ANNEXURE-VI (a)

CATEGORY OF PROPOSALS FOR WHICH COST BENEFIT ANALYSIS IS APPLICABLE

SN.	Nature of managed A. III at a line of the latest and the latest an		
SIV.	Nature of proposal	Applicable or not applicable	Remarks
1	All categories of proposals involving forest land up to 20 hectare In plains and up to 5 hectares in hills		The proposals are to be considered on case by 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 above Is diverted for non-forest use.
3	Habitation, establishment of industrial unit, tourist Lodges/complex and other construction.	Not applicable	These activities being Detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor ,medium and major irrigation projects, hydel projects mining activity, railway lines location specific installations like microwave stations, auto repeater. Centers, T.V. Towers etc.	applicable	These are cases where a cost- benefit analysis is necessary to determine when diverting the forest land to non-forest use is I the overall public Interest.

 Since proposal falls under category S. No. 4 there for cast benefit analysis is applicable in this case.

> (Atul Nigam) Chief Project Manger Rail Vikas Nigam Ltd Bhopal

Cost Benefit Analysis in connection with construction of new railway line between Indore-Budni stations.

GENERAL DETAILS:-

- **a. Project:** Construction of new railway line between Indore and Budnl stations of Bhopal & Ratlam railway division in the state of Madhya Pradesh.
- **b. District:** Sehore , and Dewas
- c. Forest Division: Dewas and Sehore
- d. Forest Range: In forest division Sehore-Rehanti, Budni
 - In forest division dewas-Dewas, Jinwani, Panigaon
- e. Forest land needed (Ha): 24.583 Hact. In Sehore and 45.855 Hact. In dewas

divisions Total 70.438 Hact.

- f. Density of forest: Ranges between 0.2 to 0.5
- g. Non-Forest land needed (Hact.): 1408.15 Hact.

PARAMETERS FOR EVALUATION OF LOSS OF FORESTS

Sn	Parameters	Values
1	Loss of value of timber, fuel wood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived livelihood and wages from the harvest of these commodities	
A	Loss of value of Timber	There will be loss of timber to some extent. This loss will be made good by way of compensatory afforestation as decided by forest department. Further, the project alignment passes through tunnels in 10 kms alignment length. Ministry of Environment, forest and climate change through their letter #F.No.II-674/2014-FC dated 27.11.2015 (Copy enclosed) have exempted estimation of losses in case of underground structure during construction of which the forest remains undisturbed.
В	Loss of value of fuel wood and minor forest produce	NIL There will be loss to some extent. This loss will be made good by way of compensatory afforestation as decided by forest department. Further, the project alignment passes through tunnels In 10 kms alignment length. Ministry of Environment, forest and climate change through their letter #F.No.Il-674/2014-FC dated 27.11.2015 (Copy

C	Loss of livelihood and wages	enclosed) have exempted estimation of losses in case of underground structure during construction of which the forest remains undisturbed. NIL
2	Loss of animal husbandry productivity including loss fodder	No village In the affected forest area NIL No village or grasslands fall In the affected forest area
3	Cost of human resettlement	No villages or population affected due to implementation of project
4	Loss of public facilities and administrative Infrastructure (roads, building, schools, dispensaries, electric lines, railway etc.) on forest land or which would require forest land if these facilities	NIL No public facilities affected due to implementation of project
5	Environmental losses (soil erosion, effect on hydrological cycle, wildlife , habitat microclimate upsetting of ecological balance)	Standard loss per Hact. In fully stocked area x Area applied for x Average density of forest. 126.74 x 70.438 x 0.4= 3570.92 Lakhs
6	Suffering to oustees	NIL No population affected due to implementation of Project.
	Total	3570.92 Lakhs

(Atul Nigam)
Chief Project Manger
Rail Vikas Nigam Ltd Bhopal

ANNEXURE-VI (c)

PARAMETERS FOR EVALUATION OF BENEFIT, NOTWITHSTANDING LOSS OF forest

1	Increase productivity attributable to the specific project	Productivity Incereasement calculated is by transportation of goods-1951.77 Transportation of passengers- 1056.34 Total per annum- 3008.11 150405.50 Lakhs for 50 years In the standard forest.
2	Benefit to economy	Construction of New railway line will reduce me distance between Indore-Jabalpur by 82 Kms. This will facilitate not only passengers but also goods carrying trains and will lead to boost in the economy of the country and the region.
3	No. Of population benefited	The proposed New railway line will cater to new area and will connect Kannod, Sanaliya, Chhan, Khategaon, Nasrullahganj, and Salkanpur to railway map. This area is reach in food grains. Thus apart from providing rail connectivity to people, petroleum, food grain and doc freight movement will take place. Overall Population benefited by the project is approx. 16,82,600 nos yearly.
4	Employment potential	Direct Employment Labors- Benefits of employing labors for annual maintenance and operating staff. Manpower employed=1000 nos @ Rs 20000 per month (average), Amount 1000x0.2x12x50= 120,000 lakh
5	Cost of acquisitions of facility on non-forest land wherever feasible	@ 79.32 Lakhs per hectare for 1408.15 Hact 79.32 x 1408.15 = 1,116.85 Cr.
6	Loss of (a) agriculture & (b) animal husbandry production due to diversion of forest land	Agriculture loss- Nil Animal husbandry production- @ Rs 1.48 Lakhs per annum per hectare for 58.461 Ha. for 50 years = 1.48 x 70.438 x 50 = 5,212.412 Lakhs
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement	NIL
8	Cost of supply of free fuel wood to workers residing in or near forest area during the period of construction	NIL

