

Cost-Benefit AnalysisPARAMETERS FOR EVALUATION OF LOSS OF FORESTS

<u>Sl.No</u>	<u>Parameters</u>	<u>Transmission Lines</u>
01.	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	Negligible as the nature of proposal involves only transmission line. However it is assessed that loss of timber comes Rs0.12lakhs/annum.
02.	Loss of animal husbandry productivity, including loss of fodder	Negligible
03.	Cost of human resettlement	Not applicable as no human displacement is involved
04.	Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project	Not applicable as no such public utilities falls on the forest land involved
05.	Environmental Losses: (Soil erosion, effect on hydrological cycle, wildlife habitat, microclimate, upsetting of ecological balance)	Density of forest involved varies from 0.2 to 0.4. Hence considering average density of 0.3 for an forest area of 1.422 hectare, environmental loss is assessed to Rs. 54.07 Lakh @ Rs.38.022 lakhs /hectare

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Cost-Benefit Analysis

Annexure-III

PARAMETERS FOR EVALUATION OF BENEFIT, NOTWITHSTANDING LOSS OF FORESTS

Sl.No

Parameters

Transmission Lines

01. Increase in productivity attributable to the specific project

considering average flow of power through the line at 30 MW, Load Factor-50%, Loss-2%, average cost of power at Rs.4.93 Kwh, Energy sent out/year = $30 \times 1000 \times 0.5 \times 8760 \times 0.98$
Kwh = 128772.00x 1000 Kwh

Value added = $128772.00 \times 1000 \times 4.93 = \text{Rs.} 63.48 \text{ Crore /Year}$

02. Benefits to economy

The transmission scheme is for evacuation of hydro-electric power generated from HEPs with addition of cheap hydro-electric power, not only power system becomes more stable, but also saves other fossil fuel whose deposits are increasingly diminishing. With commissioning of the scheme, the state of Sikkim also will earn considerable revenue from royalty besides a boost in industries and agricultures and relief to domestic consumers.

03. No. of population benefited

Whole population of Sikkim in general and the country at large

04. Employment potential

Transmission line costs approx. 5.0792 crores.

Approximately 20% will be labour component and Percentage of various categories of labourers, their daily wages shall be as under:-

- i) Skilled- 20% @ Rs.342/day
- ii) Semiskilled-30% @ Rs.315/day
- iii) Unskilled-50% @ Rs. 308/day

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The following employment opportunities are generated:-

- | | | | |
|------|-----------------------|---|----------------|
| i) | Skilled labourers | - | 5,941 mandays |
| ii) | Semiskilled labourers | - | 9675 mandays |
| iii) | Unskilled labourers | - | 16491 mandays) |

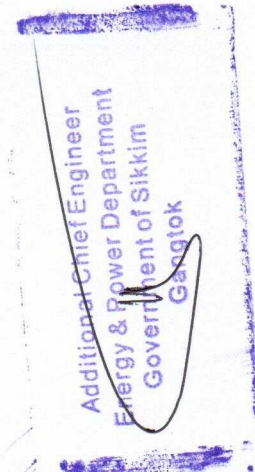
05. Cost of rehabilitating the displaced persons as different from
Compensatory amounts given for displacement

Nil, as no person is being displaced due to the
transmission line project

06. Cost of supply of free fuel wood to workers residing in or near
Forest area during the period of construction

Nil, as during construction period workers shall be
provided with Kerosene/LPG


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