



UNIVERSITY OF  
BIRMINGHAM



INTERNATIONAL ROAD FEDERATION  
FEDERATION ROUTIERE INTERNATIONALE

# **RURAL ROADS FOR DEVELOPMENT**

**09-13 SEPTEMBER 2019**

University of Birmingham  
Edgbaston, Birmingham. B15 2TT  
United Kingdom

**Day 1 (September 9<sup>th</sup>)**  
**Rural Roads for Development**

**Session**

0830 - 0900		Registration
0900 - 0945	1	<b>Introduction and welcome to course</b> Dr Michael Burrow, University of Birmingham
0945 - 1100	2	<b>Rural Roads research at the University of Birmingham</b> Dr Michael Burrow, University of Birmingham Dr Gurmel Ghataora, University of Birmingham
1100 - 1130		Break: Tea/Coffee
1130 - 1230	3	<b>Including the Social Benefits of Rural Roads in Investment Appraisals</b> John Hine, formerly of TRL Ltd and the World Bank
1230 - 1330		Lunch
1330 - 1530	4	<b>The role &amp; Importance of Planning and Prioritisation</b> John Hine, formerly of TRL Ltd and the World Bank
1530 - 1600		Break: Tea/Coffee
1600 - 1730	5	<b>The Rural Transport System: Introducing and planning transport services</b> John Hine, formerly of TRL Ltd and the World Bank
1900- 2100		Module Dinner

**Additional activities:**  
Module Dinner

**Day 2 (September 10<sup>th</sup>)****Design**

	<b>Session</b>	
0855-0900	1	<b>Introduction to Day 2</b> Dr Gurmel Ghataora, University of Birmingham
0900-1030	2	<b>Introduction to Soil Mechanics and Geotechnical Engineering for Rural Roads</b> Dr Gurmel Ghataora, University of Birmingham
1030-1100		Break: Tea/Coffee
1100-1230	3	<b>Site Investigation, Ground improvement and Pavement Design for Rural Roads</b> Dr Gurmel Ghataora, University of Birmingham
1230-1330		Lunch
1330-1500	4	<b>Climate resilience in Rural Roads Construction and Maintenance</b> Dr Gurmel Ghataora, University of Birmingham
1500-1530		Break: Tea/Coffee
1530-1700	5	<b>Visit to the Civil Engineering Laboratories</b>

**Additional activities:**  
Module Photograph

**Day 3 (September 11<sup>th</sup>)****Management**

	<b>Session</b>	
0855-0900	1	<b>Introduction to Day 3</b> Dr Michael Burrow
0900-1030	2	<b>Decision making in Rural Road Asset Management</b> Dr Michael Burrow, University of Birmingham
1030-1100		Tea/Coffee
1100-1300	3	<b>Rural Road Management in India: Significant Experiences</b> Dr Ashok Kumar, The World Bank
1300-1345		Lunch
1345-1530	4	<b>Road Safety</b> <i>TBC</i>
1530-1600		Tea/Coffee
1600-1730	5	<b>Rural Road Management in India: Significant Experiences</b> Alka Upadhyaya, Joint Secretary - Ministry of Rural Development, Government of India

Day 4 (September 12<sup>th</sup>)

Sustainable Rural Road Maintenance Management

		<b>Session</b>
0855-0900	1	<b>Introduction to Day 4</b> Dr Gurmel Ghataora, University of Birmingham
0900-1030	2	<b>Rural Road Safety Workshop</b> Dr Ashok Kumar, World Bank Road Safety Expert
1030-1100		Break: Tea/Coffee
1100 -1230	3	<b>Developing Sustainable Low Volume Rural Road Management: Principles</b> Rob Petts, Intech Associates
1230-1330		Lunch
1330-1500	4	<b>Developing Sustainable Low Volume Rural Road Management: Practice Including Intermediate Technology Approaches</b> Rob Petts, Intech Associates
1500-1530		Break: Tea/Coffee
1530-1700	5	<b>Recent Developments in the uptake of Intermediate Technology</b> Rob Petts, Intech Associates

**Day 5 (September 13<sup>th</sup>):**

**Recent Developments in Rural Roads**

	<b>Session</b>	
0855–0900	1	<b>Introduction to Day 5</b> Dr Michael Burrow, University of Birmingham
0900-1030	2	<b>Rural Roads for Development: A Socio-Economic Ex-Post Impact study from Cambodia and Laos</b> Dr Reiner Koblo, KfW
1030-1100		Break: Tea/Coffee
1100-1230	3	<b>Rural Roads for Development: Case Studies from around the World</b> Dr Reiner Koblo, KfW
1230-1245	4	<b>Presentation of certificates &amp; close</b>
1245 -1400		Lunch

## SPEAKERS



**Dr Michael Burrow** is a senior lecturer in the School of Civil Engineering. He leads the UoB's world renowned team of road specialists which developed a suite of cutting edge road asset management decision support tools the products of which are used world-wide and is a Deputy Director of Education in the School of Engineering (Civil Engineering). His research focus is associated with pro-poor sustainable infrastructure asset design and management and he is currently actively involved in research projects worth approximately £10 million. Amongst these he currently leads three large road management research projects; one funded by the Ethiopian Roads Authority is associated with improving the sustainability of Ethiopia's national roads; the second is a DFID funded project through RECAP which is improving rural road asset management in Sub-Saharan Africa. The third project, funded by the TSB, concerns the development of automated means of assessing at traffic speeds local road condition. Dr Burrow publishes his research widely and has more than 80 peer reviewed publications in the area of infrastructure design and management. Dr Burrow's teaching focus mirrors his research and his specialisation is that of road asset management. Dr Burrow has worked with partners from over 23 countries worldwide and his links with industry internationally. He has a number of external appointments including acting as the Chairman of Highway Management Services Ltd (HMS), which provides highway maintenance management software and consultancy to road agencies worldwide.

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**Dr Gurmel S Ghataora** is a senior lecturer in the School of Civil Engineering at the University of Birmingham. Prior to commencing his work at the University in 1990 he worked with both a ground investigation contractor and Arup. Dr Ghataora has over 42 years of experience in civil engineering. In addition to Dr Ghataora's teaching duties, which are mainly in the areas of Soil Mechanics and Geotechnical Engineering at both Undergraduate and Masters Level, he is Head of Postgraduate Admissions for all the taught programmes in the School of Civil Engineering. He also supervises PhD students. His areas of interests include, soil erosion, ground improvement, use of marginal materials for roads and railways, and utilization secondary materials in concrete. Dr Ghataora has been a principal investigator and co-investigator on both UK and overseas projects, funded by government organisations and industry, worth over £1.8 million.

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**Mr John Hine** has over 40 years' experience of working on transport problems of developing countries specialising in the fields of rural and national transport planning, road appraisal and freight transport. He has worked in 27 African and Asian countries and is an author of over 50 papers and research reports. He has been an external examiner and supervisor of 10 PhD and MPhil candidates. Over the last two years John has been working as an independent consultant. He has just completed a report for the SSATP/World Bank on the planning and prioritisation of rural transport infrastructure and services. John worked for four years (2005-2009) with the World Bank working as the Thematic Group Leader for Rural Transport in the Transport Anchor Unit. He also spent 29 years with the Transport Research Laboratory, TRL, undertaking a wide range of research and consultancy assignments, with long term postings in Ghana, Pakistan and Indonesia. In addition he has also worked as a Transport Economist for the Ethiopian Roads Authority (2002-2005) and with the Ministry of Transport in Tanzania (2009-2012).



**Dr Ashok Kumar** is working as senior highway engineer at the World Bank office, India. He has 35 years of professional experience in rural roads and M.Sc and Ph.D from the University of Birmingham. His professional experience includes (i) international assignments in countries including Afghanistan, China, Mongolia, Indonesia, Nepal, Philippines, and Sri Lanka; and (ii) preparation and supervision of road projects covering about 25,000km roads. His experience also include asset management and maintenance, development of road sector policies, modernization of road agencies, road sector reforms, capacity building and knowledge sharing, contract management, and working on challenging assignments in low capacity regions. During his research carrier of 22 years at the Central Road Research Institute, India he has successfully completed a number of research projects in the area of rural roads. As part of his Ph. D program and research work, he has developed a computerized model to generate "optimized rural road network plans" The model is widely used to develop core network plans for rural roads in India to focus investments on priority links and achieve greater transparency in resource allocation.



**Mr Robert Petts** started his career as a mechanical engineering trainee and then graduated as a civil engineer. He qualified as a Chartered Civil, Highways and Agricultural Engineer and has over 40 years of experience of running civil engineering projects in over 30 countries in the African, Asian, Middle Eastern, Pacific and European regions. He specialises in the management and maintenance of roads including the development of technologies; encompassing paving, equipment, intermediate and local resource based methods, institutional development, technical and economic feasibility, management systems, private sector development and training. He has served as a member of a number of bodies including, the World Road Association (PIARC) Committees (C3, C20 and TC2.5: Committee Secretary) on Rural Roads & Accessibility, the Appropriate Development Panel and The International Development Policy and Practice Panel of the UK Institution of Civil Engineers, Rural Transport adviser for the Global Transport Knowledge Partnership (IRF), and is an Officer of the Gold Medal of Sahametrei (Cambodia Government Adviser). He is an Honorary Senior Research Fellow for the University of Birmingham.



**Dr Reiner Koblo** is Senior Project Manager at KfW Development Bank, Frankfurt. He has a 20 years working experience as transport planner and transport economist. Since about 10 years he is working in the field of development cooperation. This encompasses 2 years of technical cooperation at GIZ, Germany, and eight years of financial cooperation at KfW Development Bank. He worked in Asia, Africa, Southeast Europe and Central America. At KfW he was about 6 years as transport sector economist responsible for the implementation of development policy objectives in transport projects of the bank, updating of methodologies and ex-post evaluations of development cooperation projects. Since 7 years he is also senior project manager of rural roads projects in Cambodia.