### ANNUAL MEETING: ASIA-PACIFIC ROAD SAFETY OBSERVATORY

5 December 2023, ADB Headquarters, Manila, Philippines

# **Case Studies of Progress** Action towards implementation of the Global Plan in Asia and the Pacific

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### Decade of Action for Road Safety 2021-2030



The second Decade of Action for Road Safety 2021 – 2030 was declared through the UN Resolution on Improving Global Road Safety in August 2020.

#### ESCAP Economic and Social Commission for Asia and the Pacific

### **The Global Plan**



### **GLOBAL PLAN**

DECADE OF ACTION FOR ROAD SAFETY 2021–2030



The GLOBAL PLAN has been developed by the World Health Organization and the United Nations Regional Commissions, in cooperation with partners in the United Nations Road Safety Collaboration and other stakeholders, as a guiding document to support the implementation of the Decade of Action 2021–2030 and its objectives.



### **The Global Plan**





### **Development of the Regional Plan**



# **The Regional Plan**



of Action for Asia and the Pacific for the Second Decade of Action for Road Safety 2021–2030



To reduce road traffic deaths and injuries by at least 50 per cent from 2021 to 2030.



To achieve an Asia-Pacific region increasingly free of the human suffering and economic burden of road crash deaths and injuries. The **Regional Plan** of Action is intended to guide and support efforts to reduce road traffic deaths and injuries by at least 50 per cent from 2021 to 2030 and to achieve the Sustainable Development Goal targets related to road safety, including target 3.6, by 2030.



### **The Regional Plan**

### **Asia-Pacific Focus**

The Asia-Pacific Region is unique & the most diverse on earth

(This is considered in the Plan):

- 1. the most wonderful diversity of cultures, religions and peoples
- 2. permafrost to tropical islands to monsoon to hot desert and cold high-altitude deserts
- 3. the highest mountains to the lowest to sea level countries
- 4. the most populous countries to some of the smallest
- 5. tiny land masses to the largest
- 6. extraordinary frenetic streets with every form of transport mixing at once to well-arranged tightlymanaged streets
- 7. containing all political systems
- 8. high to middle to low income countries, with very different road safety issues ......



### The Basis of the Regional Plan

### The Safe System Approach: Shared Responsibility



Accepts that human error is inevitable and accommodates errors;



Incorporates speeds, roads, and vehicles that limit crash forces to levels that are survivable for the human body;



Motivates those who design and maintain the roads, manufacture vehicles, and administer safety programmes to accept and address shared responsibility for safety;

Adheres to the underlying premises that the transport system should not compromise safety for the sake of other factors such as cost or faster transport times;





### The Regional Plan – 7 Arenas of Road Safety Interventions





### Arena 1: Safe Road Infrastructure

### This is a vital element of advancing from trying to fix road users





### Arena 2: Vehicle Safety

Safe vehicles offer major opportunities for improving safety through three mechanisms.

Vehicles can, with good technology:

- protect their occupants (safety belts, airbags, structural protection of survival space)
- protect those outside the vehicle in the event of a crash (more protective vehicle fronts for pedestrians, and under-run guards on trucks to protect other vehicle occupants in a crash)
- vehicles can prevent crashes or reduce the speeds of impact through active safety features such as electronic stability control and emergency brake assistance.





### Arena 3: Safe road use

### why USE enforcement not crash FEAR? Psychology: Optimism Bias, driver-overconfidence





### Arena 4: Post-crash Care

- > This is another area with potential in technological advances
- > Twice as many injured people who die before reaching hospitals in LMICs as in HICs.

Many factors, but significantly including the speed & quality of emergency care.

> Rapid effective emergency care not only saves lives but may also reduce long-term disability for survivors of road crashes and many other incidents.

> The people, processes, and funding required to achieve this are substantial, and largely outside the purview of road safety, as they should be based on the breadth of issues emergency care addresses.





### Arena 5: Safe Speed, a cross cutting issue

Added as an arena of action in the A-P Plan because:

- Speed is critical to road safety: speed is a major factor in both crashes occurring and in crash severity and these are universal effects to every country
- Speed represents especially powerful cost-effective opportunities across the Asia-Pacific Region.

The best evidence combined from many countries:

Each 1% decrease in speed delivers:

Around a 4% decrease in deaths &

around a 3% decrease in serious injuries



### Arena 6: Modal shift, land use planning, and Reduced Road Use Exposure

- Roads are the most dangerous form of transport: 97% of global transport system injury-related deaths are caused by road transport.
- Reducing road use is an effective road safety intervention.
- Road use can be reduced in two ways:
  - 1. moving people and freight from road transport to other transport (rail, metro, water, and air).
    - Provide and incentivize non-road transport options
  - 2. reducing the need for mobility.

Good land use/city planning and controls can close the distances between people and the employment, services, and good they access.

• Reduced motorized road use will also serve other global agenda (climate change, the health effects of air pollution and noise pollution, and increased active transport).



### **Arena 7: Road Safety Management and Leadership**

Added as an arena of action in the A-P Plan because:

1. Management & leadership is an arena of strong opportunity in the A-P Region.

2. The activities and expertise required for this work cannot be achieved by a committee or council, but can be achieved a strong well-resourced expert lead agency dedicated to road safety and working with a high-level committee which remains valuable.

Road safety is a product that can be delivered. Its delivery is achievable through selecting and resourcing actions across each arena, as presented in the Plan. This, in turn, requires effective Management and Leadership of road safety.

# Region

IMPROVEMENT OF DRIVER LICENSING SYSTEM IN LAO PEOPLE'S DEMOCRATIC REPUBLIC			
	of IMPACT PROJECT DATES Te Users 01 Aug 2020 31 Dec 2023	- Ongoing Budget \$570,000	
PROJECT OBJECTIVES	PROJEC	TOUTCOME	
01 Develop and roll out a net developed system for dr licensing and driver lice testing system. 02 Train trainees of the department of transpor towards becoming train 03 Increase public awaren about the new driver lic curriculum, new regula and the new online system	iver and fata nse Democr improve and kno and intru- licensing thess cense ations	e road traffic crashes,injuries lities in Lao People's atic Republic through di road safety awareness wledge of all new drivers oducing an online driver g system.	5
This project is expected to improve driver behaviors to drive safely through better training and testing in the licensing process, as well as ensure driver competency when issuing driving licenses.	It is expected that the Lao People's Democratic Republic will see improvements in sa and appropriate driving and thus, a significant reduction in the number of road traffic crashes resulting in serious	ife children and younger adults will be saved, providing important benefits to the country.	_
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LIST OF PARTNERS	Vorks Asian Institute of IPTI, Transport Development (AITD) R Instic	Malaysia Institute sea Say Say Say Say Say (Millos)	

Currently, in Lao PDR, drivers are insufficiently educated, trained, and tested for road safety awareness and skills prior to the issuance of driver licenses. Against this background, this project is expected to improve the behaviors of drivers to drive safely through better training and testing in the process of licensing and ensure the competency of drivers when issuing driving licenses.



# Region

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#### 1

O1 Demonstrate the proper use of institutional management functions and road safety (Road crash and road safety performance) data in effective and efficient road safety management at the network level.

#### $\mathbf{02}$

Develop case studies to be shared with countries throughout the region by ESCAP, and more broadly through the UN Road Safety Fund Secretariat to encourage adoption of similar best practice approaches.

#### 03

Creation of an internal monitoring system.

#### 04

Periodic collection of monitoring data.

Iran's performance in policy This making and implementation needs to be radically improved through effectiveness and efficiency enhancement in wou the country's road safety effic brir

This project will support better mobilization and enhanced harmonization within the lead agency, which would lead to efficient and effective management and



This project is expected to support better mobilization and harmonization within the lead agency, resulting in efficient and effective management and long-term outcomes (a decrease in the number of road deaths and injuries) by improving data collection and integration, developing a framework for monitoring and evaluation, establishing a system for effective budget allocation, and setting up a network for road safety research.

O1 To establish a decision support system to help the lead agency build the capacity for evidence-based policy development and implementation.

# Region





Motorcyclists are vulnerable due to the lack of protection compared to car occupants. One of the most effective motorcycle safety technologies available to date is the motorcycle anti-lock braking system (ABS). Research has shown that motorcycle ABS can increase rider stability, reduce stopping distances, and decrease rider fatalities.

# Region





There are numerous reasons for Nepal's poor road safety situation. The most significant one, however, is the National Road Safety Council's (NRSC) inability to serve as a lead organization on road safety. This project aims to strengthen Nepal's leading road safety agency, the National Road Safety Council, in order to enhance road safety.



### DEVELOPMENT OF STRATEGIC PLAN FOR INCREASING HELMET USE IN NEPAL

- Many riders in Nepal still do not wear helmets or wear substandard helmets, which can lead to serious injuries or even death in the event of a crash.
- Against this background, NRSC developed a strategic plan to increase helmet use in Nepal, that is currently in action as of May 2023.
- The strategic plan for the implementation of helmet usage is an important initiative that aims to promote helmet usage among riders and create a safer, healthier community.





### DEVELOPMENT OF STRATEGIC PLAN FOR INCREASING HELMET USE IN NEPAL

### The plan includes:

- Raising awareness among the public about the importance of wearing helmets,
- Making helmets more affordable and accessible,
- Enforcing strict regulations to ensure that only standard helmets are sold and used.

The plan will involve all relevant stakeholders in the process, including helmet manufacturers, law enforcement agencies, and transport authorities in the implementation process.





### IN-DEPTH MOTORCYCLE ACCIDENT INVESTIGATION IN THAILAND

- 1,001 motorcycle crash cases (2016-2020) were investigated and supported by Honda and Yamaha in Thailand.
- The causes and consequences of Motorcycle accidents are identified.
- The data were used to develop proper countermeasures to reduce the number and severity of motorcycle accidents in Thailand.
- This investigation recommended countermeasures and policies.

# MOTORCYCLE ACCIDENT INVESTIGATION PROCESS















### HAZARD PERCEPTION TRAINING IN THAILAND

- Studies have been performed from a psychological standpoint to better understand motorcycle crash risks in Thailand.
- A training curriculum for Thai drivers on hazard perception has been developed and validated.
- It assesses how well the driver can spot hazards when driving on the road and how to respond safely.
- This will aid in anticipation and enhancing awareness and understanding high-risk situations.







### MOTORCYCLE ANTI-LOCK BRAKE SYSTEM (ABS) ADOPTION IN THE ASEAN COUNTRIES

- One of the most effective motorcycle safety technologies available to date is motorcycle anti-lock braking system (ABS).
- In ASEAN, the implementation of an ABS motorcycle regulation in the region is likely to be able to save the lives of up to 8,000 motorcyclists every year.
- Endorse and implement a region wide mandate to regulate for motorcycle ABS for all powered two wheelers that are capable of travel speeds of 50km/h or greater.





### MOTORCYCLE ANTI-LOCK BRAKE SYSTEM (ABS) ADOPTION IN THE ASEAN COUNTRIES

- The ABS on motorcycles appeared in Vietnam in the late 2010s. Leading motorcycle manufacturers, such as Honda and Yamaha, began equipping high-end models with ABS from those years.
- Currently, Thailand and Malaysia are mandating motorcycle ABS to accelerate its uptake.
- The life saving potential of motorcycle ABS is huge. In Thailand, the use of motorcycle ABS is estimated to be able to save nearly 6,000 to 9,000 lives in the 5 years after the ABS regulation is implemented.
- On 24 May 2022, the Malaysian Minister of Transport announced the mandatory installation of an anti-lock braking system (ABS) on new motorcycles with an engine capacity of 150cc and above, in line with a study conducted by the Malaysian Road Safety Research Institute (MIROS).



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