

Curriculum Vitae of Dr. B.KANAGA DURAI



1. Name : Dr. B. KANAGADURAI

2. Designation & Complete Address : Chief Scientist & Head
Planning, Monitoring and Evaluation
Division
CSIR- Central Road Research Institute
Mathura Road, New Delhi -110 025.
durai.crrri@nic.in
Ph. 011-26922884 (O) 26917004 (R)

3. Area of Interest: Transportation Planning and Economics, Rural Roads, Cost-Benefit Analysis, GIS Applications, Social Impact Assessment, Project Management and R&D Business Development & Management.

4. Educational Qualifications:

Degree	University	Year	Specialisation	Grade\division
M.A. (Economics)	Presidency College University of Madras, Chennai	1982	Economics	"A" Grade 5.36/6.00 OGPA
M.Plan. (Regional Planning)	Indian Institute of Technology Kharagpur	1985	Transportation Planning	7.67/10.00 CGPA
Ph.D	Indian Institute of Technology Delhi	2005	Transportation Planning & Economics	

5. Professional Experience:

Name of organisation	Designation	Period
CSIR-Central Road Research Institute, New Delhi	Chief Scientist	January 2013 till date
CSIR-Central Road Research Institute, New Delhi	Sr. Principal Scientist	January 2007 to January 2013
CSIR-Central Road Research Institute, New Delhi	Scientist E-II	January 2002 to January 2007
CSIR-Central Road Research Institute, New Delhi	Scientist E-I	January 1997 to January 2002
CSIR-Central Road Research Institute, New Delhi	Scientist C	January 1991 to January 1997
CSIR-Central Road Research Institute, New Delhi	Scientist B	January 1986 to January 1991
Indian Institute of Technology, Kharagpur	Senior Research Assistant	November 1985 to December 1986

Academic/Teaching Experience : Faculty (since 2010) in Academy of Scientific and Innovative Research (AcSIR) (An Institute of National Importance enacted under an Act of Parliament) (Currently, Coordinator AcSIR-CRRI)

Teaching Subjects for M.Tech/Ph.D (Transportation Engineering):

- (i) Research Methodology (2 credit course)
- (ii) Economic Evaluation of Highway Projects (3 credit course)

6. Membership of Professional Bodies

- Institute of Town Planners, India – Fellow
- Indian Roads Congress – Life Member
- Regional Science Association, India – Member
- Institute of Urban Transport – Member

7. Achievements:

a. Membership of National Committees:

- i) Task Force Member of FICCI – TIFAC Task Force on ‘Road Transportation’ 1996.
- ii) Member PMGSY - Rural Road Planning Committee, 2001.
- iii) Core Member – Committee to Advice C-DAC, Pune for development of computer software (OMMS) for PMGSY programme.
- iv) Member, Sub Group on “Planning and Design of Rural Roads” under the Planning Commission’s Working Group on ‘Rural roads in 11th Five Year Plan’ constituted under Ministry of Rural Development, 2006.
- v) Member, Empowered Committee of Rural Roads under PMGSY’ on behalf of Director, CRRI New Delhi since 2004.
- vi) Council Member, Indian Roads Congress (2013-14)

b. Important R&D and Consultancy Projects involved:

- Block Level Planning for a Typical Tribal Area, under NRDMS project sponsored by Department of Science and Technology, Government of India – 1986, at IIT Kharagpur 1985-86 (Team Member)
- Socio-economic Aspects of Nine District Level Studies, sponsored by Indian Roads Congress 1987-89. (Team Member)
- Remote Area Transport and Socio-Economic Surveys, sponsored by UNESCAP Bangkok 1988-89 (Team Member)
- UNESCAP Project on Rural Road Infrastructure Development, sponsored by UNESCAP Bangkok 1988-94. (Team Member)
- Planning and Selection of Rural Roads, and Capacity Evaluation of NGOs in Rural Road Construction – associated with GTZ New Delhi, 1996-97. (Team Member)
- Economic Analysis of Rural Road Component under Agricultural Development Projects of World Bank in Rajasthan, sponsored by PWD Rajasthan. 2000-01. (Co-Project Leader)

- Project Preparation for Rural Roads for Bihar and Jharkand, sponsored by Rural Engineering Organisation, Bihar and Jharkand, 2001-2003 (Team Leader).
- Urban Road Traffic and Air Pollution, sponsored by CHT, Ministry of Petroleum and Natural Gas, GOI, 2002 (Team Member)
- Pradhan Mantri Gram Sadak Yojana - the Principle Technical Agency for Ministry of Rural Development GOI, 2000-04. (Sub-Project Leader)
- Road Project Appraisal Process in India - a Country Report, sponsored by TRL Ltd. U.K. 2004. (Project Leader)
- CSIR Network Project on National Data Centre for Managing Data for Planning, Design, and Management of Roads, sponsored by CSIR New Delhi 2003 – 07. (Nodal Officer)
- Environmental Impact Assessment for Delhi Metro Rail Projects - sponsored by DMRC, New Delhi. (Team Leader -SIA)
- Road planning approaches for location of urban amenities in rural areas – sponsored by Department of Science and Technology, GOI, 2006-07. (Principle Investigator)
- Associated in preparation of draft report for the Planning Commission’s “Working Group on Rural Roads in 11th Five Year Plan”, under the Ministry of Rural Development Government of India, 2006. (Member)
- Development of GIS Based National Highway Information System Sponsored by MoRT&H (Member & Co-Coordinator 2009-10)
- Planning and Management of High Speed Corridor, Supra institutional (CRR) project sponsored by CSIR, 2007-012. (Team Leader)
- Consultancy Services for conducting the Road Safety Audit for PPP Projects on DBFO Basis (Member) Sponsored by NHAI.
- Investigation for the use of structural steel products in transportation and facility sector in India. (Estimation of steel usage in India) Member, 2013-14
- Determination of Service Charges for toll tax collection at Rajokari Border on Delhi Gurgaon Expressway (Member) sponsored by MCD, 2013-14.
- Developing Thematic GIS database for integrating Road Management System, sponsored by RCD, Bihar (Member) 2014
- Development of Indian Highway Capacity Manual(Indo-HCM) under CSIR-12FYP Project (Member) 2012-17
- Development and Application of Technologies for Sustainable Transport System (SUSTRAN) under CSIR-12FYP Project (Member), 2012-17.

Training Programme: As Course Coordinator organised the following training programmes at CRR :

- Geo-Spatial technologies for roads and transportation
- Techno-economic evaluation of highway projects
- Contract management in highway sector

c. List of Important Publications: (since last five years)

SCI & Referred Journals:

1. B. Kanagadurai, "Recent Trends in Road Development in India" Civil Engineering & Construction Review, March 2010.
2. S.Gangopadyay, Ch. Ravi Sekhar, B. Kanagadurai, "Travel Time Reliability Measurement for an Urban Corridor - A Case Study", Indian Highways, May 2010.
3. Mukti Advani, Kamini Gupta and B.K.Durai (2010), "Sustainability of crossing facilities for Pedestrians and Cyclists, Urban Transport Journal, Institute of Urban Transport (India)", Volume 9, issue 2, pp. 79-90.
4. Kumar, Ravindra., Durai, B.K., Saleh, Wafaa., Boswell, Colin. (2011) "Comparison and evaluation of emissions for different driving cycles of motorcycles: A note", Transportation Research, Part D, 2011, Pages 61-64. Elsevier publication. (SCI)
5. Kumar Ravindra, Gupta, Kamini., and Kanagadurai, B. 2011. "Development of real world driving cycles at Delhi Bus Rapid Transit corridor and Air pollution Scenario, *Bharatiya Vaigyanik evam Audyogik Anusandhan Patrika* (CSIR-Hindi Journal) Vol.19(2).
6. Ravindra Kuar, B. Kanaga Durai, Purnima Prida , Wafaa, Kamini Gupta,' "Driving Cycle for Motorcycle using Micro-Simulation Model", Journal of Environmental Protection, Vol. 3, 1268-1273, 2013.
7. Ravindra Kumar, Purnima Parida, B. Kanaga Durai, Wafaa Saleh, "How real-world driving cycle differs in heterogeneous traffic conditions- A case study in Delhi", *World Journal of Science, Technology and Sustainable Development*, Vol. 10, 1 2013, ISSN: 2042-5945.
8. Satish Chandra, Ch. Ravi Sekhar, Anish Kumar Bharti and B. Kangadurai "Relationship between Pavement Roughness and Distress Parameters for Indian Highways" Journal of Transportation Engineering, ASCE, May 2013, 139:467-475
9. Ch.Ravi Sekhar, E.Madhu, B.Kanagadurai and S.Gangopadhyay "Analysis of Travel Time Reliability of an Urban Corridor using Micro Simulation Techniques", Journal of Current Science, Accepted for Publications in July 2013.
10. Neelam J Gupta, Mukti Advani, B. Kanagadurai & S. Velmurugan, "Bypass Impact Analysis – a case study", International Research Journal of Sustainable Science and Engineering, Vol. 2. Issue No. 2 Feb.2014.
11. Neelam J Gupta, Mukti Advani, B. Kanagadurai & S. Velmurugan, "Safety Impacts on Traffic and Habitants – a case study on Khatuali bypass", Indian Journal of Transport Management (CIRT) Vol..38 no.2 pp.4- 15, January- March 2014

Papers published in conference/seminar proceedings (India & Aboard):

1. Ravisekhar. Ch., Kanagadurai, B and Gangopadhyay, S. 2011. "Examining Travel Time Distribution of Urban and Rural Corridor of National Highway in India", '9th International Conference of Eastern Asia Society for Transportation Studies', South Korea.
2. Kumar,Ravindra Gupta,Kamini., Kanagadurai, B., and S. Gangopadhyay, 2011. "Effect of Driving Cycle and Emission, '9th International Conference of Eastern Asia Society for Transportation Studies', South Korea.

3. Advani, Mukti., and Kanagadurai, B. Gangopadhyay, S. 2011 “Measuring Safety, Accessibility and Mobility of people living adjacent to a National Highway of India”, 3rd International Conference on Road Safety and Simulation, Indianapolis, USA,.
4. Advani, Mukti., and Kanagadurai, B. 2011. “Developing a methodology to evaluate impact of road infrastructures on different modal trips – a scenario based stud”, International Transport Research Conference, Malaysia.
5. Ravi Sekhar, Ch., Kanagadurai, B., Gangopadhyay, S. 2011. “Modeling of travel time distribution under uncertainties from demand and capacity of system : A case study”, International Conference of Transport Research Group, India, December 7-10, 2011 Bangaluru.
6. Achuta, Mohan Rao, A., Kanagadurai, B., 2011. “Assessing Road Compaction Impact on Life Cycle Cost of Road Projects using HDM-4”, International Conference of Transport Research Group, India, December 7-10, 2011.
7. Mohan Rao, A., and Kanagadurai, B. 2011. “Application of GIS in Road Safety Projects” Proceedings of the International seminar on National Road Development Strategies and Road Safety on Improved Highways, organised by School of Planning and Architecture, New Delhi, March 25-26,2011.
8. Ravi Sekhar, Ch., Gupta, Kamini, and Kanagadurai, B. 2011. “Techniques for Monitoring Safety Measures at Construction Site, Proceedings of the International seminar on National Road Development Strategies and Road Safety on Improved Highways, School of Planning and Architecture, New Delhi, March 25-26,2011.
9. Kanagadurai, B. 2012. “Pedestrian and Non-Motorized Transport on Rural Highways – Issues and Strategies”, Proceedings/Keynote Address at the National Workshop on ‘Issues and Strategies for Non- Motorized Transport Modes’, Orangised by CSIR-CRRI New Delhi, 23, January, 2012.
10. Kumar,Ravindra., Gupta, Kamini. and Kanagadurai, B. 2012. “Real World Driving Cycle and emission and fuel economy of car – a case study of East Delhi”, 8th International Symposium on Fuels and Lubricants, New Delhi, March 5-6, 2012.
11. Ravi Sekhar, Ch. and Durai, B.K. 2012 “Evaluation of Onsite Visualization and Dust Monitoring of Safety Management at Construction Site”, JICA Workshop on ‘On-Site Visualization and Dust Monitoring’, Bangalore. 21, January, 2012.
12. Mukti Advani and B. Kanagadurai, Urban Mobility in India BMTTC – Special News Letter on the occasion of Annual Conference of BMTTC, October 2013.
13. B. Kanagadurai, “Keynote Address on “GIS Applications in Roads and Transportation” 10-12 December 2013 ESRI User Conference on GIS Applications in roads and transportation, Organised by ESRI India New Delhi
14. B. Kanagadurai, “Geospatial Technologies for Roads and Transportation sector – way-forward” Invited Key note presentation, Geo Smart India 2016 Conference, 2-3 March 2013, NOIDA.