## India's Achievements in Environmentally Sustainable Transport

Focusing on PMGSY and Alignment with Aichi Goals

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### Overview of India's Transport System

- India is home to one of the world's largest and most diverse transport networks.
- \* A key challenge: bridging the gap between urban and rural infrastructure.
- India is committed to reducing its environmental impact while improving connectivity and accessibility.
- India's Focus on Sustainable Transport
- Alignment with regional and global goals, including the Aichi Targets.
- Enhancing rural mobility while ensuring environmental sustainability.

### **PMGSY Overview**

- Pradhan Mantri Gram Sadak Yojana (PMGSY): A flagship scheme launched in 2000.
- Objective: To provide all-weather road connectivity to unconnected habitations in rural India. Later on various other vertical of PMGSY launched to strengthen and widen important rural Through Routes to connect them to various facilities viz. School, hospital, Agriculture Markets and other rural growth centres
- The initiative is crucial for improving transport access and fostering economic development in rural areas
- Key Goals of PMGSY:
- Enhance rural connectivity
- Support economic growth by improving market access for rural communities
- Improve mobility and safety for all, especially marginalized populations

### **Achievements Under PMGSY**

- Road Connectivity Expansion
- As on 11.12.24, over 7,70,000 km of rural roads constructed under PMGSY, connecting approximately 1,61,000 rural habitations.
- A significant increase in rural road density, contributing to better access to education, healthcare, and markets.
- Environmental Sustainability Initiatives -
- Use of green technologies in road construction, such as cold mix technology recycled materials, Jute, Coir, cement/lime stablization and Full Depth Reclamation(FDR).
- Adoption of eco-friendly construction practices to reduce environmental impact.
- Improved Socio-Economic Conditions
- Increased rural incomes due to improved access to markets and business opportunities.
- Better social integration through improved mobility for rural populations.

### PMGSY and the Aichi Targets

- Sustainable Management of Natural Resources:
- PMGSY projects include measures to avoid deforestation and protect natural habitats by conducting environmental impact assessments. Also MoU has been signed with Provincial Govts. to plant fruit bearing trees along PMGSY roads.
- \* Adoption of eco-friendly road-building techniques that reduce the carbon footprint.
- Protection of Ecosystems: PMGSY focuses on minimizing environmental damage through better planning and environmental safeguards.
- Use of bio-engineering techniques for slope stabilization and river crossings, promoting ecosystem resilience.
- \* Reducing Pressures on Ecosystems: The introduction of alternative materials in road construction (such as fly ash and plastic waste) helps minimize the depletion of natural resources and promotes circular economy principles.
- Protected Areas: Roads built under PMGSY are designed to avoid or minimize impact on protected areas and sensitive ecosystems, ensuring that biodiversity is maintained.

# Challenges and Solutions in Rural Transport Development

- Balancing infrastructure development with environmental concerns.
- Addressing local biodiversity and ecosystem preservation needs. Ensuring that rural roads contribute to sustainable, low-emission transport networks.
- Solutions and Mitigation Measures: Rigorous environmental assessments for each project. Incorporation of green infrastructure practices in design and execution.
- Coordination with environmental agencies to ensure compliance with biodiversity preservation laws

## Alignment with the EST Forum Goals

- Reduction of Environmental Impact
- PMGSY's adoption of green technologies and sustainable practices aligns with the goal
  of reducing environmental pollution and promoting low-carbon transport systems in
  the region.
- Sustainable Mobility and Access: the development of rural transport infrastructure under PMGSY directly contributes to the EST Forum's goals of enhancing sustainable mobility, particularly in rural and underserved areas.
- Collaboration and Knowledge Sharing
- India's PMGSY serves as a model for other nations in the region, showing how largescale infrastructure development can be implemented with environmental safeguards and sustainability in mind.

### Future Plans and Initiatives

- Continue expanding rural road networks, with a focus on climate-resilient infrastructure.
- Emphasis on green mobility solutions, such as electric vehicles (EVs) and energy-efficient transport options, in rural areas.
- Integration with National and Global Initiatives: PMGSY projects are well aligned with UN Sustainable Development Goals (SDGs).

### Conclusion

- PMGSY has made significant strides in enhancing rural connectivity and supporting sustainable transport development.
- By integrating environmental safeguards, PMGSY contributes to India's broader goals of biodiversity preservation and sustainable development, aligned with the Aichi Targets.
- Commitment to Continued Progress: India remains committed to expanding and improving its transport infrastructure while ensuring that environmental sustainability remains a priority.
- Let us continue collaborating across borders and sharing knowledge to create sustainable, inclusive transport systems for the future.

## Thank You