







Technical Committee A.4

Rural Roads Systems and Accessibility to Rural Areas



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Presentation Highlights

- Brief Summary of TC A.4 Activities
- Focus on Working Group 2 - Sustainability of Maintenance
- Key Findings and Conclusions



A.4 Technical Committee

- Committee divided into 3 working groups (WG):
 - WG 1 Accessibility and planning of the development of rural roads
 - WG 2 Sustainable maintenance of rural roads
 - WG 3 Involvement of local community in rural roads
- Each WG prepared a report on their findings
- Meetings held in Paris (France), Cancun (Mexico), Cluj-Napoca (Romania), Milan (Italy), Bergen (Norway)
- 2 international seminars:
 - Hyderabad, India
 - Santa Cruz, Bolivia



TC A.4 WG 2

Sustainability of Maintenance

Objectives:

- Provide a useful tool on the best practices of sustainable maintenance
- Highlight the importance of maintaining rural roads, including their socio-economic benefits
- Locate various operational methods for maintenance practices
- Identify obstacles and potential solutions for the funding of rural roads in developing countries



TC A.4 WG 2

Sustainability of Maintenance

- Prepared a *Guide on the Best Practices for the Sustainable Maintenance of Rural Roads in Developing Countries*
- Based on literature review, information gathered through research, seminars held in India and Bolivia, technical meetings and the expertise of the Technical Committee members
- Particular focus on Asia, Africa and South America
- Purposefully avoided technical aspect of maintenance, not a guide on maintenance practices



TC A.4 WG 2

Sustainability of Maintenance

Importance of rural roads maintenance

- Usually last to be accounted for transportation network
- Play a crucial road in economic and social development
- Link rural communities to education, health services and market

Maintenance of rural roads is critical to ensure adequate access and mobility to rural populations

Agencies in charge of rural road maintenance have difficulty developing effective engineering solutions to address the functional requirements of all-weather access and selection low-cost solutions to build and maintain an extensive network



TC A.4 WG2

Sustainability of Maintenance

- Economic benefits of the positive impact of rural roads investments in poor countries have been evaluated in recent studies
 - Asian and African countries - close relationship demonstrated between extent of road network and expenditures on roads with income growth
 - India - expenditures on rural roads presented the most positive impact on rural poverty reduction and income growth
 - Pakistan and Morocco - presence of all-season road associated with higher school enrollment rates, improvement in education quality, higher use of health services



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Sustainability of Maintenance

KEY ISSUES

- Lack of Funds, Financial System and Procurement Process
 - Clearly identified as roots of the problem
 - On-going problem
- Financing Methods
 - Maintenance funds (road funds) created in several countries
 - Financing procured by users
- Delivery of maintenance
 - Community involvement is key
 - Micro-enterprises model



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Sustainability of Maintenance

MAIN CONCLUSIONS

- Rural roads play a crucial role in the economic and social development of societies therefore rural road maintenance is critical to ensure adequate access and mobility to rural population
- Necessary that governments facing maintenance road problems adopt viable (technical and financial) solutions that contribute to providing sustainability
- Recent studies have evaluated the positive impact of rural roads investment on development in poor countries . These studies show, without a doubt, that one of the best investment for a country is road maintenance sustainability.



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Sustainability of Maintenance

CONCLUSIONS

- Recent studies identify the nature of various social benefits, how they can be measured using indicators and how they can be included in the appraisal process. However, the management process of rural roads needs improvement
- Government's support is required to avoid regional inequalities in economic development
- For developing countries, adequate funding and administrative decentralization are not enough. Fiscal decentralization is needed, in addition to grants from the central government
- An adequate and stable source of funding also needs to be established for investments made following an appropriate set of standards

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Sustainability of Maintenance

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