Road Safety Problems in Developing Countries

10th meeting of the United Nations Road Safety Collaboration

Bangkok, Thailand

Presentation by Rohit Baluja, IRTE
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Every year...

Injuries in Global Crashes - 50 million

Deaths in Global Crashes - 1.3 million

And still rising...
Number of Deaths due to Road Accidents

85% of global crashes occur in low & middle income countries

India ranks No 1
1,10,000 people killed every year

China ranks No 2
87,000 people killed every year

Various efforts are being made to improve road safety based on the

World Report on Injury Prevention and Control

- United Nations Road Safety Collaboration
- The World Health Organization
- Commission for Global Road Safety
- Make Road Safe Campaign
- Global Road Safety Partnership
- Global Transport Knowledge Partnership
- WP-1 of the UNECE
- OECD, World Bank
In spite of these global efforts, road crashes, fatalities and injuries in low & middle income group countries are not reducing.

To ensure that our efforts are successful it is important to first understand the causes of accidents in developing countries.

Traffic in Developed and Developing Countries is DIFFERENT.
Hence, safety initiatives should also be different and specific to the problems and issues of developing countries.

India has the largest Road fatalities worldwide

- CONFUSION: TRAFFIC MANAGEMENT NOT DEFINED

Hence, Role and Responsibilities of Traffic Management Agencies are also not defined
Traffic Engineering Centres were introduced in UK/USA in 1930/1932. Still remains a consultancy in most developing countries.

- Negligible research on Traffic Engineering
- Standards not ratified to UN Convention of Signs and Signals
- Standards not conducive to mixed traffic conditions

Traffic Legislation

- Not conducive to the so called traffic engineering practices
- Not being updated regularly
- Not enforceable in many cases
- No regulation for non motorised traffic
**TRAFFIC ENFORCEMENT**

- Enforcement cannot be implemented in the absence of standard road environment and legislation
- Lack of understanding of violations
- Lack of suitable modern technology

**DRIVER TRAINING AND ASSESSMENT**

- Totally neglected area
- Driving schools not developed
- Tools and systems of training and assessment unavailable
- Health of drivers
CRASH INVESTIGATION

There is an almost vacuum in scientific recording and analysis of road crashes. Hence the real causes and consequences of a crash are never known. Remedial measures are arbitrary. Data generated has no real value.

POST CRASH MANAGEMENT

Lack of Emergency Response Systems
Road Safety is **not** a stand alone phenomenon
Roads are **unsafe** due to **deficiencies** in

Road safety can be achieved by **plugging the deficiencies**, developing an **effective coordination** and supplementing these with **education**.
While much efforts have been directed by the UNRSC on Educational Aspects...

- Helmets
- Seat Belts
- Drinking and Driving
- Speed Management

Education and awareness alone cannot be successful unless we build capacity in

- Traffic Engineering
- Enforcement
- Driver Training
- Crash Investigation
- Post Crash Management
An Example: Sikri Village, India

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Indicators</th>
<th>Before Campaign delivery</th>
<th>After Campaign Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vehicles with Reflectors &amp; White Paint</td>
<td>94</td>
<td>1308</td>
</tr>
<tr>
<td>2</td>
<td>Level of Knowledge regarding Road Safety (Based on Pre and Post Test and Public Interactions)</td>
<td>15.70%</td>
<td>43.20%</td>
</tr>
<tr>
<td>3</td>
<td>Presence of Road Signage</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Application of Road Markings</td>
<td>Zebra Crossing at only one intersection on the entire section of 4km.</td>
<td>• Zebra Crossing, • Centre Line Marking • Lane Line Marking • Block Arrow Markings • Edge line Marking on the all the intersections and stretches in the 4Km. Section.</td>
</tr>
<tr>
<td>5</td>
<td>Number of Fatal Accidents (Jan-June'06 – 07)</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
There has to be a shift from total dependence on consultancies…
…to capacity building in own research
Current Status: Building under construction
Proposed Completion: October 2009

Site Plan for College of Traffic Management
Proposed Course Programmes at CARRS

- Road Safety Engineering
- Introduction to Road Safety Audit
- Introduction to Journey Risk Management
- Advanced Journey Risk Management
- Installation and Standards of Traffic Control Devices
- Design Development for safety of Non-Motorised Transport
- Understanding Road Crashes – Causes, Analysis, Recording & Reconstruction
- Advanced Course in Accident Recording and Analysis Systems
Tools & Systems of Training and Assessment

Tailor-made Courses for
- Instructors of Driver Training Schools
- Motor Licensing Officers in Driver assessment
- Supervisors of Fleet Organisations
- Drivers of Heavy Vehicles - Post License
- Drivers of Heavy Vehicles carrying Hazardous Goods - Post License
- Drivers of other Commercial Vehicles - Post License
- Disabled Drivers with Special Category Vehicles
- Drivers of VIP Vehicles
- Police Drivers

College of Traffic Management
School of Driver Training

Driver Training & Assessment Programme
- Instructors of Driver Training Schools
- Motor Licensing Officers in Driver assessment
- Supervisors of Fleet Organisations
- Drivers of Heavy Vehicles - Post License
- Drivers of Heavy Vehicles carrying Hazardous Goods - Post License
- Drivers of other Commercial Vehicles - Post License
- Disabled Drivers with Special Category Vehicles
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- Police Drivers

College of Traffic Management
School of Driver Training
School of Traffic Enforcement

Why Traffic Enforcement?
- Traffic enforcement is a controlling road users
- Ensures road safety and discipline
- Helps in reducing accidents and violations
- Ensures the smooth flow of traffic

The School of Traffic Enforcement focuses on training individuals who will enforce traffic laws effectively. This includes traffic police, municipal officials, and other road users.

College of Traffic Management

- Legislation
- Crash Investigation
- Violation Control
- Technology Advancement
- Traffic Control
- Educative Enforcement

The College of Traffic Management offers a comprehensive curriculum that covers various aspects of traffic management, including enforcement, technology, and education.
Activities and Courses

- Fatigue and stress management in drivers
- Falling health of drivers who are driving heavy vehicles in the unorganized sector
- Alcohol, Drugs and driving
- Young Drivers without experience of Hazardous conditions
- Post accident management including Trauma management
- Dealing with victims of road accidents and their rehabilitation
- Dealing with families of victims
- Systems of accident handling, including first aid.
Center for Road Safety Education & Media Development

The roads safety system while complex in the whole, the number of accidents and related deaths and disabilities it is one of the major public health and public safety issues. The schools form the main area in which the education and awareness can be imparted to the young minds through various methods and techniques. The aims are to generate enough road safety knowledge and awareness.

- School Conclave – Teachers Training
- Programmes for RSE
- Highway Literacy
- Student Traffic Volunteers
- Road Safety Films Development
- Multimedia tools for training and awareness generation
- Puppetry, Debate, Skits etc.
Recommendations:

IRTE Recommends that

- Similar Tailor Made Capacity Building Exercise must be Catalyzed for Low & Middle Income Countries, as well as for different Regions in these countries

- Research must be shared amongst developing countries with the help and support from experienced Institutions

- Ministerial Meeting must showcase successful examples
In Conclusion:

- IRTE SEEKS support and partnerships in making this world class facility a reality
- IRTE offers this facility for building research, tools and systems of training, training courses for low and middle income group countries.
- It aims to be a platform for sharing and learning