Regional Expert Group Meeting
on Sustainable and Inclusive Transport Development

Ahmedabad, India 28-30 October 2014

Road Safety in Asia Pacific Region
Content

What is the presentation about?

- Road Safety: Global and Regional status
- Road Safety in Urban Area and vulnerable Road Users
  - VRU situation
  - Improvement measures
Road Safety Situation

**Global Level**

1.24 million people killed in 2010

By 2030 - the **fifth leading cause** of death, beating the rank of lung cancer and HIV/AIDS

Vulnerable age group: 15-29 years old: **# 1 leading cause of death**

**Economic loss** from road fatalities and injuries: 1-3% of GDP, up to 5% in some developing countries

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**Leading causes of death, 2004 and 2030 compared**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total 2004</th>
<th>Total 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ischemic heart disease</td>
<td>13.2</td>
</tr>
<tr>
<td>2</td>
<td>Cerebrovascular disease</td>
<td>9.7</td>
</tr>
<tr>
<td>3</td>
<td>Lower respiratory infections</td>
<td>7.0</td>
</tr>
<tr>
<td>4</td>
<td>Chronic obstructive pulmonary disease</td>
<td>5.1</td>
</tr>
<tr>
<td>5</td>
<td>Diarrhoeal diseases</td>
<td>3.6</td>
</tr>
<tr>
<td>6</td>
<td>HIV/AIDS</td>
<td>3.5</td>
</tr>
<tr>
<td>7</td>
<td>Tuberculosis</td>
<td>2.5</td>
</tr>
<tr>
<td>8</td>
<td>Trachea, bronchi, lung cancers</td>
<td>2.3</td>
</tr>
<tr>
<td>9</td>
<td>Road traffic injuries</td>
<td>2.2</td>
</tr>
<tr>
<td>10</td>
<td>Prematurity and low birth weight</td>
<td>2.0</td>
</tr>
<tr>
<td>11</td>
<td>Neonatal infections and other</td>
<td>1.9</td>
</tr>
<tr>
<td>12</td>
<td>Diabetes mellitus</td>
<td>1.9</td>
</tr>
<tr>
<td>13</td>
<td>Malaria</td>
<td>1.7</td>
</tr>
<tr>
<td>14</td>
<td>Hypertensive heart disease</td>
<td>1.7</td>
</tr>
<tr>
<td>15</td>
<td>Birth asphyxia and birth trauma</td>
<td>1.5</td>
</tr>
<tr>
<td>16</td>
<td>Self-inflicted injuries</td>
<td>1.4</td>
</tr>
<tr>
<td>17</td>
<td>Stomach cancer</td>
<td>1.4</td>
</tr>
<tr>
<td>18</td>
<td>Cirrhosis of the liver</td>
<td>1.3</td>
</tr>
<tr>
<td>19</td>
<td>Nephritis and nephrosis</td>
<td>1.3</td>
</tr>
<tr>
<td>20</td>
<td>Colon and rectum cancers</td>
<td>1.1</td>
</tr>
</tbody>
</table>

UN GA Resolution 64/255 of 2 March 2010 on Improving Road Safety Proclaimed the period 2011-2020 as the Decade of Action for Road Safety

Goal is to stabilize and then reduce the forecast level of road traffic fatalities around the world by increasing activities conducted at the national, regional and global levels

Global Mandate

Road Safety Situation

- Road Safety Management
- Safer Roads
- Safer Vehicles
- Safer Road Users
- Post-crash Response
Road Safety Situation

Global Mandate

SDGs Outcome Document – OWG

Goal 3 Ensure healthy lives and promote well-being for all at all ages

3.6. By 2020 halve global deaths and injuries from road traffic accidents

Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
ESCAP Ministerial Declaration on Improving Road Safety in Asia and the Pacific has been adopted. The Declaration includes the goal “to save 600,000 lives and to prevent a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015.”

Regional Goals, Targets and Indicators (46 indicators)

Member States resolved to, amongst other transport matters, place road safety high on the policy agenda and to set road safety goals, targets and indicators through networking among national and subregional organizations.

Revised ESCAP Regional Road Safety Goals, Targets and Indicators
- 50% Reduction in fatalities & injuries
- 8 Goals, 25 Targets, 36 Indicators

Forum of Asian Ministers of Transport
Decade of Action for Road Safety 2011-2020
Road Safety Situation

Regional Mandate

8 Goals

1. Make Road Safety a policy priority
2. Make Roads Safer for vulnerable road users
3. Make Roads Safer and build "forgiving roads"
4. Make vehicles safer and encourage responsible ads
5. Improving national and regional road safety system, management, & enforcement
6. Improving cooperation & fostering partnerships
7. Developing Asian Highway as a model for road safety
8. Providing effective education on road safety awareness

Overall Objective

50% reduction in fatalities and serious injuries on the roads of Asia and the Pacific over the period 2011 to 2020

25 Targets 36 Indicators
Road Safety Situation

Road Safety Situation in Asia-Pacific

Change in Road Traffic Deaths Between 2007 and 2010 (in percent)

- Road traffic injuries are a leading cause of death and disability in the regions
- 777,000 deaths (approx. 62% of 1.24 m global road deaths)
- 11% increase compared to 2007
- At subregional level, 2 sub-regions show progress while other 4 regress (21 countries have reduced the death rates)
- Road traffic death rate in ESCAP (18.62) was higher than world average (18.04/100,000)
Road Safety in Urban Areas

Urbanization

- 2009 was the first time ever that the majority of the world’s population lived in a city

In Asia
- ESCAP estimates: 1.6 billion people or 40% of total population live in urban areas in 2011.
- By 2030, it is estimated that 2.7 billion people will live in urban areas in Asia.
- This continuous growth of urban residents has resulted in rapid increases of transport activities and private vehicle ownership.
Road Safety in Urban Areas

Urbanization

Some common characteristics of urban areas in developing countries

- Rapid increase in population and motorization
- Densely populated
- Road users compete for limited space
- Traffic mix

→ Frequent and close interaction between vulnerable and high speed motorized road users

→ Urban road safety is to a large degree an issue of vulnerable road user safety.
Motorcyclists, pedestrians and cyclists are more vulnerable in the region.

VRUs account for more than half (55%) of total deaths.

India
- 32.4% are motorized 2 and 3-wheelers
- almost 45.7% death from VRUs

Most countries still in early stages of road safety action implementation, though progress has been made.
Vulnerable Road Users

Distribution of road traffic deaths by type of road user (%)
ESCAP sub-region 2010

- Other/unspecified road users
- Drivers/passengers of 4-wheeled vehicles
- Pedestrians
- Cyclists
- Drivers/passengers of motorized 2- or 3-wheelers
Vulnerable Road Users

Percentage share of VRU - 2010

[Bar chart showing the percentage share of vulnerable road users (VRU) in various countries, with Thailand having the highest share and Bhutan having the lowest share.]
“Enable increased mobility without compromising safety”

- The VRU or vulnerable road users such as two and three-wheeler users and pedestrians and are at greater risk and bear greater burden of injury due to variety and intensity of traffic mix (especially slow moving VS fast moving vehicles) and lack of separation from other road users (OECD)

- The VRU especially pedestrian and cyclists – to a certain degree are those from the poorest of the community (urban poor)

- Pedestrians often being neglected from the planning of urban road networks (designed for motor vehicles only) (DFID)
Vulnerable Road Users

Issues and Concerns

Target Actions

– Improve infrastructure safety designs and safe environment for VRUs (especially Non-Motorised Transport Users)

– Improve enforcement and changing behavior or road users to avoid dangerous traffic offences e.g. helmet wearing, speeding

– Awareness raising, Education and Campaigns

– Improve emergency response
One of the problems is inadequate separation of pedestrians from vehicles / separation of non-motorized slow moving to motorized fast moving vehicles

- Footpaths not available (low quality, obstructed, illegally used by motorized vehicles)

- Lack of road shoulders

- Lack of medians

- Few safe crossing points or long distances between safe crossing points

- No bicycle lanes

- Not enough light (night time)
Infrastructure Safety Designs

Vulnerable Road Users

Source: CoE UT, CEPT University
Infrastructure Safety Designs

Vulnerable Road Users

Source: GIZ

Counterflow : Brazil

Counterflow : England
Infrastructure Safety Designs

Vulnerable Road Users
Infrastructure Safety Designs

Vulnerable Road Users

Pedestrian Zone Project in Korea

- Speed in traffic of 23 km/h has been reduced to 16 km/h
- Illegal parking of 59 vehicles/m has been reduced to 33 veh./m
- Traffic volume of 427 vehicles/h has been reduced to 289 veh./h
- Casualties of 10 pedestrians/km has been reduced to zero
- Sales of stores have shown a 89,5% increase over preceding years

Source: KOTSA
Enforcement and Behavioral change

Issues and Concerns

Poor road user behavior - one of the major cause of accidents

Source: Mirror Star
Enforcement and Behavioral change

Issues and Concerns

Poor road user behavior - one of the major cause of accidents

Road Safety requires variety of measures. In addition to engineering, enforcement, awareness raising and education are also needed

*Behavioral and cognitive psychological theory:*

people modify behaviors as a result of
- new information, experiences and perceptions
- rewards and punishment
Enforcement and Behavioral change

**Actions**

- *Increase awareness* of road safety risk factors and prevention measures
  - >> public awareness campaign and training programme
  - >> training and education (basic safety knowledge for school children)

- Implement social marketing campaigns to help *influence attitudes and opinions* on the need for road traffic safety programmes

- Law and Enhance *police enforcement*
  - >> Effective enforcement requires capacity and resources
  - >> Both prevention and detection
Facts and Figures

• Wearing a good-quality helmet can reduce the risk of death from a road crash by 40 per cent and the risk from severe injury by over 70%.

• Non helmet users among motorized two wheelers are 3 times more likely to sustain head trauma than helmet users.

• Above a blood-alcohol concentration (BAC) of 0.05 g/dl, the risk of road traffic crash increases dramatically.

Source: WHO
Enforcement and Behavioral change

Facts and Figures

• A 5% cut in average speed can reduce the number of fatal crashes by as much as 30%. Pedestrians and cyclists are especially at risk of an injury as a result of excessive vehicle speeds.

• Car @ 30km/h 90% survival of pedestrian
  Car @ 45km/h 50% survival of pedestrian
  Car @ 80km/h No survival of pedestrian

• Passengers @ 80km/h 20 times more likely to die than if travelling at 32km/h

Source: WHO
Highlights of ESCAP activities

National workshops focussed on developing national strategy with measurable goals, targets and timeframes and best practices

- Mongolia, Uzbekistan, Tajikistan, Philippines, Bangladesh, Azerbaijan, Lao People’s Democratic Republic, Sri Lanka

Regional expert group meetings in Bangkok in 2010 and 2011

- Endorsed a set of regional road safety goals, targets and indicators in line with the Decade of Action and Global Plan and discussed issues and challenges related to data systems, and monitoring.

Regional expert group meetings in Seoul in 2013

- Adopted joint statement on improving road safety

Europe-Asia Road Safety Forum in Delhi in 2013

- Discussed harmonization and standardization of road traffic signs and signals and road traffic rules

Future Activities

- Regional expert group meeting (May 2015)
- National workshops
Thank you

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