

CHAPTER IV

ROAD DEVELOPMENT



All roads other than National Highways in the states fall within the jurisdiction of respective state governments. However, to assist the state governments in their road development programme, Central government also provides funds from the

Central Road Fund (CRF) for certain selected state roads under Inter State Connectivity and Economic Importance (ISC & EI) scheme. The Department is also responsible for evolving standards and specifications for roads and bridges in the country besides acting as a repository of technical information on roads and bridges.

4.1.2 The length of National Highways, for which the Government of India is constitutionally responsible is 65,569 km. A list of state wise National Highways is at **Annex-IV**.

4.1.3 The National Highways system suffers from various deficiencies of capacity constraints, pavement crust, geometric and safety features. Improvement of National Highways is undertaken by way of widening and strengthening of existing highways, reconstruction/widening of bridges and constructing bypasses after prioritizing the works on the basis of requirement within available resources. While the government is providing increasing budgetary allocation for projects in the highway sector and has undertaken major up gradation initiatives in high-density corridors, it has not been possible to allocate sufficient funds matching the needs for maintenance of National Highways. The physical programmes of road development and removing the financial bottlenecks need concerted efforts in the form of mobilization of funds from other sources. In-flow of private sector funds is expected to bridge the gap of the demand and supply to certain extent.

Development and Maintenance of National Highways

4.1.4 The government has embarked upon a massive National Highways Development Project (NHDP), the largest highways project ever undertaken in the country. The NHDP is being implemented by National Highways Authority of India.

National Highways Authority of India

4.1.5 The National Highways Authority of India Act, which was enacted



by the Parliament in 1988, provided for the setting up of a central authority for the development, maintenance and management of National Highways vested to it. The Authority (NHAI) became operational in 1995 with the appointment of a full time Chairman and Members.

4.1.6 The Authority consists of a full time Chairman, and not more than five full time Members and four part time Members. They are appointed by the Central government. The full time Members are:

- (i) Member (Administration)
- (ii) Member (Finance) and
- (iii) Members (Technical)

The part time Members are:

- (i) Secretary, Department of Road Transport & Highways
- (ii) Secretary, Department of Expenditure, Ministry of Finance
- (iii) Secretary, Planning Commission and
- (iv) Director General (Road Development), Department of Road



Toll Plaza on Jaipur-Kishangarh Section of NH-8



4.1.7 The Authority started functioning with the appointment of its first Chairman Shri Yogendra Narayan on 10 February 1995.

The mandate of NHAI under the Act is briefly as under:

- (a) Develop, maintain and manage National Highways vested in it by the government.
- (b) Collect fees on National Highways, regulate and control the plying of vehicles on National Highways for its proper management.
- (c) Develop and provide consultancy and construction services in India and abroad and carry on research activities in relation to the development, maintenance and management of Highways or any other facilities thereat.
- (d) Advise the Central government on matters relating to highways.
- (e) Assist on such terms and conditions as may be mutually agreed upon, any state government in the formulation and implementation of schemes for highway development.

NHDP Phase I

4.1.8 National Highways Development Project Phase-I comprises of Golden Quadrilateral (GQ), North-South and East-West (NSEW) Corridors and Port connectivity and other projects. The total length in Phase-I is 7498 km i.e. 5846 km of GQ, 981 km of NSEW Corridors and 671 km of Port connectivity and other projects. Up to 31 December 2005, the GQ has been completed to the extent of 5154 km (88.2%). It is expected that 96 % of the GQ will be completed by June 2006. Only those works, which were awarded late due to delay in finalization of alignment i.e. Allahabad bypass (one contract awarded in June 2004 and the other in November 2004) and the work on terminated contracts, will remain uncompleted beyond June 2006. 797 km of NSEW Corridors (81%) have been completed as on 31 December 2005. In respect of Port connectivity and other projects, 386 km (56%) have been completed as on 31 December 2005. The total completed length of NHDP Phase-I as on 31 December 2005 is 6337 km (84.5%).

NHDP Phase II

4.1.9 National Highways Development Project Phase II mainly





Ahmedabad - Vadodara Expressway

comprises of 6240 km of NSEW Corridors and 596 km of other National Highways projects. At the end of December 2005, 4490 km of NESW Corridors have been completed. It is expected that all the works except the award of 201 km of East West Corridor in West Bengal and 318 km in North South Corridor in Jammu & Kashmir will be delayed because of the re-alignment of East West Corridor in West Bengal and difficulties of terrain and technical complexities in Jammu & Kashmir.

NHDP Phase III

4.1.10 National Highways Development Project Phase III includes National Highways with heavy traffic and connectivity of state capitals, and places of economic and touristic importance. The total length is 10,000 km of National Highways.

4.1.11 Four-laning of 4000 km on BOT basis has been approved by the government on 5 March 2005 at an estimated cost of Rs.22000 crore under NHDP Phase IIIA. Approval for preparation of Detailed Project Reports for NHDP Phase IIIB was also given. Fifteen contracts covering 926 km under NHDP Phase IIIA have been awarded up to December 2005. NHDP Phase IIIA is proposed to be completed by December 2009.



4.1.12 The important indicator of activity at present is award of contracts. During the year 2005, 129 contracts with a length of 5429 km were awarded, which are highest ever since NHDP started.

Special Accelerated Road Development Programme for the North Eastern Region (SARDP-NE)

4.1.13 Special Accelerated Road Development Programme for North Eastern region (SARDP-NE) aims at improving road connectivity to remote places of NE region. It envisages two / four laning of about 3251 km of National Highways and two laning / improvement of about 2500 km of state roads and a length of 1888 km roads of strategic importance. This will also ensure connectivity of 85 district headquarters in the eight North-Eastern states, to the National Highways.

4.1.14 The estimated cost of the proposed project is Rs. 12,123 crore with the budgetary support of Rs. 9952 crore and Rs. 2171 crore is proposed through private sector participation. This programme will be implemented in three phases.

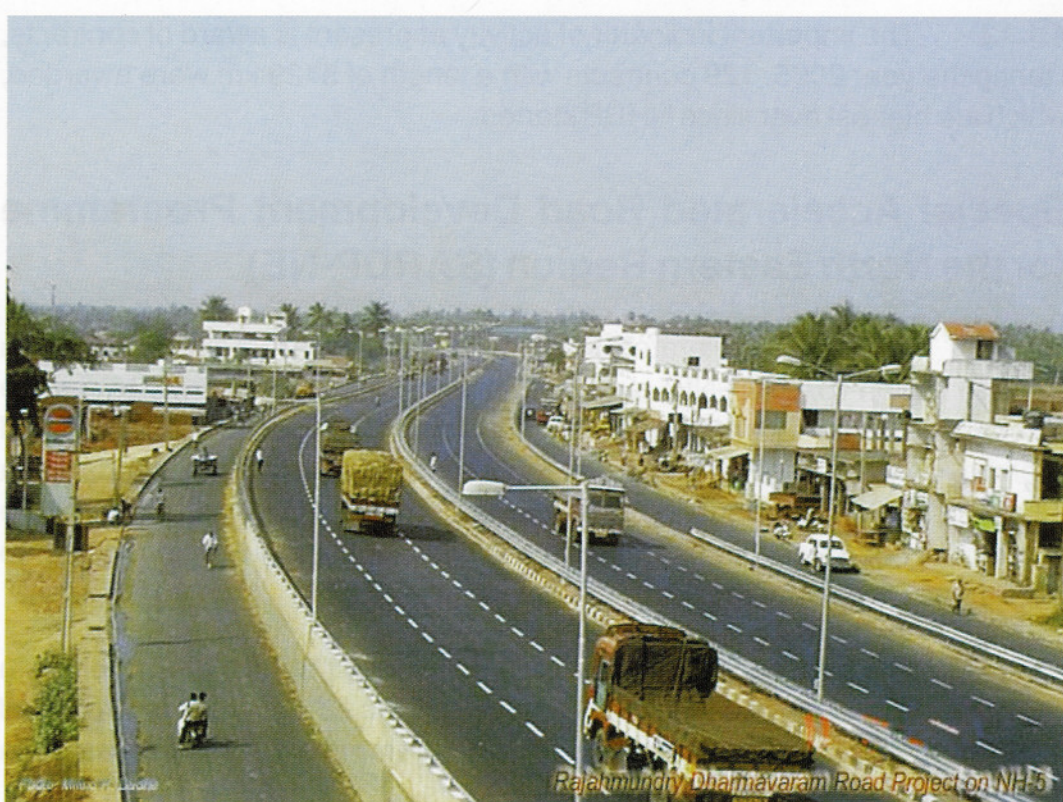
- Phase A consisting of 1110 km of National Highways and 200 km State/ General Staff (GS) Roads at an estimated cost of Rs. 4618 crore.
- Phase B involving improvement of 2141 km National Highways and 2981 km State/ General Staff (GS) Roads at an estimated cost of Rs. 5920 crore.
- Phase C envisaging construction and improvement of 1027 km of state roads at an estimated cost of Rs. 1585 crore.

4.1.15 The government has recently approved implementation of Phase-A and given approval for preparation of Detailed Project Reports (DPRs) of roads in Phase-B.

National Highways entrusted to State PWD and Border Roads Organization

4.1.16 Apart from the National Highways (NHs) under the NHDP, there are about 49322 km of National Highways whose development and maintenance are presently being carried out by the respective PWDs and the BRO. The length of the NHs with National Highways Authority of India (NHAI) will increase with the sanction of works under Phase-III to VII of NHDP and Special Accelerated Road Development Programme for North East (SARDP-NE) Phase-A. During the year 2005-06, in respect of the stretches not





Rajamundry-Dharmavaram Section of NH-5

included under NHDP, as on 31 December 2005, 318 proposals including 55 works under Improvement of Riding Quality Programme (IRQP) aggregating to Rs. 870.51 crore have been sanctioned. 638 km of single lane have been widened to two lanes, and 420 km of two lane road strengthened, in addition to the completion of work of rehabilitation/construction of 65 bridges and improvement of 1842 km length under IRQP. An amount of Rs. 2082.30 crore has been allocated during 2005-06 [This includes allocations to states made from the resources generated through the collection of user charges on bridges (Permanent Bridge Fee Fund - PBFF) for development of National Highways entrusted to state governments and the BRO]. An amount of Rs. 847.14 crore and Rs. 22 crore have been allocated during 2005-06 for maintenance of National Highways entrusted to the state PWDs and the BRO, respectively. **Annex-V** gives state-wise allocation under different schemes on the development and maintenance of National Highways during the year 2005-06.

Sanction under CRF for State Roads

4.1.17 During the current financial year up to 31 December 2005, 510 proposals involving a cost of Rs.1410.06 crore have been sanctioned for improvement of state roads under the CRF.



Sanction under Inter State Connectivity and Economic Importance Scheme

4.1.18 During the year 2005-06 a sum of Rs. 170.59 crore has been earmarked for the state roads under Inter State Connectivity and Economic Importance (ISC&EI) scheme and till 31 December 2005, 49 proposals worth Rs.186.99 crore have been sanctioned.

Constraints

While implementing this project several constraints were encountered which are as follows:

- **Land acquisition :** There has been inordinate delay in acquisition of land in some states mainly due to procedural formalities, court cases and lack of full co-operation from the state governments concerned.
- **Environment and Forest Clearances :** There have been considerable delays in getting the forest clearance both at the Central and state level.
- **Clearances of Railways for ROB designs:** 84 Rail Over Bridges (ROBs) and Rail under Bridges (RUBs) had to be constructed to make the GQ free from level crossing on Railways. Obtaining the clearances/approval from the Railways involves co-ordination with several Departments within Railways and it takes a long time to get the necessary approvals.
- **Shifting of Utilities:** Shifting of utilities of different types e.g. electric lines, water pipelines, sewer lines, telecommunication lines which were to be completed with the assistance of the concerned utility owning agencies took a considerable time.
- **Law and order problems:** In many states, works have been affected due to adverse law and order conditions and activities of anti-social groups. Law and order was a serious issue in the states of Bihar and Jharkhand affecting the progress of works on NH-2 (Delhi-Kolkata Corridor). In addition, the stoppage of works by the local population demanding more additional underpasses/bypasses, flyovers, etc. was also frequent.
- **Poor performance by some contractors:** Performance of some of the contractors has been very poor. Cash flow problem has



been one of the major reasons for poor performance. The termination of such contracts often results in long-drawn litigation and further delays in the completion of works.

ALLOCATION FROM CENTRAL ROAD FUND

4.1.19 An allocation of Rs.9496 crore has been made under the CRF for 2005-06 with the following break-up:

Table 5.1

Allocation from the Central Road Fund

(Rs. in crore)

1	Grant to State Governments and UTs for State roads	1535.36
2	Grant to States & UTs for Roads of Inter-State Connectivity and Economic Importance	170.59
3	National Highways	3269.74
4	Rural Roads	3809.5
5	Railways	710.81
	Total	9496.00

State Roads

4.1.20 The accrual under the CRF to states is further allocated to the various states based on the 60% fuel consumption and 40% geographical area.

4.1.21 The summary of the accruals and release in respect of states/UT roads since the year 2000-01 to 2005-06 is as follows:

Table 5.2

Accruals and Release

Year	2000-01		2001-02		2002-03	
	Accrual	Release	Accrual	Releases	Accrual	Release
Rs. Cr.	985.00	332.0	962.03	300.00	980.00	950.28
Year	2003-04		2004-05		2005-06	
	Accrual	Release	Accrual	Releases	Accrual	Release*
Rs. Cr.	910.76	778.94	868.00	738.36	1535.36	1043.58

* Up to September, 2005





Delhi-Jaipur Section of NH-8

Inter State Connectivity and Economic Importance (ISC&EI) schemes

4.1.22 The schemes of Inter State Connectivity and Economic Importance had been in existence prior to the enactment of CRF Act 2000 where only modest programmes of work were sanctioned with Central loan assistance. The scheme has now been regulated in accordance with the provisions in the Central Road Fund Act, 2000. Under Inter State Connectivity scheme 100% funding (instead of loan) is provided by the Central government. Economic Importance scheme is funded to the extent of 50% by the Central government and the state government.

Sanction under ISC & EI Schemes

4.1.23 The Department, up to December 2005, has accorded in principle approval to 92 proposals worth Rs. 485.71 crore with Central share of Rs.242.86 under Economic Importance scheme and in principle approval for 140 proposals worth Rs. 672.42 crore with Central share of Rs. 669.14 crore under Inter-State Connectivity scheme.



4.1.24 During the current year up to December 2005, 35 proposals involving a cost of Rs.234.28 crore with a Central share of Rs.192.74 crore have been given in principle approval under this scheme.

National Institute for Training of Highway Engineers

Broad Activities:

4.1.25 The broad activities of National Institute for Training of Highway Engineers (NITHE) consist of:

- a) Training of freshly recruited Highway Engineers of Department of Road Transport and Highways.
- b) Conducting Refresher Courses for Senior and Middle Level Engineers.
- c) Short duration technical and management development courses for Senior Level Engineers.
- d) Short duration Orientation courses for NHAI officers
- e) Development of training materials, training modules for domestic and foreign participants.

4.1.26 Since its inception, the NITHE has trained 11,346 Highway Engineers and Administrators involved in road development from India and abroad through 486 training programmes (up to 30 November, 2005). Participants are drawn from Ministry of Shipping, Road Transport and Highways, various state PWDs, Public Sector, Private Sector and NGOs involved in the field of Highway Engineering. Engineers from foreign government departments have participated in NITHE's International, SAARC and Technical Co-operation Scheme of Colombo Plan. It has also compiled a number of manuals useful for the engineers and their organizations.

