

Daunne Khanda Road Tunnel Project



Government of Nepal
**Ministry of Physical Infrastructure
and Transport**



Background

The Daunne Khanda Road Tunnel project is a strategic initiative by the Government of Nepal to enhance the East-West Highway's Narayanghat-Butwal section. Addressing the need for a safer, more efficient transportation corridor, the project proposes the construction of a road tunnel to mitigate the challenges of traffic congestion, steep gradients, and frequent landslides in the Daunne area. By bypassing the treacherous terrain, the tunnel aims to offer a direct and reliable route, thereby reducing travel time and maintenance costs, improving overall road safety, and enhancing connectivity within the region.



Sector

Transportation



Location

Start Point: Dumkibas, Nawalpur District
End point: Bardhaghat, Nawalparasi District



Tunnel Length

6.215 km

Salient Features:

- Twin Double Lane tunnel
- Smart Monitoring System
- Fire Fighting
- Emergency Facilities
- Energy efficient tunnel illumination

Project Rationale:

- Alternative to current existing road in fragile mountainous landscape with frequent landslides.
- Reduce traffic congestion in areas with difficult topography
- Improve transport mobility
- Reduce human and vehicles casualties
- Enhance accessibility and reduce travel distance

Project Components



Tunnel Inlet and
Outlet



Approach
Road



Main
Tunnel



Cross
Passage



Ventilation
System

Project Outcomes



Reduced
congestion



Reduced
travel time



Enhanced
road safety



Preservation of Natural
Landscape and habitats



Increased connectivity
and accessibility



Vehicle Operating Cost
(VOC) savings

Financial Indicators

Estimated Project Cost

NPR 19 Billion

USD 168.78 million



Economic IRR
15%



Economic NPV
NPR 34.9 Billion



Pay-back
period
13.25 Years



Benefit Cost
Ratio
1.38

(1 USD= NPR 112.57 as per 2019)
Discount Rate = 10%

(Information is based on Feasibility Study report prepared in 2019)

Project Implementation Modality



Public Private Partnership
(PPP)

Project Implementation Timeline



