Project Road: Chapaguri – Amteka (Bhutan Border)

Alternative analysis between chainage 22+316 Km to 40+776 Km of Chapaguri-Amteka (Bhutan Border) Project Road

| | Existing Road | Option 2 | Option 3 | Option 4 |
|---------------------------------------|--|--|---|--|
| Forest land acquisition | Option 1 Being the existing alignment it requires least forest land acquisition than all other options. Also impact on forest dwellers will be minimum in comparison to other options. | Option 2 Forest land acquisition will be higher than option 1 and 3 but less than option 4. | Option 3 Forest land acquisition will be higher than option 1 but less than option 2 and 4. | Option 4 Forest land acquisition is highest than all options as this alignment is passing through forest. |
| Fuel consumption & GHG emission | Length= 18.460 km. Highest length than all other options. So fuel consumption and GHG emission will be high than all other options. | Length= 17.669 km. Higher fuel consumption and GHG emission compared to option 3 but less than option 1 and 4. | Length= 16.990 km. Shortest length than all other options. So fuel consumption and GHG emission will be least than all other options. | Length= 17.750 km. It would lead to lesser fuel consumption and GHG emission compared to option 1 but higher than option 2 and 3 |
| Private land acquisition | As this is existing road, private land acquisition would be comparatively least than all options. | Private land acquisition requirement is lesser than option 4 but higher than option 1 and 3. | Private land acquisition requirement is lesser than option 2 and 4 but higher than option 1. | Private land acquisition requirement is highest than all options. |

Based on above comparison Option 1 (pink colour) is recommended as it would result in least forest land acquisition compared to all other options. Connectivity for local forest villagers might be adversely affected due to changes in existing alignment. Hence, Option 1 (existing alignment) is preferred alignment for this project road.

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