



Draft Design and Monitoring Framework

Project Number: 39225
August 2009

BHU: Road Network Project II

A design and monitoring framework is an active document, progressively updated and revised as necessary, particularly following any changes in project design and implementation. In accordance with ADB's public communications policy (2005), it is disclosed before appraisal of the project or program. This draft framework may change during processing of the project or program, and the revised version will be disclosed as an appendix to the report and recommendation of the President.

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>Impact Increased passenger and freight transport within the country and with India, facilitating industrial development in the southern economic hubs and increasing trade with India.</p>	<p>Traffic volume along the project corridor increased by 20% higher than the country's average traffic growth rate</p> <p>Volume of cross-border traffic increased by 50% higher than the country's average traffic growth rate</p> <p>Industrial activities (the number of industries) in project influenced dzongkhags increased by 10% higher than the country's average traffic growth rate</p> <p>Contribution of road transport sector to the gross domestic product (11.3% in 2007) increased by 10%</p>	<p>Post-implementation measurement</p> <p>Government socio-economic statistics, e.g., Selected Economic Indicators, Statistical Yearbook of Bhutan</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Various government development activities effectively coordinated with road sector investment • The Government provides routine and periodic maintenance throughout the project life.
<p>Outcome Expanded road transport capacity in the southern region, facilitating efficient and safe transport in the southern region of the country and with India.</p>	<p>Average travel time along project roads reduced at least by 50% (from more than 3 hours)</p> <p>Fatality rate along the project corridor not exceeding the country's average fatality rate (5 per 10,000 vehicles)</p>	<p>Post-implementation measurement</p> <p>RSTA accident data</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Timely and quality project delivery • Transport modes and services available for the project roads

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<p>Outputs</p> <p>1. Critical sections connected along the southern east-west corridor</p> <p>2. Strengthened capacity of road engineering technologies and road asset management</p>	<p>200km completed by 2012</p> <p>Project roads maintained with international roughness index below 5 (paved roads) and at an all-weather standard (gravel roads)</p>	<p>Progress reports</p> <p>ADB's review missions</p> <p>DOR road condition survey</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Civil works implemented on schedule • Qualified civil works contractors and consultants participated • Efficient and effective procurement and safeguard implementation • Government commitment to institutional strengthening
<p>Activities with Milestones</p> <p>1. Road construction</p> <p>1.1 Engagement of design and supervision consultants by end of 2009</p> <p>1.2 Procurement of civil works completed by September 2010</p> <p>1.3 Construction of all civil works completed by end of 2012</p> <p>2. Capacity building (technical assistance)</p> <p>2.1 Consultant selection by June 2010</p> <p>2.2 Training of DOR field offices by end of 2010</p> <p>2.3 Road maintenance planning by end of 2010</p>			<p>Inputs</p> <p>For 1:</p> <ul style="list-style-type: none"> • ADB: \$38.76 million • Government: \$15.56 million <p>For 2:</p> <ul style="list-style-type: none"> • ADB: \$0.4 million • Government: \$0.1 million in-kind contributions

ADB= Asian Development Bank, DOR= Department of Roads