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on

New Technologies and Innovations in Rural Roads

24-26 May 2022 Pragati Maidan, New Delhi, India



Organising Partners







Vision

Pradhan Mantri Gram Sadak Yojana (PMGSY), i.e., Prime Minister's Rural Roads Scheme was initially launched in 2000 to connect rural habitations across the country. Later on, important Through Routes and Major Rural Links have also been co-opted under this scheme. The scheme has focused on evidence-based planning and selection of roads, quality of construction and emphasis on maintenance.

PMGSY has been a pioneer in the adoption of new and green technologies in construction of roads. New Technology Vision was launched in 2013. As a result of which, more than 1,00,000 km roads have been undertaken using new technologies.

Prior to this conference, a New Technology Vision 2022 is being launched, which aims to maximize the use of new and green technologies and use of sustainable and local materials in construction of rural roads and bridges. It envisions that adoption of these technologies will not only result in cost economy but will also reduce carbon footprint, mining of natural resources and environment degradation in construction of rural roads and bridges.

Pradhan Mantri Gram Sadak Yojana

Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched in the year 2000 to provide all-weather road connectivity to unconnected habitations of population size 500+ in plain areas and 250+ in hills and other difficult areas. In 2013, the Government widened the ambit of the programme and launched PMGSY-II to upgrade 50,000 km of the existing rural road network. In the year 2019, another intervention PMGSY-III was launched for the consolidation of 1,25,000 km Through Routes and Major Rural Links

connecting habitations to important social and economic infrastructure. Additionally, 10,000 km road length has been sanctioned for inaccessible and backwards areas for their socio-economic development.

A total of 7,88,273 km road length has been sanctioned till



March'2022 under the scheme since its inception with an outlay of $\ref{3}$,50,109 crore (US\$ 46 billion), out of which 7,04,738 km has already been completed with an investment of $\ref{2}$,75,895 crore (US\$ 36 billion). A total of 1,61,875 unconnected habitations have so far been provided with an all-weather road connectivity under PMGSY.

The scheme has emphasised on use of new and green technology in construction of rural roads. Technology Vision 2013 for PMGSY mandated construction of minimum 15% road length using new technology and locally available materials. The objective was to achieve economy and speed in construction of roads, reduce carbon emission and environment degradation, and provide sustainable roads with reduced maintenance cost.

More than 100,000 Km road length has been approved for construction using new and green technologies, against which more than 66,000 km has already been completed. During the last year alone, a total of 19,000 km road length was approved under new and green technologies, which is more than 40% of the total road length approved in the year. Major technologies being used are waste plastics, cold mix, stabilization using chemical or commercial stabilizers, cell-filled concrete, paneled cement concrete, etc. Recently, Full Depth Reclamation (FDR) is being adopted in a major way to achieve cost economy and reduction in carbon footprint. PMGSY has focused on innovations in management of rural roads. A systematic approach is being adopted for prioritization of roads for construction as well as maintenance. Use of mobile application for quality related inspections and for registration of public grievances, electronic Maintenance of Rural Roads under PMGSY (eMARG) for maintenance monitoring, web based overall monitoring are some of the innovative practices adopted in PMGSY. Need based research projects includes evaluation of roads constructed using new and green technologies are assigned to premier technical institutions.

With an objective to deliberate on ways to strengthen and adopt more such emerging technologies, new materials, and adoption of established technologies, though beneficial but yet not prevalent in the Indian context, an International Conference on 'New Technologies and Innovations in Rural Roads' along with technical exhibition is being organized from 24 to 26 May, 2022 at New Delhi, India. The conference is conducted through hybrid mode (both online and offline). This program will provide insight for

materials and maintenance management of low volume roads. Delebrations will be useful to engineers, field implementers, construction agencies, academicians, a d m i n i s t r a t o r s , consultants and other s t a k e h o l d e r s engaged in the management of rural roads.

innovations and use of new technologies, new

Conference Theme

1. Resilient & Sustainable Rural Roads Infrastructure - Lowering the Carbon Footprint

- Covering all issues related to resource efficiency new materials (marginal/innovative/alternate) and technologies - their pilot use, mainstreaming, challenges and promoting green growth
- Technologies and practices to enhance resilience of rural roads and bridges including disaster risk management across life-cycle management
- Challenges & solutions of design & construction of rural roads & bridges in hilly terrain/cyclone prone/snowbound areas including cost-effectiveness
- Design of sustainable Rural Roads (Low Volume Roads)
- Low cost surfacing for Rural Roads

2.Transforming Rural Economy through Access – Enhancing Integration & Inclusivity

- Enhancing efficiency by linking roads to agriculture, commerce and services
- Rural Transport Services
- Community participation in selection, route choice, quality monitoring of rural roads, formation of micro-enterprises, role of women, creation of jobs and alignment with rural employment programs

3. Management and Maintenance of Rural Roads – Effective Governance Framework

- Asset Management of Low Volume Rural Roads
- Innovations in Maintenance & Rehabilitation Strategies for Rural Roads
- Data Driven Planning & Implementation Use of eMARG, GIS, OMMAS etc.
- International Best Practices in Management of Rural Roads
- Road ahead: facing the future including innovations in financing

Knowledge Partners

S.No	Institute	S.No	Institute
1	CSIR-Central Road Research Institute (CRRI)-New Delhi	6	Indian Institute of Technology (IIT) BHU- Varanasi
2	Indian Institute of Technology (IIT) Madras- Chennai	7	Indian Institute of Technology (IIT) Hyderabad
3	Indian Institute of Technology (IIT) Kharagpur	8	Indian Institute of Technology (IIT) Tirupati
4	Indian Institute of Technology (IIT) Bhubaneswar	9	Indian Institute of Technology (NIT) Warangal
5	Indian Institute of Technology (IIT) Roorkee	10	Sardar Vallabhbhai National Institute of Technology (SVNIT) Surat

Technical Exhibition

The conference will provide a platform to showcase the latest technologies, new materials, equipment, road construction machinery, road safety materials, automatic traffic counters cum classifiers, quality control equipment related to rural road construction, maintenance and asset management.

Participants

Technical Institutions, Research Institutions, Government Officials, Road Construction Agencies, Consultants, Technology Experts, Equipment Manufacturers, etc.

Conference Fee

Registration fee payable by the participant for participation in person is INR ₹4000 + 18% GST (INR ₹4720). For registration kindly visit the website www.pmgsy.nic.in

Virtual participation (online)- no fee required only registration through______link is to be done by the participant, after validation from NRIDA/MoRD the conference link will be shared with applicant.

International Conference on New Technologies and Innovations in Rural Roads

Payments

Payment Details: The payment can be made through RTGS / NEFT / Demand draft. For offline payments Demand Draft shall be drawn in favour of the "Secretary General, Indian Roads Congress" payable at New Delhi. The bank details for online payment is as follows:

Name of Bank: Canara Bank

Bank Payee Name: Indian Roads Congress, IRC Account No.: 90092140000352

Branch and Address: Delhi Tamil Sangam Building, R. K. Puram,

New Delhi, 110022

IFSC Code: CNRB0019009

MICR: 110015393

Swift code: CBRBINBBDFS IRC PAN No: AAATI3600C IRC TAN No: DELI04517C

GSTIN/Temporary ID: 07AAATI3600C1ZD

Payment can also be made through www.pmgsy.nic.in

All registration payment details shall be sent to mail ID: CONFERENCE.NRIDA@GMAIL.COM



International Conference on New Technologies and Innovations in Rural Roads