

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB903

<b>Project Name</b>	Lucknow-Muzaffarpur National Highway Pro
<b>Region</b>	SOUTH ASIA
<b>Sector</b>	Roads and highways (100%)
<b>Project ID</b>	P077856
<b>Borrower(s)</b>	GOVERNMENT OF INDIA
<b>Implementing Agency</b>	National Highways Authority of India Plot No. G5 & G6 Sector 10, Dwarka India Tel: 91 11 2507 4100 Fax: 91 11 2508 0360 Grsingal@nhai.org
<b>Environment Category</b>	A
<b>Safeguard Classification</b>	S <sub>1</sub>
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<b>Date of Appraisal Authorization</b>	May 30, 2004
<b>Date of Board Approval</b>	September 23, 2004

### 1. Country and Sector Background

By the late 1990's, lack of investment and inadequate management coupled with sharply increasing rates of motorization had resulted in high levels of congestion, slow speeds, high vehicle operating costs and a bad safety record on the national highways (NH) network of India. Recognizing that the poor performance of this network was becoming a major drag on growth, the Government of India (GOI) made investment and reform of the NH system an important foundation of their overall strategy to invigorate the economy and integrate the country.

In 1998, the GOI initiated a National Highway Development Program (NHDP) to strengthen and widen to four lane standard the core national highway network of about 13,100 km in a phased manner over ten years. The total cost for the program is estimated to be US\$12 billion. Of this, about US\$5.2 billion has been spent so far, with 3,200 km of four laning completed and a further 3,700 km ongoing. The program is being financed through a mixture of increased user charges in the form of a dedicated fuel cess and tolls plus debt from domestic and international development banks as well as private investment, to date limited to a few viable sections.

A number of actions have been taken to facilitate the delivery of the NHDP. In 2001, a Central Road Fund Act was passed that generates additional revenue through applying a new levy on motor fuels dedicated for road development including on national highways. The National Highways Act was also amended to further facilitate private financing of highways. Institutional reform has also been a part of the GOI's sector strategy. Before 1998, nearly all NH responsibilities, from policy and planning to construction and maintenance, lay with the Ministry of Road Transport and Highways (MORTH). However, the GOI decided to separate policy from

implementation for the NHDP assigning the latter to the National Highways Authority of India (NHAI), a statutory body established under the National Highways Authority Act of 1988.

NHAI's mandate is to develop, maintain and manage those national highways entrusted to it by the GOI. This represented a major step towards more commercial management of the network. NHAI has managed to maintain a lean organization by outsourcing design, supervision and construction activities to the private sector. As stretches of the NHDP are completed, NHAI is now starting to turn towards the task of better management of the operation and maintenance of the upgraded NH network. In early 2004, the GOI announced that a further 10,000 km of NH is to be entrusted to NHAI for development.

## **2. Objective**

The project development objective is for road users to benefit from an improved journey between Lucknow and Muzaffarpur (National Highway No. 28). This road forms part of the East West Corridor of the NHDP. The project road passes through some of the poorest districts of Bihar and Uttar Pradesh, and links the remote, less developed north-eastern states to the rest of India. In addition to facilitating inter-city travel and transport of goods, proximity to the highway is expected to have a significant positive influence on major aspects of the socio-economic well being of the rural population in the adjoining areas.

## **3. Rationale for Bank Involvement**

The Bank can provide (i) a means for bringing global knowledge to address outstanding institutional, policy, financing and implementation issues in the sector (ii) a comprehensive perspective in integrating economic, social, and environmental analysis in project design (iii) convening powers to help facilitate the exchange of information between stakeholders central government, states and the private sector (iv) long term financing at competitive interest rates to help bridge the sector funding gap and thereby delay the imposition of higher user charging/taxes necessary to sustain the network in the long run. Many of the procedures which have been put in place as part of Bank funded projects have now been adopted by NHAI for all of its projects; for example in the areas of procurement, environmental and social management, construction supervision and dispute resolution practices. Given the long term nature of the investment under the NHDP, it is important that the Bank demonstrate its ongoing commitment to the GOI's sector strategy by continuing to support what the Government clearly considers to be one of the key foundations for growth. The Asian Development Bank also has a significant program of support to NHAI which is consistent with the support provided by the World Bank.

## **4. Description**

The project has only one component of highways upgrading. This will contribute to removing the capacity constraints on the National Highway (NH) network by providing for the upgrading to 4-lane divided carriageway standard of 483 km out of the total 513 km continuous stretch of NH28 between Lucknow and Muzaffarpur. The primary target group is the road users, of whom about 65% are commercial, and the secondary target group is those living adjacent to the road. The Lucknow to Muzaffarpur stretch of the East West corridor can be divided into five homogenous sections: Lucknow-Ayodhya (126 km); Ayodhya-Gorakhpur (117 km); Gorakhpur-Gopalganj (106 km); Gopalganj-Muzaffarpur (134 km), and Gorakhpur Bypass (40 km). The project will help finance, for the first four sections (total 483 km) the (i) civil works and associated environmental management actions procured in twelve packages through ICB, (ii)

construction supervision by four teams of internationally recruited consultants (iii) delivery of entitlements under a Resettlement Action Plan to project affected people (iv) ancillary activities such as afforestation, monitoring and evaluation activities as well as road safety and HIV awareness programs. The latter awareness programs will be delivered to those using, living or working adjacent to the project road throughout the construction period. This will help to implement the recommendations of broader strategies in these areas that have been developed with previous Bank support.

The Gorakhpur Bypass will be financed by the NHAI itself. This is a green field site with higher unit costs. The implementation timeframe and financing options are therefore different to the other four main sections making the bypass more amenable to a standalone project approach. However, as the Gorakhpur Bypass is an integral part of the stretch between Lucknow and Muzaffarpur, the preparation and implementation of environmental and social safeguard management will be identical to the Bank financed sections.

## 5. Financing

Source:	(\$m.)
BORROWER	208.86
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	640.00
Total	848.86

## 6. Implementation

Similar to the arrangement under the three ongoing Bank loans to support the NHDP, this project has been prepared and will be implemented by the National Highways Authority of India (NHAI) with extensive outsourcing to the private sector and close coordination with relevant agencies of states in which the project is to be implemented. Within NHAI, the civil works under the project will be the direct responsibility of a Chief General Manager for the eastern section of the East West corridor under the general guidance of the NHAI Board Member (Technical), and managed in the field by three on-site Project Implementation Units (PIU) at Lucknow, Gorakhpur and Muzaffarpur. High-level State Project Coordinating Committees in Uttar Pradesh and Bihar have been in place and functioning for existing NHDP projects to coordinate with NHAI on matters relating to land acquisition, resettlement, utility shifting, tree cutting and re-plantation under the on-going projects. Responsibility for land acquisition, resettlement and financing of all project-related costs will remain with NHAI.

## 7. Sustainability

The NHDP was proposed by the Prime Minister's Taskforce in 1998, and is GOI's top priority infrastructure investment program. A new fuel cess was put in place in 1998/99, 32% of which is allocated to the NHDP (the balance is used on state highways and rural roads). This cess was raised by 50% in 2002 as absorption capacity increased. Between US\$ 450 to 560 million has been passed annually to NHAI for the NHDP from this source, a high and sustained resource transfer that demonstrates GOI commitment to the program.

As traffic volumes increase, the key factor in sustaining project benefits will be satisfactory arrangements to manage and fund the operation and maintenance of the completed NHDP. NHAI is currently negotiating a maintenance funding strategy with the GOI which essentially

places reliance on toll receipts to fund maintenance as well as existing debt servicing. Assuming this is adopted, the issue will be on how best to collect tolls, with NHAI keen to move from the current manual system towards electronic tolling over time. A pilot in this area is expected in next 12-18 months. Furthermore, NHAI is now ready to experiment with new contracting arrangements for corridor management. About 600 km of completed GQ will shortly be tendered using two year term performance based contracts supervised by independent consultants with oversight from NHAI. It is expected that the operation and maintenance of further sections of the NHDP will be outsourced along similar lines as the construction of new sections is completed. These reforms are being supported through technical assistance provided under ongoing Bank supported national highway projects.

## **8. Lessons Learned from Past Operations in the Country/Sector**

The design of the project reflects experience gained on ongoing projects in India, recent Analytical and Advisory services provided by the Bank as well as relevant Implementation Completion Reports and an OED sector review from 2001.

The most important lessons learned from the three ongoing Bank funded projects on the NHDP include the importance of project/site readiness, appropriate package sizing and the focusing of any technical assistance. The level of implementation readiness has been further raised for LMNHP. Ongoing NHAI projects, both Bank and non Bank financed, have demonstrated the additional implementation risk pertaining to the least developed regions of India where relevant local government practices are more slow and law and order more problematic. These additional constraints place a higher premium on pre-construction readiness. Initiation of the land acquisition and RAP implementation process has been further brought forward with NGOs already mobilized six months ahead of the expected time of contract award and a milestone approach adopted for site hand over which is reflected in the bidding documents. The package sizes have been decreased by about 20% in value in comparison with TNHP and GTRIP to increase competition and diversify the risk of poor contractor performance. The Supervision Consultants team also includes skills and experiences in contract dispute resolution.

Lessons have also been learnt on stronger integration of HIV/AIDS concerns into highway projects. GTRIP included some preliminary support towards defining an HIV awareness strategy. ABP moves a step ahead by including contractual clauses for the HIV/AIDS awareness and prevention for construction camps in the civil work contracts. NHAI collaborates with the National AIDS Control Organization for technical advice and anti-AIDS material supplies. Learning from similar operational experience from African Region, this project will include an expanded preventive program to cover other high risk groups such as truckers and sex workers along the project links. It will also include additional road specific road safety awareness campaigns to help bring into effect the GOI's action plan in this field.

The ICR for the Second National Highway Project (1992-2002) emphasized as lessons learned the importance of better project management arrangements, stricter pre-qualification for Joint Ventures to avoid sham arrangements, greater procurement and implementation readiness, improved safeguard management and quicker payment to contractors. These recommendations are being pursued in the detailed preparation of the project.

Lastly, the 2001 Operations Evaluation Department sector review concluded that the Bank should focus on highways, especially the interstate system and that while efforts should be made to encourage private funding, a substantial public funding program was justified.

## 9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
<a href="#">Environmental Assessment (OP/BP/GP 4.01)</a>	[X]	[ ]
Natural Habitats ( <a href="#">OP/BP 4.04</a> )	[ ]	[X]
Pest Management ( <a href="#">OP 4.09</a> )	[ ]	[X]
Cultural Property ( <a href="#">OPN 11.03</a> , being revised as OP 4.11)	[X]	[ ]
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	[X]	[ ]
Indigenous Peoples ( <a href="#">OD 4.20</a> , being revised as OP 4.10)	[ ]	[X]
Forests ( <a href="#">OP/BP 4.36</a> )	[X]	[ ]
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	[ ]	[X]
Projects in Disputed Areas ( <a href="#">OP/BP/GP 7.60</a> )*	[ ]	[X]
Projects on International Waterways ( <a href="#">OP/BP/GP 7.50</a> )	[ ]	[X]

## 10. List of Factual Technical Documents

NHAI	Feasibility Studies for Four Laning of NH28, October to December 2003
NHAI	Detailed Project Reports for Four Laning of NH28, October to December 2003
NHAI	Consolidated resettlement action plan for Lucknow-Ayodhya on NH-28 and Gorakhpur Bypass, February, 2004
NHAI	Consultancy services for independent review and consolidation of environmental and social assessment – Volumes 1-3: Consolidated resettlement action plan, Annexes, Lists of PAPs, February, 2004.
NHAI	Socio-economic Impact of National Highway on Rural Population, Asian Institute of Transport Development, for NHAI, 2003, <a href="http://www.aitd.net">www.aitd.net</a>

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\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

