the Forest land being diverted. Rs.8.03 Lakhs X 75.92Ha = 609.63 Lakhs.
2	Loss of animal husbandry productivity, including loss of folder.	60.9	10% NPV of the Forest as per the new guidelines.
3	Cost of human resettlement		There is no human resettlement in proposed forest land. Hence, the cost of Human resettlement does not apply.

4	Loss of public facilities and administrative infrastructure (Roads, Building, Schools, Dispensaries, Electric lines, Railways etc.) on forest land, which would require forest land if these facilities were diverted due to this project		There is no Roads, buildings, schools, dispensaries, electric lines, railways passing in the proposed area. There is no loss of public facility in the area.
5	Possession value of forest land diverted.	182.88	30% of Environmental cost (NPV) due to loss of forest.
6	Suffering of austees		There will not be any losses on this account as diversion of the forest land to this project and will not affect any evaluation of house or structure or human settlement.
7	Habitat Fragmentation Cost	304.8	50% of Environmental cost as a thumb rule as per the new guidelines.
8	Compensatory afforestation and Soil & moisture conservation cost	1296.71 5.0	Rs.17.08 Lakhs per Ha. as per letter No. KFD/HoFF/A5-3 (GFL)34/2019-FC dt.19.04.2021
	Total Loss due to Forest Diversion	2459.89	

Table-C: Existing guidelines for estimating benefits of forest-diversion in CBA

Sl.No.	Parameters	Remarks
Sl.No.	Parameters Increase in productively attribute to the specific project.	NMDC commenced mining operations in Donimalai and Kumaraswamy Iron Ore Mine in the year 1977 & 1992 respectively. Lot of common infrastructural facilities such as Screening plant, Loading plant, Power supply, Water supply, Township have been developed at Donimalai for these two mines. Further, both the mines have respective downhill conveyor system for transportation of ore. The railway siding at Ranjitpura was already developed at the time of commissioning of Donimalai iron ore mine for transportation of Iron from Donimalai which is now being used for Kumaraswamy mine also. The proposal for construction of new Screening Plant of capacity-10 MTPA has been proposed for the beneficiation of iron ore from both the Donimalai and Kumaraswamy iron ore mines of
		Plant of capacity-10 MTPA has been proposed for the beneficiation of iron ore from both the Donimalai and Kumaraswamy iron ore mines of
		NMDC Limited. The existing Donimalai and Kumaraswamy Iron Ore Projects are having valid Environmental clearances issued by MoEF for capacity of 7 million tons per annum for each mine.

2	Benefits to economy due to the specific project.	A suitable land of 75.92 Ha has been identified outside M.L. area of Donimalai for the construction of Screening Plant-II and associated facilities like Tailing dam(s), pipeline corridor etc. Accordingly, the area has been proposed for diversion of 75.92Ha. in Donimalai Forest range in Sandur (Tq.) of Bellary dist. Reduce the pressure on Environment, enhance the air quality of the surrounding areas. As result of mining of Kumaraswamy Iron Ore, a multitude of
		Government Departments, agencies and the like, including local population will derive direct benefit by way of: Earnings for state Govt. of Karnataka. A. Royalty on tonnage basis to Dept of Mines & Geology. B. Electricity charges to KEB. C. Electricity charges to Tungabhadra Reservoir Dvn, PWD. D. Cess on welfare department. E. Transportation charges to the railways rents, taxes etc. to the Govt & etc.,
3	No. of population benefited due to specific project.	About 1000 people will be benefited.
4	Economic benefits due to of direct and indirect employment due to the Specific project.	100
5	Economic benefits due to compensatory afforestation. Benefit from the proposed	NPV @ Rs.8.03 Lakhs X 75.92 Ha = 609.637 X 20 years = 12192.752 + Providing of equivalent non forest land to the forest department + Compensatory afforestation charges = Rs.17.08 Lakhs per Ha. X 75.92 Ha = 1296.713 Rs.12192.752 + 1296.713 = 13489.465 Lakhs. Rs.13489.465 Lakhs.
	Benefit from the proposed project	KS.13407.403 Lakns.

Loss due to forest diversion = 2459.89 Lakhs.

Benefit from the proposed project = 13489.465 Lakhs.

Net benefit from the proposed project = Rs.13489.465 – Rs.2459.89 (Approx) = 11029.575

Hence Cost benefit ratio = 1:4.48

Date:30.09.2021

Chief General Manager Donimalai Complex मुख्य महाप्रवेधक

Chief General Manager

एन.एम.डी.सि.लिमिटेड / NMDC Limited दोजिमले लौह अयस्क खान / Donimalai Iron Ore Mine