Financial and Social Benefits

COST-BENEFIT ANALYSIS

As per cost (Conservation Rules, 2003, Rules 6, Form'A'S.No. 1(v) and guide lines- application of Forest Act 1980, Chapter II (2.6) and Revised Guidelines Issued by MoEFFC vide No. 7-69/2011-FC(Pt.) dated

1st August 2017.

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

| SI. No. | Nature of proposal | Applicable/ not applicable | Remarks |
|------------|--|-------------------------------|---|
| 1. | All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills | Not applicable | These proposals may be considered on a case to case basis and value judgement |
| 2. | Proposal for defence 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, as a matter of policy, such proposals would be rarely entertained. |
| 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 like micro-wave stations, auto repeater centres, 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

| SI. No. | Parameters | Remarks |
|------------|---|--|
| 1. | Ecosystem services losses due to proposed forest diversion | NPV for 131.0175 ha @ Rs. 6,26,000=Rs. 8,20,16,955 |
| 2. | Loss of animal husbandry productivity, including loss of fodder | 10% of NPV = Rs. 82,01,696 |
| 3. | Cost of human resettlement | Since there is no displacement of persons due to the diversion of forest land, the cost of |



| SI. No. | Parameters | Remarks | |
|------------|---|--|--|
| | | resettlement is nil. | |
| 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 the project | Public facilities and administrative infrastructure like Roads, building, schools, dispensaries, electric lines, railways, etc. are not going to be affected due to the diversion of forest land therefore the loss on this account will be nil. | |
| 5. | Possession value of forest land diverted | 30 % of NPV= Rs. 2,46,05,087 | |
| 6. | Cost of suffering to ousters | The cost of rehabilitation is nil. | |
| 7. | Habitat Fragmentation Cost | 50% of NPV= Rs. 4,10,08,478 | |
| 8. | Compensatory afforestation and soil & moisture conservation cost | As per guidelines Standard Compensatory Afforestation, Restoration factor (SCARF) assuming 4% discounted rate of moderate density tropical dry deciduous forest type is 5.18% of NPV= Rs. 42,48,478 | |

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

| SI. No. | Parameters | Remarks |
|------------|--|---|
| 1. | Increase in productively attribute to the specific project | Implementation of entire project will ensure fast and safe road traffic movement, reducing travel time by almost half. Turnaround time of commercial vehicle will be reduced resulting in better profit margin for commercial vehicle operator. Project also aims at creation of commercial nodes mainly in tourism, commercial and agricultural sectors resulting in employment generation. |
| 2. | Benefits to economy due to the specific project | Improved access to tourist places, higher education facilities and modern health facilities. Improved road connectivity helps in better implementation and management of government schemes. After completion of the project, local communities and industries situated in the area will be greatly benefited. The project road alignment is important as it traverses through Mirzapur district and connects MP state. |
| 3. | No. of population benefited due to specific project | The project stretch is very important National Highway as it connects Uttar Pradesh and MP. Approximately 26 lakh People of Mirzapur district are going to be benefited. Apart from these it also improves the industrial activities in this district. |
| 4. | Economic benefits due to of direct and indirect employment due to the project | The construction of project provides direct employment to people and substantial indirect |



| | | employment as a result of development of infrastructure and trade improvement. |
|----|---|---|
| 5. | Economic benefits due to Compensatory afforestation | Benefits due to double the area of compensatory afforestation is assumed to be at the rate used for calculation of economic value of loss due to afforestation i.e. Rs 8,20,16,955Lakhs |

