

**Regional Seminar on Safe, Climate Adaptive and Disaster Resilient Transport
for Sustainable Development, 17-18 November 2015, Kathmandu, Nepal**

Draft Report

1. The Regional Seminar on Safe, Climate Adaptive and Disaster Resilient Transport for Sustainable Development was organized by UNESCAP and UNCRD on 17 and 18 November 2015 at Kathmandu, Nepal in conjunction with the 9th EST Forum.
2. Representatives of the following UNESCAP member countries were in attendance: Afghanistan; Azerbaijan; Bangladesh; Bhutan; Cambodia; Fiji; India; Indonesia; Islamic Republic of Iran; Japan; Kyrgyzstan; Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Myanmar; Nepal; Pakistan; the Philippines; the Republic of Korea; Samoa; Sri Lanka; Tajikistan; Thailand; Timor-Leste; and Viet Nam. Representatives of international organizations, academia, IGOs and NGOs were also in attendance. A provisional list of participants is attached as annex.
3. Mr. Rabindra Nath Shrestha joint secretary, MOPIT, Ms. Chikako Takase, Director, UNCRD and Mr. Peter O'Neill, Chief, Transport Policy and Development Section, UNESCAP delivered opening statements.

Transport and post-2015 development agenda

4. The Regional Seminar took note of the 17 SDGs and 169 targets adopted by the United Nations General Assembly in September 2015. The SDG framework included five targets related to goals 3, 7, 9, 11 and 12 that are directly related to transport. They are: Target 3.6-by 2020, halve the number of global deaths and injuries from road traffic accidents; Target 7.3- by 2030, double the global rate of improvement in energy efficiency; Target 9.1-develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all; Target 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; and Target 12c-rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption.
5. The Regional Seminar stressed the need for the countries and transport communities to work towards achieving transport related goals and targets by implementing focused sustainable transport policies, strategies and action plans.
6. In this context, the Regional Seminar stressed the need of additional human and financial resources for developing countries to implement focused sustainable transport policies, strategies and action plans and declarations. The Regional Seminar requested international community and development partners to extend support to the developing countries.

Transport Safety

7. Globally it is estimated that 1.25 million people were killed in road accidents in 2013 of which 733,000 deaths (59%) occurred in the Asia Pacific roads. The fatality in the region reduced by 5.6% compared to 2010. Road traffic accidents are one of the top leading causes of death and disability in the region. If we not do enough interventions by 2030 it is estimated that it will be the fifth leading cause of death. The rank will be higher than those killed by HIV aids or lung cancer. Road traffic is the leading cause of death for the age group of 15-29 years old which is one of the most energetic and active age group.

8. The majority of fatalities in this region are from vulnerable road users which account for 55%. For some countries in the region, the VRUs portion is very high. Cambodia, Kiribati, Palau, Singapore, Sri Lanka and Thailand are among countries in ESCAP region that have over 80% of VRU share of total traffic fatalities. Speeding, drunk driving as well as poor road user behaviour (disregard rules of law) were common causes of road crashes in the region.

9. The Decade of Action for Road safety calls to stabilize and then reduce the forecast level of road traffic fatalities around the world by increasing activities at the national, regional and global levels by 2020. The Global Plan for the Decade of Action for Road Safety 2011-2022 includes five pillars of road safety interventions: road safety management; safer road; safer vehicles; safer road users; and post-crash response.

10. The importance of road safety was further highlighted through the inclusion of road safety within goal 3 and goal 11 in recently adopted SDGs. Target 3.6 stipulates by 2020, halve the number of global deaths and injuries from road traffic accidents. This is a very ambitious target for road safety and transport community to achieve. As VRU accounts for more than 55% of fatalities in Asia, implementation of focused policies and programmes such as improvement of NMT infrastructure; improved enforcement of rules, changing behavior of road users; awareness raising and education campaigns and improved emergency response, targeting VRU would be useful in achieving the target.

11. The Regional Seminar took note of the GRSP road safety activities in the region that focused on behavioral change of the road users. It was highlighted that there are implementation gaps in the area of safe systems approach, data and analysis, legislation and policies, enforcement of rules, public education, safety standards and post-crash care that contribute to road crash problems. There is plenty of opportunity to work in these areas through a multisectoral collaborations. The areas of action to improve road safety were: strong political commitment; laws and legislation; enforcement campaigns & penalties; public education and social marketing; and proven and evidence based interventions.

12. The Regional Seminar noted that many countries were implementing national road safety strategies, policies and action plans to improve road safety. Bangladesh, Cambodia, India, Nepal, the Republic of Korea, Thailand, and Viet Nam shared their experience in improving transport safety.

13. The Regional Seminar noted that derailment of rails and level crossing incidents were the major causes of railway accidents in India which were responsible for 36% and 55% casualties in 2014-15 respectively. Various innovations like active and passive warning systems, sliding boom level crossing system, Train Actuated Warning Device (TAWD), and a Gate Warning System (GWS) as part of Anti Collision System are being implemented in India to reduce railway accidents.

14. Bangladesh selected 144 black-spots and is implementing improvement measures such as easing of curves, widening of roads, introduction of medians, intersection improvement, and widening in market areas that has led to a 89% reduction in fatalities (from 117 fatality in 2011/12 to 13 fatality in 2012/13) in Dhaka- Aricha section of the National Highway (NH-5).

15. Cambodia stated that the total fatality in road accidents was 2226 in 2014. The leading causes were speeding (43%) and drink driving (17%) and vulnerable road users were involved in 86% of accident of which 73% corresponded to motorcycle and non-wearing of helmets. Cambodia was implementing a national road safety action plan to address the issue of road safety that included policies to improve issuance of driving licenses, helmet wearing & a do not drink drive campaign, law enforcement, capacity building of traffic police and public awareness campaigns during national festivals.

16. Nepal was implementing a campaign against drinking and driving and the result was reduction in accidents by 28%, injury had decreased by 60% and fatality had decreased by 5% within 2 years of operation in the Kathmandu Valley. The campaign has received a positive response and support from civil societies and increased social harmony and the level of the public awareness against drunk driving was increasing. The campaign also helped to reduce cases of domestic violence and social disputes. Lenient penalties, no lower limit of alcohol, lack of breath analyzers with printer, equipment for analysis and advance database system was mentioned as some of limitations and that need to be addressed to have more effective do not drink and drive campaigns.

17. Thailand was implementing a national road safety action plan deemed at reducing number of deaths resulting from road crashes by half by 2020. The plan covered road safety management, infrastructure, vehicles, drivers' behavior, helmet use, black-spot treatment, education campaigns and emergency medical systems. More than 50% of road accidents occurred during the national festival season and focused awareness and enforcement campaigns were held during this period all over the country. However, Thailand needs to do more to improve the road safety situation as it was still the countries with the highest number of fatalities per 100,000 population in Asia.

18. The Republic of Korea has reduced fatalities from road accidents in recent years; the current fatality rate was 10.1 fatalities per 1000,000 population. Improvement of road user behaviours, provision of safe transport infrastructure, operation of smart transport system, enforcement of safety management system and enhancement of emergency response system were some of the strategies included in National Road Safety Plan (2012~2016). Provision of sidewalks, installation of information boards, warning signs and markings for speed reduction in village zones,

installation of black box in taxis and private cars were some of new initiatives to reduce road accidents. School zoning and child road safety initiative resulted in reduction of child road fatalities from 1,776 to 82 between 1988 and 2013 a reduction of 95%.

19. Viet Nam acceded to United Nations Convention on Road Traffic, 1968 and Convention on Road Signs and Signals, 1968 on 20 August 2014. Viet Nam has developed a plan of implementation of the provision of the conventions including revision of national laws and regulations to harmonize with the provision of the two Conventions.

Climate Adaptive and Disaster Resilient Transport

20. Asia and the Pacific region has experienced frequent extreme climate events such as increase in number of hot days and heat waves, sea level rise, increases in storm surges and intensity, increase in intense precipitation events and increase in drought conditions

and natural disasters such Nepal Earthquake, Thailand Flood, Japan Earthquake, and Super Typhoon Haiyan in the Philippines. Many Asian cities and Pacific small island communities are located in coastal areas with unstable settlements that are highly vulnerable to climate change. These events damage to transport infrastructure, affected services & safety. That's has resulted in higher construction, rehabilitation, retrofitting, maintenance and operation costs.

21. In order to improve the resiliency of transport systems countries need to identify critical system components at risk, monitor conditions and on-going impacts, prepare operation and maintenance strategy, and develop standard operating procedures to manage and mitigate the impacts, identify changes required in design processes and procedures, retrofit and relocate vulnerable infrastructure and choose what to de-prioritize as resources available are always not sufficient.

22. While impacts of climate change are global, their nature, extent and magnitude are localized. This requires locally planned and designed adaptation measures. Some countries are using risk mapping, asset management approach and updating planning and design standards in order to ensure that future infrastructure are more resilient to anticipated climate change and/or extreme weather events impacts. Climate impacts and adaptation should be integrated into the planning, policies, operations and programmes of transport agencies in order to ensure that transport infrastructure, services and operations remain effective in current and future climate conditions.

23. The Philippines is one of the most disaster prone country and has been continuously hit by storms, floods, typhoons and cyclones affecting larger population and damage to infrastructure. Some of the recent events were: Typhoon Ondoy (September 2009); Typhoon Sendong (December 2011); Sagbayan, Bohol Earthquake of 7.2 magnitude scale; (October 2013) and Super Typhoon Haiyan (November 2013). It was implementing various measures to improve resiliency of transport infrastructure such as: institutionalize good governance and anti-corruption reforms; increase in investment in infrastructure; upgrade quality and safety of roads and bridges with private sector participation; issuing long term road maintenance contracts; design and build bridge program; provision of improved access to tourism

destinations, airports, seaports, RORO ports and food production areas; disaster and flood risk reduction, management and resiliency program; and Mindanao logistics network program.

24. The Sendai Framework for Disaster Risk Reduction adopted in March 2015 aims to substantially reduce global disaster mortality by 2030, aiming to lower per 100,000 global mortality rates in the 2020-2030 period compared with the 2005-2015 period. The four priority areas of the framework are: understanding disaster risk; strengthening disaster risk governance to manage disaster risk; investing in disaster risk reduction for resilience; enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

25. The Regional Seminar noted that Governments can facilitate progress in adaptation and encourage involvement of private sector. Planning using logframe approaches and the Theory of Change can enable programme designers to think through the likely consequences of investment and innovative design options for adaptation.

26. The Regional Seminar noted challenges faced by the urban traffic system, disaster prevention and mitigation planning framework and methods of research being used in China. Greening transport sector, development of urban rail transit and bus rapid transit, development of intelligent transport system (ITS), development of integrated transport hubs, and electronic toll collection (ETC) system were some of the initiatives being undertaken in China.

Conclusions and Recommendations

27. The interactive discussion followed every technical session. The following are major conclusions and recommendations of the Regional Seminar for developing safe, climate adaptive and disaster resilient transport systems:

- a. Consider developing/refining and implementing a national transport safety policy covering all modes of transport. In the area of road safety, a focused and targeted programme to reduce fatality from road crashes and including targeting VRUs would contribute towards achieving road safety target included in SDGs.
- b. Identify critical transport infrastructure and initiate review of design standards, guidelines and specifications to consider potential impacts climate change and

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_3758

