

## BHUTAN

## Road Network Project



Accessibility is Bhutan's key development issue. The country's trunk road network is still limited in terms of coverage and unable to meet the growing demands of larger and heavier vehicles. Limited provision of feeder roads adds to the isolation of remote rural areas. To cope with socioeconomic development and the consequent expansion of vehicular traffic, the existing road infrastructure must be upgraded and improved.

The objectives for the road sector in the Government of Bhutan's Ninth Five-Year Plan, 2002–2007 were to improve accessibility to socioeconomic activities by building more roads; and to enhance the existing network to reduce travel time, road-user costs, and transportation costs for goods and services. The objectives for road transport services were to develop safe, reliable, efficient, and affordable passenger and freight transport

services. To achieve these objectives, the plan's strategies included focusing on safety and environmental standards through vehicle inspection, and expanding services through regulation and selective support of private transport enterprises.

Recognizing that physical isolation is the main cause of poverty in Bhutan, the country strategy devised by the Asian Development Bank (ADB) supported road expansion, followed by assistance to promote integrated rural development. At the request of the government, ADB approved a loan for the Road Network Project.

The project aimed to improve economic prospects, living conditions, and quality of life for communities in the project catchment areas by enhancing nonfarm employment and investment opportunities;

## PROJECT RESULTS

**Improved national highway.** A total of 136.38 kilometers (km) of national highway was strengthened and 66.07 km of feeder roads constructed. The project has provided rural populations along the project roads better access to social and economic opportunities. On the project national highway, vehicles may now travel at an average of 30–40 km per hour compared to 15–20 km per hour before.

**Reduced vehicle operation costs.** Better road conditions have resulted in reducing vehicle operation costs by about 18%, vehicle travel time by 23%, and walking distance for villagers by 65%. Construction of feeder roads has drastically improved the socioeconomic welfare of farmers in the project areas. Before the project, there were only narrow footpaths connecting to the villages. Now, farmers can travel to the markets and towns by motorized vehicles. This has stimulated agricultural development while improving access to education, health, and social amenities.

Due to the progress in socioeconomic development and improved road conditions, the traffic count on the project national highway rose by about 33% in 2011 and a further 50% in 2012. Compared to estimates, actual traffic in 2012 was about 89% higher, with an annual average daily traffic count of 73 vehicles on the project's feeder roads (208 vehicles on the Mirchim–Bongo road, 46 vehicles on the Garbagtang–Chali road, 26 vehicles on the Autsho–Gumrang road, 56 vehicles on the Khardungla–Kangpara road, and 30 vehicles on the Tekizam–Bjena road).

**Improved road connectivity.** A monitoring and evaluation survey confirmed that the overall socioeconomic development in the country was robust, with gross domestic product growth rates of 8.9% for 2011 and about 9.9% in 2012. The survey showed the project had substantially improved connectivity in the project areas; project implementation provided a working opportunity of 24,398 person-months to local laborers; better connectivity had significantly stimulated agricultural development in the project area and improved people's lives; women participated more in working and social activities; and education status had improved.

shortening travel times, increasing comfort and safety, and reducing vehicle operating costs, which would together translate into greater service frequency and lower fares; increasing local nonmotorized traffic and expanding commercial activities, particularly

along the roadsides; providing employment opportunities for the poorer segments of the population during construction, thus benefiting the community as a whole; and improving access to health services and education.

A technical assistance project was also provided to strengthen the Department of Roads' capacity in road asset management, and develop its capacity in road safety auditing.

The project is in line with the strategic directions of ADB's South Asia Department. The strategy focuses on sustainable infrastructure, climate change mitigation and adaptation, human development, regional cooperation and integration, public-private partnership, and good governance.



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## PROJECT AT A GLANCE

**Cost and financing:** Asian Development Fund, \$27.3 million; Japan Special Fund, \$300,000; Counterpart, \$6.8 million

**Project approval date:** 30 September 2005

**Project themes:** Sustainable economic growth, fostering physical infrastructure development

**Status of project implementation:** Completed

**Loan closing date:** 31 December 2011

**Executing agency:** Department of Roads

## FOR INFORMATION

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Link to South Asia Project Briefs:  
<http://www.adb.org/publications/series/south-asia-project-briefs>

Sources: Project Data Sheet. <http://www.adb.org/projects/32373-013/main>; ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant for the Road Network Project in the Kingdom of Bhutan*. Manila. <http://www.adb.org/projects/documents/road-network-project-4>; ADB. 2013. *Completion Report: Road Network Project in Bhutan*. Manila. <http://www.adb.org/projects/documents/road-network-project-pcr>



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