

Rural Roads Development in India- Opportunities and Challenges



Functional Classifications of Highways in India

o Primary Roads

- Expressways
- National Highways (NH)

o Secondary Roads

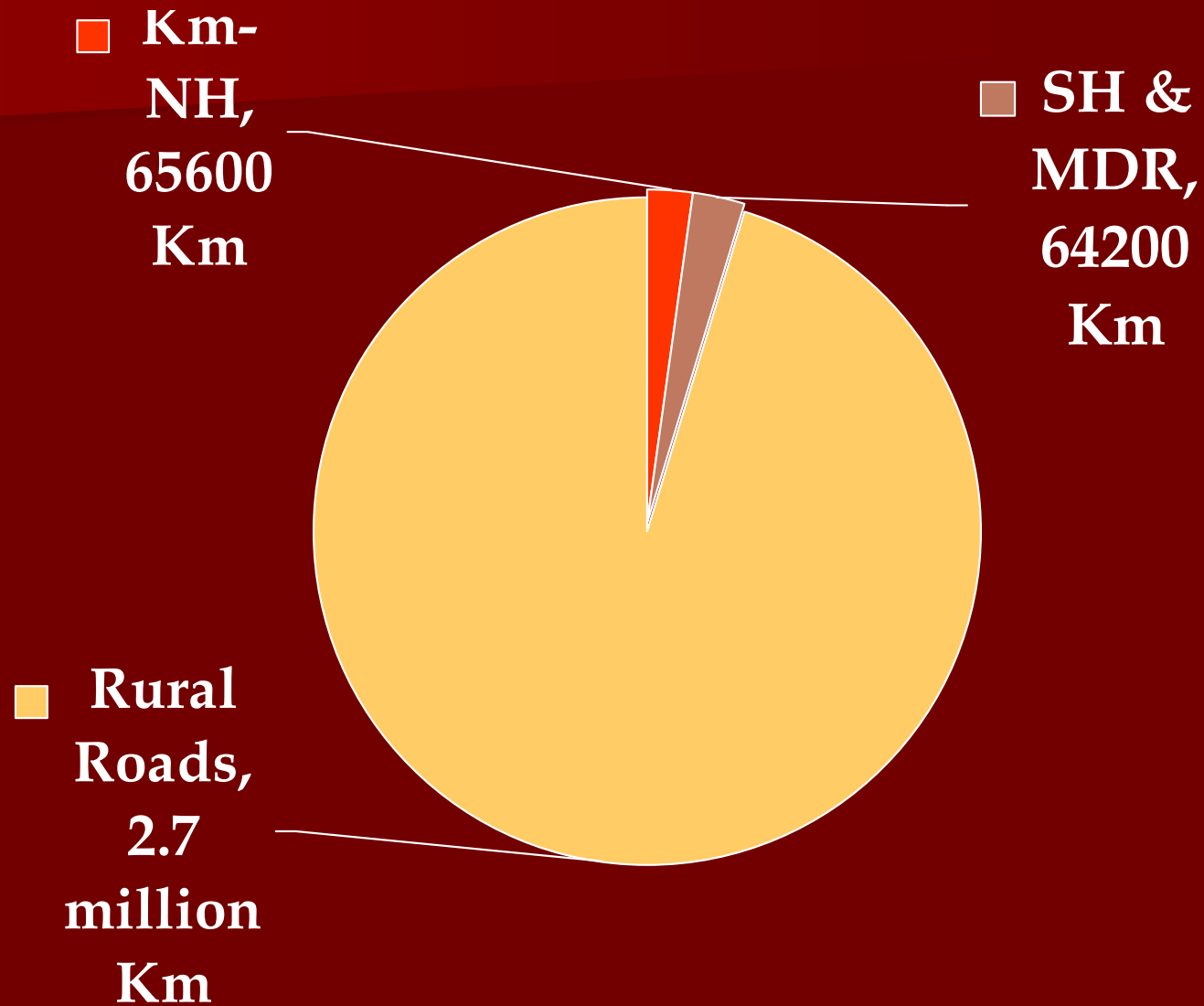
- State Highways (SH)
- Major District Roads (MDR)

o Tertiary Roads

- Other District Roads (ODR)
- Village Roads (VR)

} Rural Roads

Road Network, India



Historical Status of Rural Roads in India.

- India has a Rural Road Network of about 2.70 Million km with Rs.35,000 Crore investment (Rs. 1,80,000 Crore of replacement value).
- Constitutes over 80% of Total Road Network.
- More than 1,000,000 Km are tracks and roads not meeting Technical Standard.
- Rural Roads Sector suffered from lack of systematic Planning, Quality and Sustained Maintenance.
- About 45% of the Habitations still to have All-Weather Road connectivity at the beginning of PMGSY Programme.
- It was a Myth that Rural Roads do not require Planning/ Design/ Quality Assurance.

Objectives and Targets of PMGSY

- ❖ To provide farm to market All-Weather connectivity for all the habitations of 500 and above population (250 and above in case of Hill States, Desert and Tribal Areas)
- ❖ Network Augmentation and Modernization, both have been provided in the programme.
- ❖ New Connectivity being provided to about
 - 60,000 Habitations of 1000+ population
 - 81,000 Habitations of 500+ population
 - 29,000 Habitations of 250+ population.
- ❖ Total cost of New Connectivity is about Rs. 79,000 Crore.
- ❖ Upgradation of about 3,70,000 km Rural Roads at a cost of Rs.53,000 Crore.
- ❖ Total envisaged cost of the project is about Rs.1,32,000 Crore

Sectoral Initiatives under PMGSY

- ★ District Rural Roads Plan and Core Network
- ★ Rural Roads Manual (IRC:SP:20-2002).
- ★ Standard Bidding Document for transparent procurement.
- ★ Book of Specifications and Standard Data Book developed for the rural road sector.
- ★ Maintenance policy developed enabling 5-year contracted maintenance for all PMGSY roads with additional 5-year batch maintenance of PMGSY Through Routes.
- ★ Quality consciousness developed to ensure PMGSY roads conform to high standards. 3-tier Quality Management System enforced.
- ★ Computerized Online Management Monitoring & Accounting System (OMMAS) operationed with full information available at <http://www.pmgys.nic.in>. Complete access at citizen interface.

PMGSY Achievements

(end of June, 06)

■ Proposals cleared	-	32958 Crore
■ Amount Released	-	18143 Crore
■ Length Completed	-	96430 Km
■ Expenditure	-	15146 Crore
■ Habitation benefited	-	27967

Bharat Nirman

- “My Government proposes to undertake a major plan for rebuilding rural India called Bharat Nirman. This will be a time-bound business plan for building rural infrastructure in the areas of irrigation, roads, housing, water supply, electrification and telecommunication connectivity. The programme has been conceptualized as a platform on which the Government would construct its new deal for rural India”.

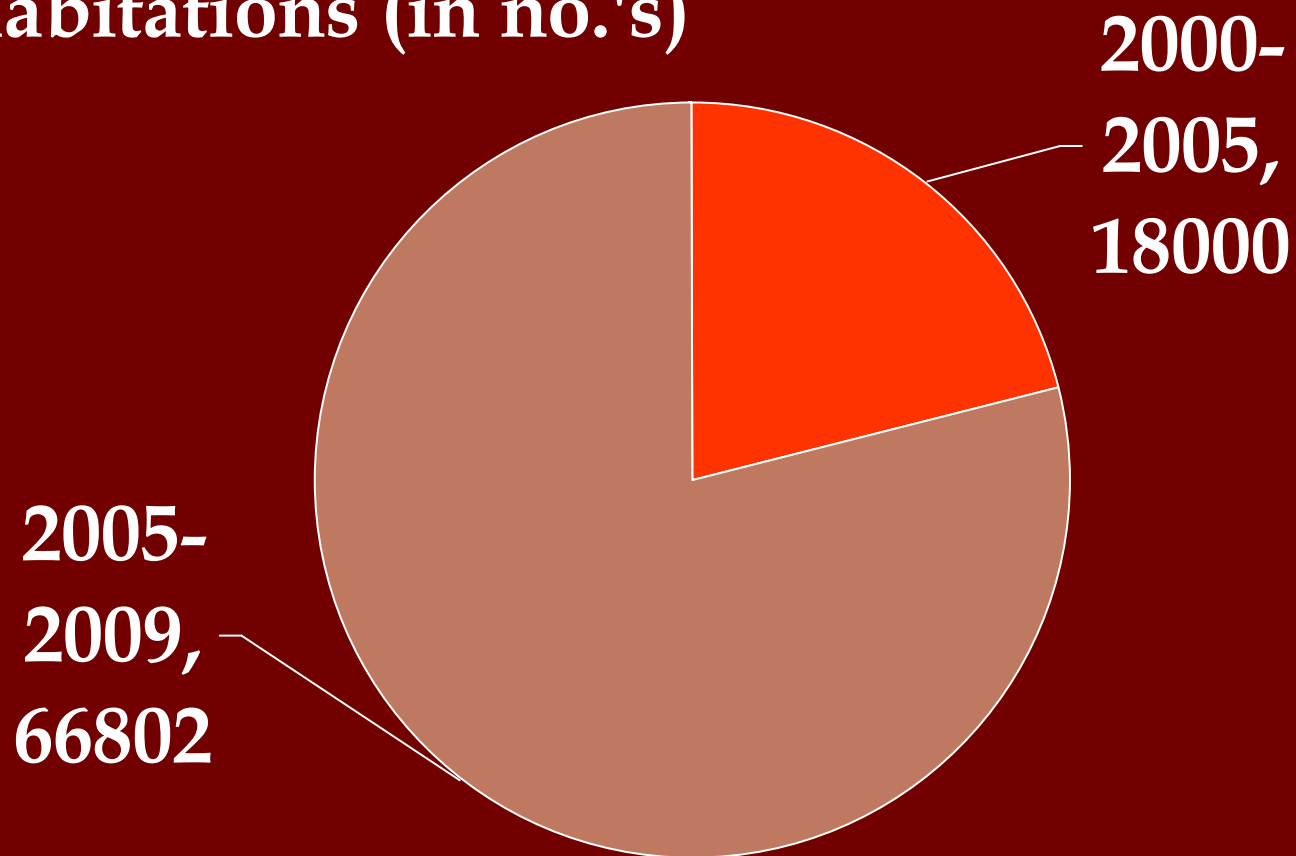
– Address of Hon’ble President of India to Parliament on 25th February, 2005.

PMGSY under Bharat Nirman

- A new deal for Rural India
- PMGSY launched in 2000 seen as popular rural economy multiplier and unleashing growth potential of our villages
- By FY 08-09 aims to provide connectivity to habitations of population 1000+. Eligibility for hilly, tribal and desert areas being 500
- Upgradation of existing Associated Through Routes to ensure full farm to market connectivity.

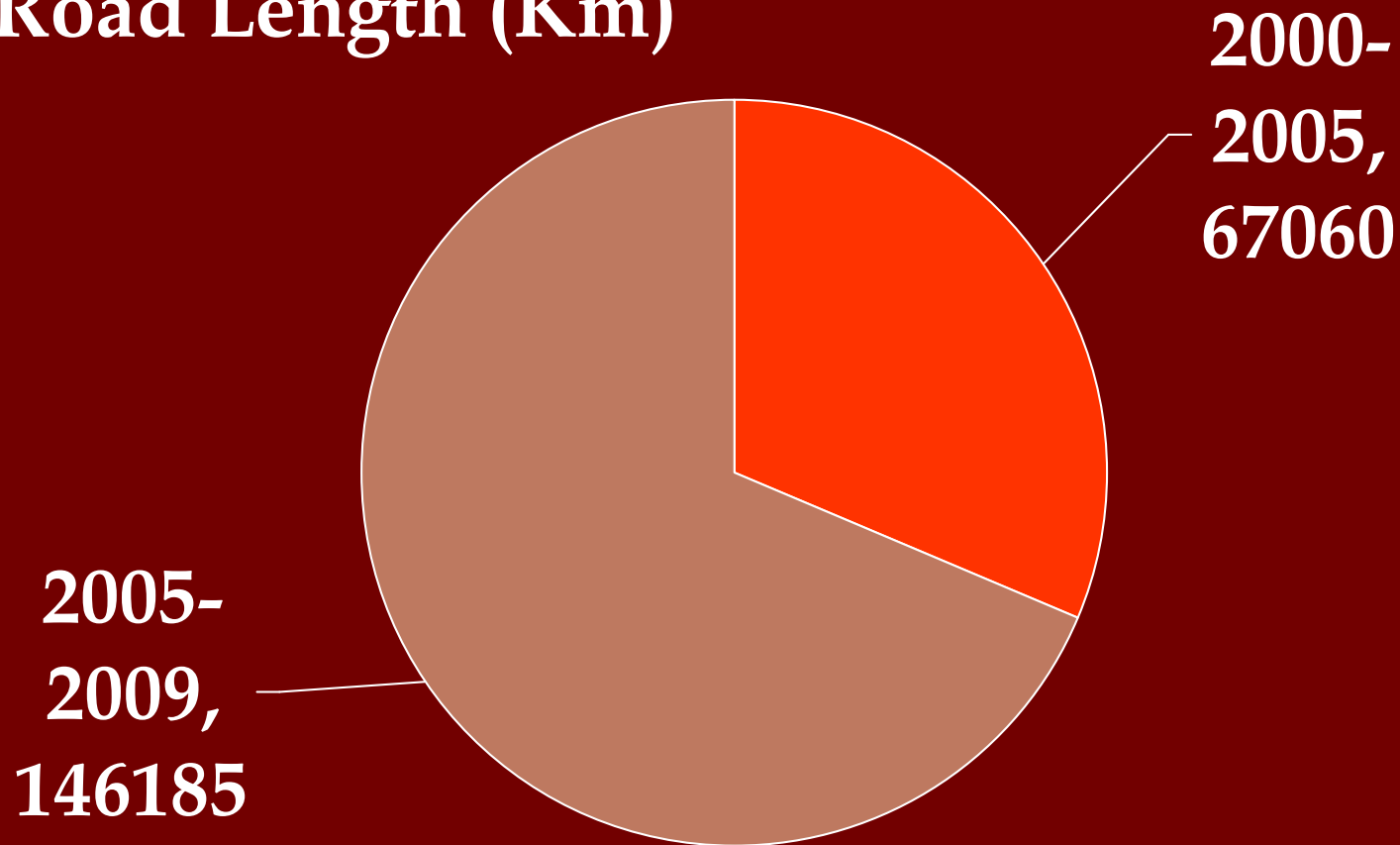
Dimension of Task Ahead

Habitations (in no.'s)



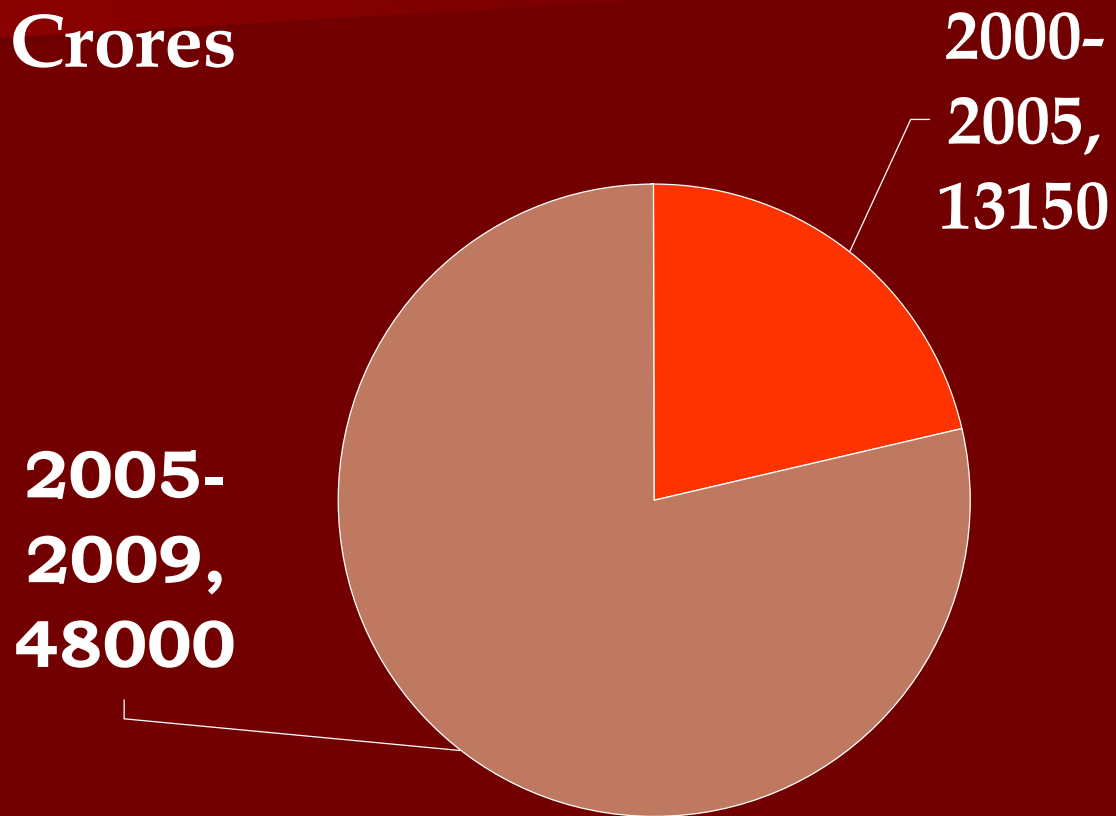
Dimension of Tasks Ahead

Road Length (Km)



Financial Investment

Rs. Crores



Bharat Nirman

Unfolding the opportunities

- **To create Core Network of roads in Rural India.**
- **To build roads meeting prescribed Design, Specifications and Quality parameters.**
- **To address location specific problems and optimally use local resources by Innovation and experimentation.**

.....Contd.

- To upscale Project Management capacity of Implementing Agencies.
- To evolve a framework for community participation in planning and implementation.
- To Institutionalize Community ownership of rural roads.

Challenges

Overcoming Institutional Capacity Constraint.

- Organized Strategy for Planning and Implementation.
- Dedication of manpower at appropriate level.
- Capacity building through Training.
- Use of Modern Management Tools
- Commitment to professionalism.
- Selective Outsourcing of activities.

Capacity Building of Contractors

- **Appropriate Provisions in the Procurement Process.**
- **Training of Contractors' Engineers and Technicians.**
- **Encouraging Equipment Banking System**

Cost Optimization

- Insistence on full scale investigation.
- Adoption of need based designs.
- Practicing alternate technologies such as soil stabilization.
- Use of locally available materials.
- Use of low end machinery and appropriate technology.

Ensuring Quality Product

- Creation of Quality Consciousness among Engineers and Contractors.
- Development of sustainable Quality Control System.
- Strengthening of Quality Control divisions.
- Encouraging Public participation.
- Capacity building for Quality Assurance.
- Third Party Quality Audit.
- Citizen Audit of Rural Roads.

Upkeep and Maintenance of the Assets

- Adoption of Asset Management System.
- Insistence on Preventive Maintenance.
- Creation of dedicated Funding.
- Adoption of Zonal Maintenance Management System.
- Involvement of Community in Maintenance Management.