

JICA's approach for Road Traffic Safety

**Transportation Group, Infrastructure Management Department
Japan International Cooperation Agency (JICA)**

Kondo Ryuhei

Outline of presentation

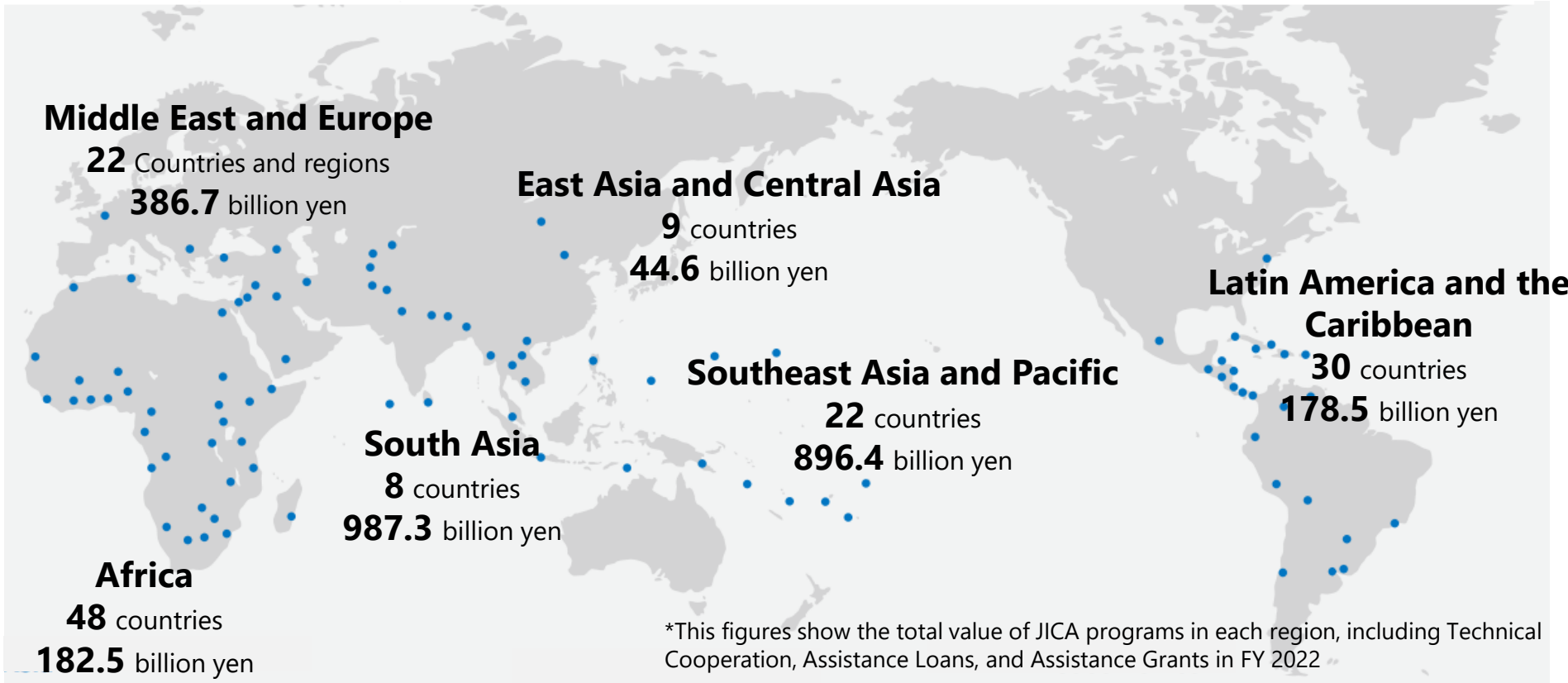
1. JICA's Global Agenda for Transportation
2. Approach for Road Traffic Safety
3. Current T/C and Future Development of Activities





1. JICA's Global Agenda for Transportation

JICA Overseas Offices & Scale of Operation



139
the number of
countries and regions**

96
overseas offices**

1,968
full time staffs**

**As of July 2023

Tackling Global Issues with Diverse Actors

JICA GLOBAL AGENDA

— JICA'S 20 STRATEGIES FOR GLOBAL DEVELOPMENT ISSUES



Aiming to

- **Show development impact / outcome for priority issues** towards contributing the SDGs and achieving JICA's medium and long-term targets.
- Maximize development impacts / **outcome by proactively working with partner governments and variety of actors**

Prosperity	<ol style="list-style-type: none"> 1. Urban and Regional Development 2. Transportation 3. Energy and Mining 4. Private Sector Development 5. Agriculture and Rural Development
People	<ol style="list-style-type: none"> 6. Health 7. Improving Nutrition 8. Education 9. Social Security/ Disability and Development 10. Sport and Development
Peace	<ol style="list-style-type: none"> 11. Peacebuilding 12. Governance 13. Public Finance and Financial Systems 14. Gender Equality and Women's Empowerment 15. Digital for Development
Planet	<ol style="list-style-type: none"> 16. Climate Change 17. Nature Conservation 18. Environmental Management 19. Sustainable Water Resources Management and Water Supply 20. Disaster Risk Reduction through Pre-disaster Investment and Build Back Better



JICA Global Agenda
— JICA's 20 strategies
for Global Development issues

NO. 2

Transportation

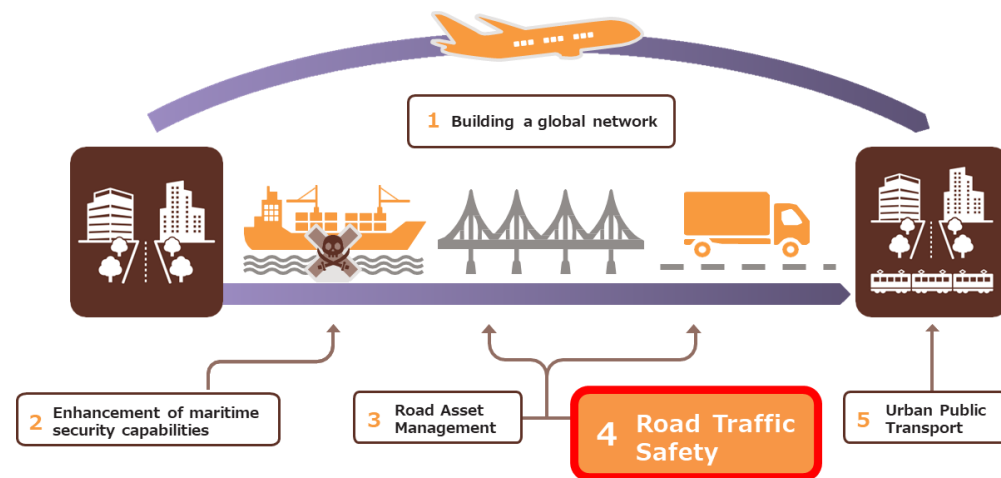
The world where all people and goods move safely and freely

Transportation and traffic are
the driving factors to live
culturally and creatively
in human society.

While promoting low-carbon and decarbonization in transportation sector, JICA works on the development of transportation infrastructure, improvement of maintenance / management techniques and safety. We aim to create society where people can move freely and safely, and necessary goods can be transported anywhere in the world including the last one mile.



- Set **Five Approaches** to solve the challenges in Transportation.
- JICA recognizes we have a responsibility to address **Road Safety issue** as important as Road Asset Management, Maritime Security etc.



2. Approach for Road Traffic Safety

Background and Goal

Issues

1.35 million death each year*¹

8th leading cause of death for people of all ages*¹

#1 cause of death for children and young adults 5- 29 years of age*¹

\$1.797 trillion Macroeconomic losses estimated over 2015-30*²

Why JICA ?

- **The loss of valuable young people** due to traffic accidents is an extremely serious social and economic problem, especially for the countries developing for the future.
- **Experience with** urbanization and overcoming the distortions caused by **rapid motorization**
- As Japan leads the **automobile and motorcycle industries**, the role of supporting traffic safety is significant.

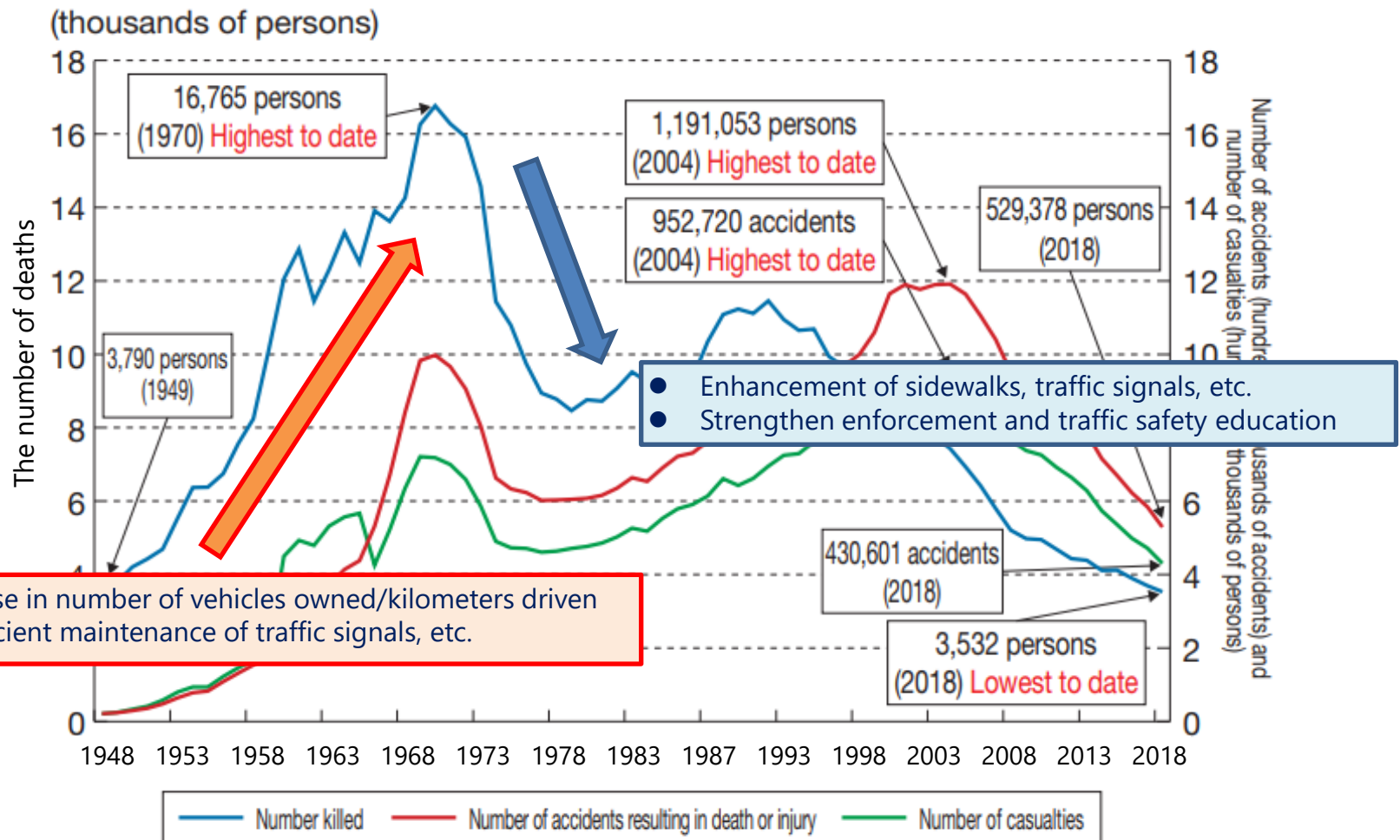
Contribute to SDG target 3.6 "**Halve the number of deaths and injuries from traffic accidents**"



*Aim to save **150,000** lives per year through collaboration with the countries concerned and other partner*

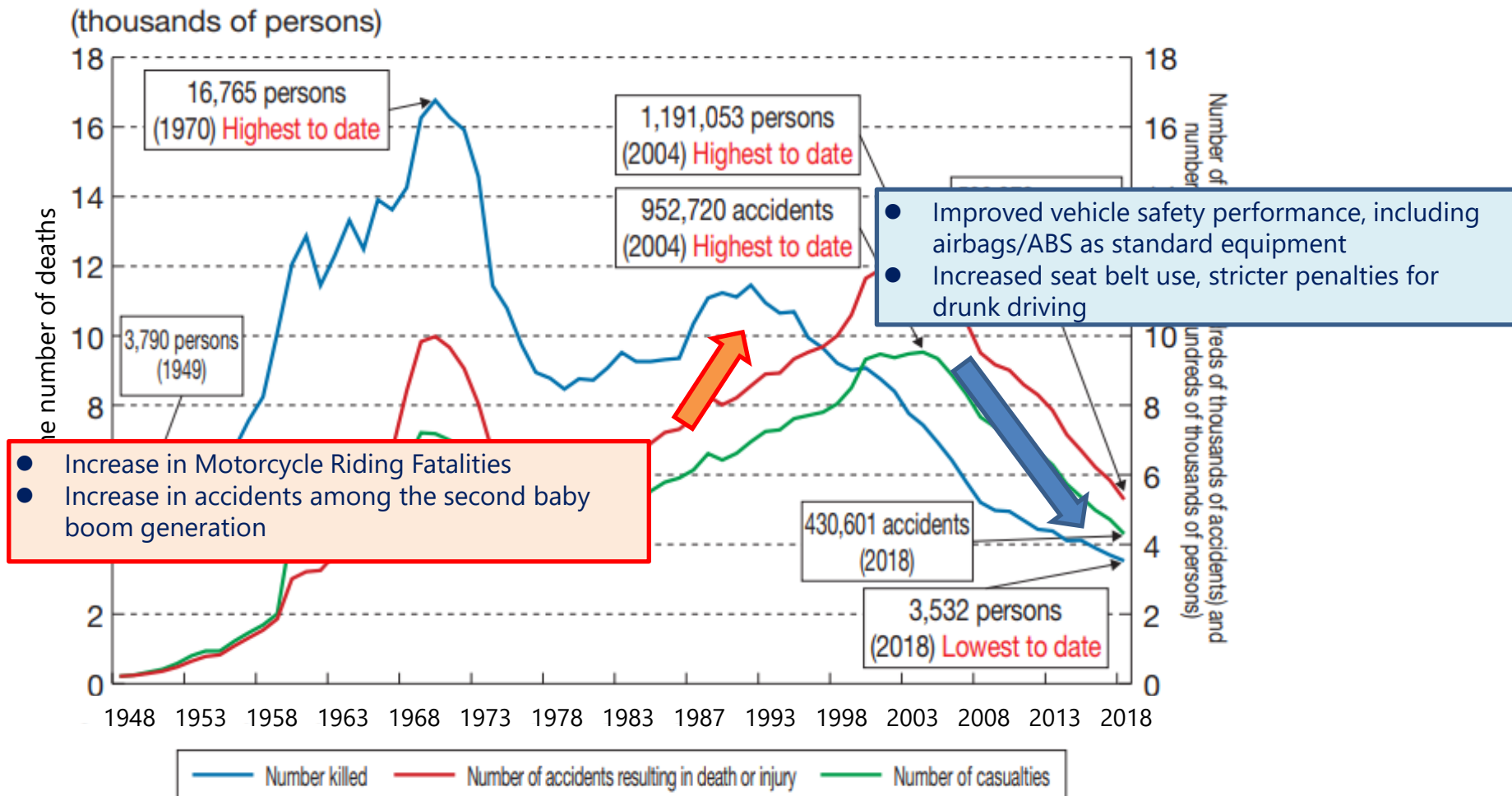
Experience in Japan 1

- 1950s-1970s Increase in accidents involving passengers in automobiles and pedestrians
- 1970: Basic Act on Traffic Safety Measures



Experience in Japan 2

- 1990s : Increase the number of fatalities “again”
- 2022 : The number of fatalities is 2,610 (2.1 per 10⁵)



JICA's approach for "Road Safety"

Key approach for cooperation "**4E**"

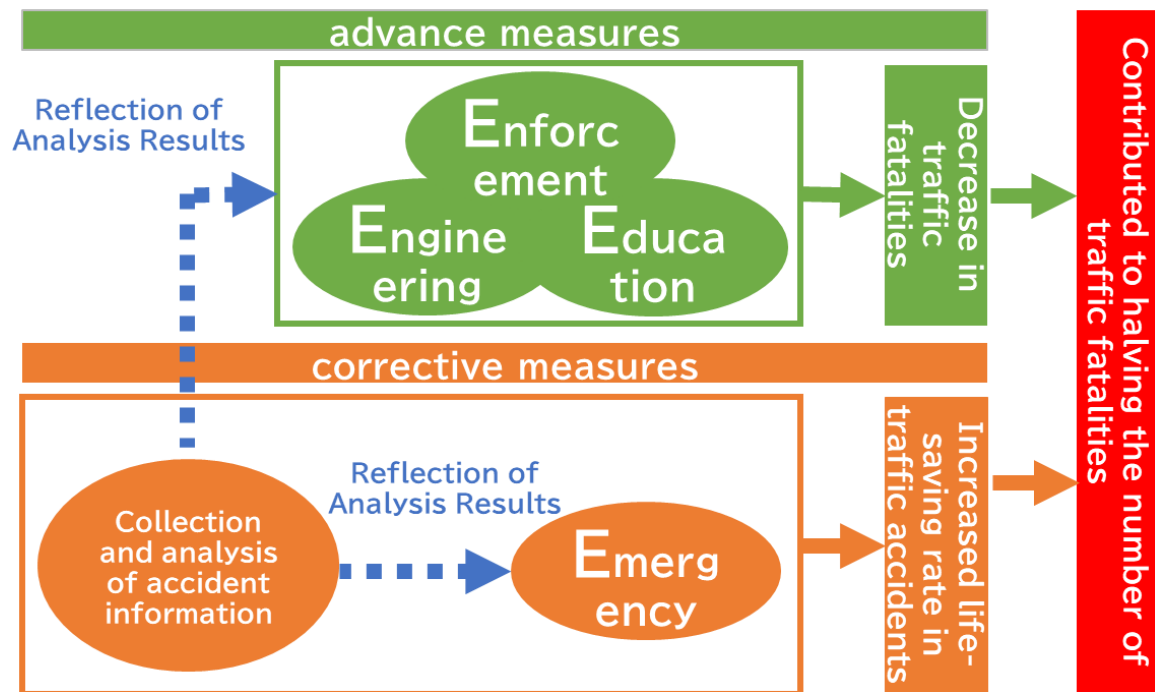
- Collect **accident information** and based on its scientific analysis
- The data can contribute to **effective counter measure** and approach such as targeting specific cause of death and generations

Enforcement Education

- | | |
|--|---|
| <ul style="list-style-type: none"> • Regulations • Enforcement • Policy, Law and Planning | <ul style="list-style-type: none"> • School • Local communities • Driver license • Training |
|--|---|

Engineering Emergency

- | | |
|---|--|
| <ul style="list-style-type: none"> • Safety facilities • Sidewalk • Traffic signal • Control system | <ul style="list-style-type: none"> • Medical facilities • Medical Tecnique |
|---|--|

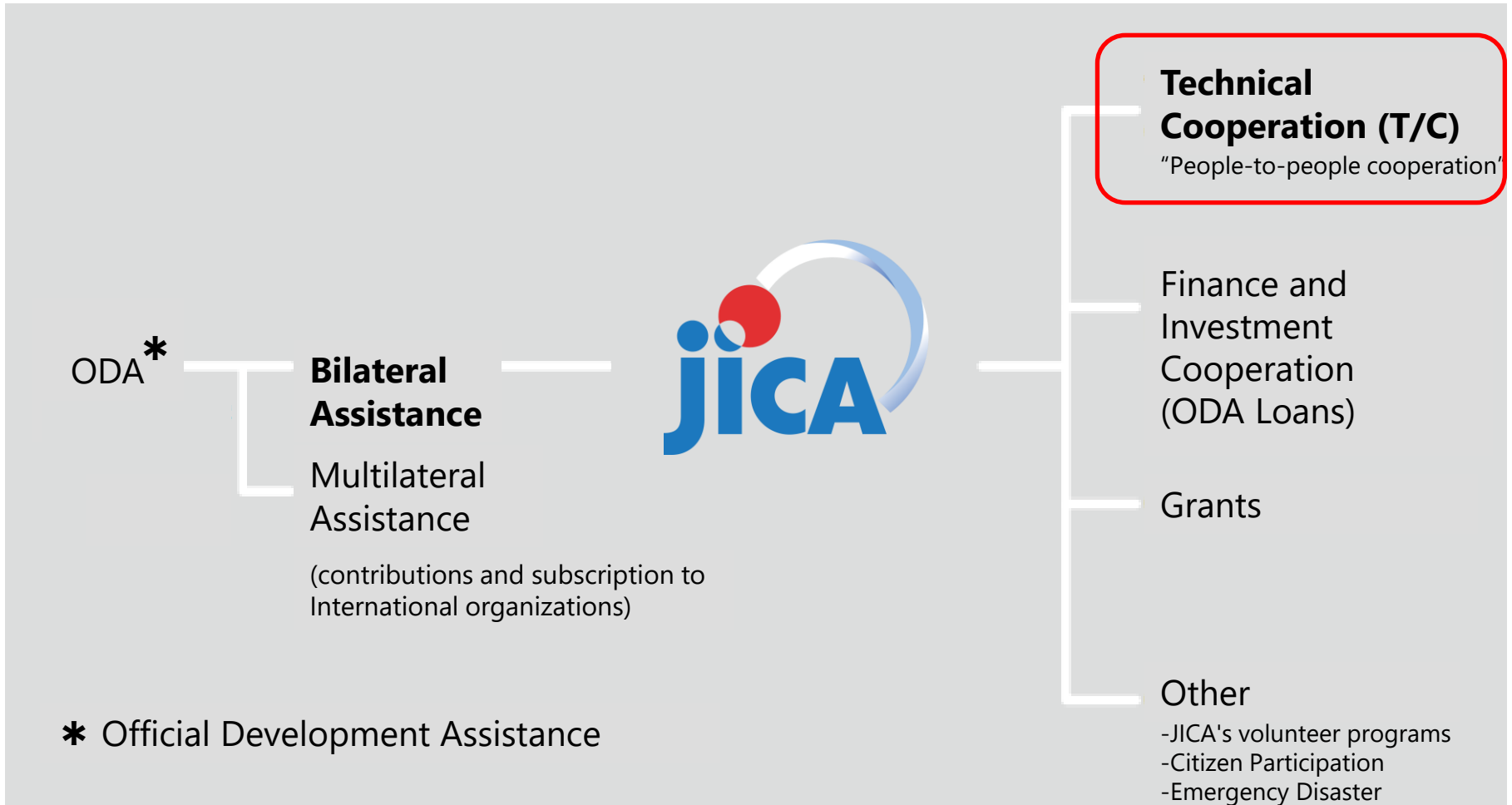


Enforcement, Engineering, and Education measures also assume that measures will be taken after a traffic accident occurs.

3. Current T/C and Future Development of Activities

JICA's Cooperation Scheme

- JICA is in charge of administering Japan's ODA and is one of the largest bilateral aid agencies in the world.
- Flexible combination of various cooperation such as T/C, Loans, Grants.



Types of Technical Cooperation scheme

Aiming to Capacity Development

- Technical cooperation is **“people-to-people”** cooperation by supporting partner countries
- Enhancing capacities to address development challenges **through own efforts.**

1) Technical Cooperation Projects

Strategically combine the dispatch of experts, technical training, and provision of equipment

- Counterparts
- Facilities
- Running Cost

- Expert Dispatch
- Training in Japan
- Third Country Training
- Equipment Supply

Record of Discussion



Consultancy Contract

Japanese Experiences related agencies & academics

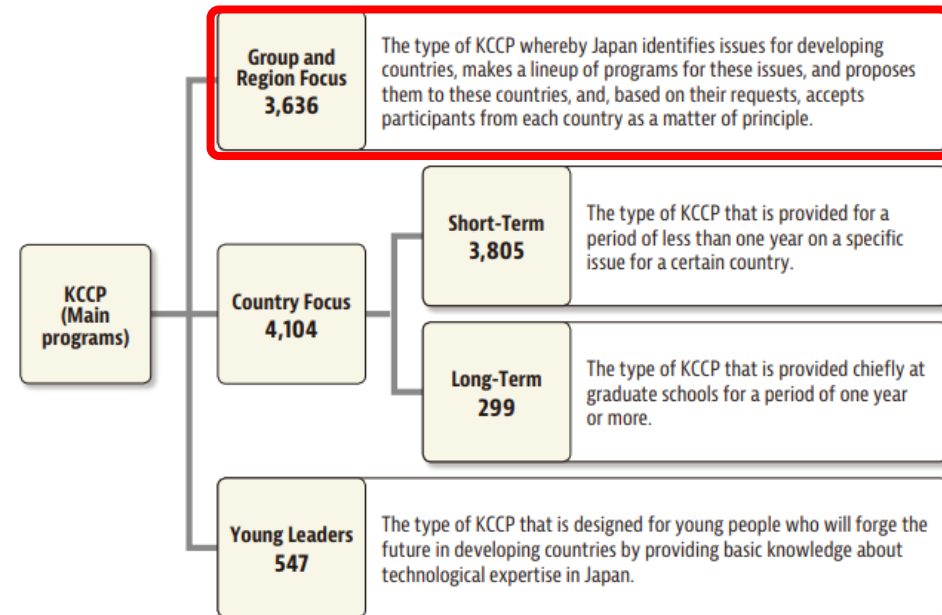
JICA Expert Team

Counterpart
Co-working
During the
Project

Technical support
Capacity Development

2) The Knowledge Co-Creation Program (KCCP)

Transmit Japanese strengths to partner countries, and enhance further co-learning among participating



Number of Participants in KCCP in Fiscal 2019

Consideration of Countries for Cooperation

Category 3

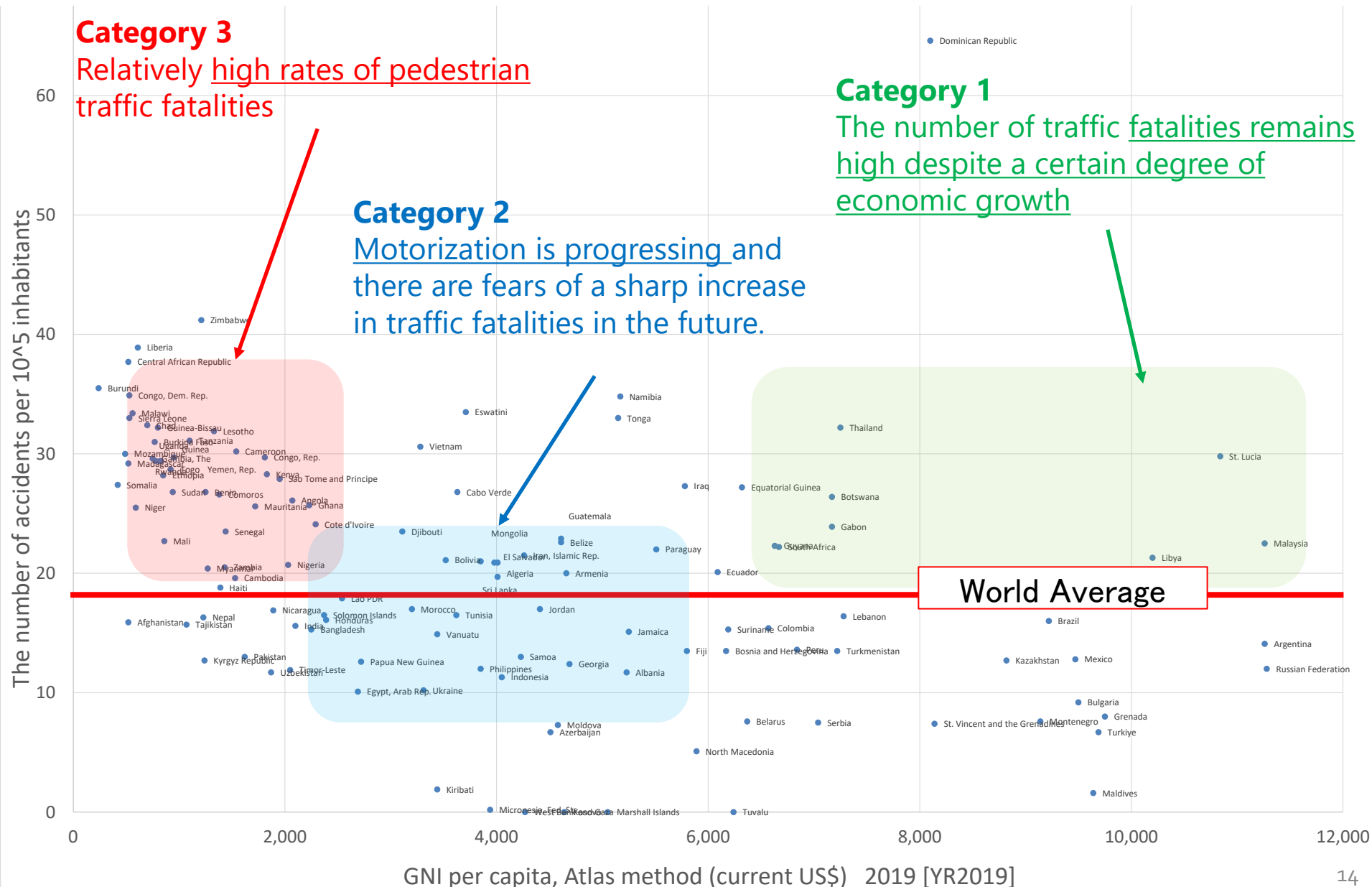
Relatively high rates of pedestrian traffic fatalities

Category 2






Motorization is progressing and there are fears of a sharp increase in traffic fatalities in the future.

Category 1

The number of traffic fatalities remains high despite a certain degree of economic growth



T/C Projects : On-going & Planning

	Project Period	Crash data collection and analyzation	E nforcement	E ducation	E ngineering	Characteristics
Thailand 	3.5years (Dec 2020~ Jun 2024)	◎	◎	◎	○	✓ Improvement of Driver licensing system and commercial vehicle operation management is included.
Cambodia 	3years (February 2022~ January 2025)	◎	○	◎	◎	✓ Cross-ministry collaboration is required ✓ National Road on-going as a collaboration project
Bangladesh 	3years (July 2021~ March 2025)	◎	◎	◎	△	✓ Police is the main counterpart ✓ Utilize DRIVER introduced by WB
Uzbekistan 	2years (July 2023~ July 2025)	◎	△	○	△	✓ Project almost exclusively dedicated to traffic accident information activities.
Kenya 	Planning 3years	◎	◎	○	△	✓ We are expecting to launch the project early 2024

- ✓ "Emergency" is not included in the scope of ongoing Project.
- ✓ Addition to these Project, Project in Tanzania is under consideration.

T/C projects : example of activities

- Motorcycle driver's license workshop for high school students
- Intersection Improvements



No.	Accident data No.	Policy of Countermeasure	Term	Countermeasure
1	1, 3	Awareness of Priority way	short	GiveWay Line
2	1, 3	Awareness of Priority way	short	Left Turn guidance Line
3	1, 2, 3	Awareness of Priority way	short	Installation of Stop sign To non-priority road
4	1, 2, 3	Warning to decrease the speed of Vehicles	short	"40km/h" Making
5	1, 2, 3	Warning to decrease the speed of Vehicles	short	Increasing Rumble Strips thickness
6	1, 2, 3	Guidance of each Lane, and warning to decrease the speed of Vehicles	short	Dot line and Color Marking
7	1, 2, 3	Guidance of each Lane, and warning to decrease the speed of Vehicles	short	Compacting of Intersection
8	1, 2, 3	To avoid entering intersection from crossing road	Middle	Traffic Signal
9	1, 2, 3	To avoid entering intersection from non-priority road	long	Over pass



- Teaching Material, Poster Contest

Grade 4 - English

English for Today 4

Traffic Lights

A. Look, listen and say.

Red light, red light, what do you say?
I say stop and stop right away.
Yellow light, yellow light, what do you mean?
I mean slow down and wait for the green.
Green light, green light, what do you say?
I say go, but look both ways.
Thank you, thank you, red, yellow, green.
Now we know what the traffic lights mean.

B. Read the poem in Activity A. Write T for True or F for False.

- There are three lights on a traffic signal. _____
- A red light means slow down. _____
- A yellow light means go. _____
- A green light means look both ways and go. _____
- The red light is between the other lights. _____
- The green light is under the yellow light. _____
- The lights on the traffic signal are triangles. _____

C. Correct the False sentences from Activity B. Write them in your exercise book.

Example: A red light means stop.

DMP Road Safety Poster Contest Guidelines

Message: Use zebra crossing (12 years old)

Message: Thanks for keeping safe (9 years old)

Message: Gratitude can be understood even through face mask (9 years old)

Message: Follow the rules for everyone's sake (9 years old)

(Winning posters at 10th Tokyo Road Safety Poster Contest)

Applicants
Students of Rajarbag Police Lines School and Colleges (Class 4, 5) approx. 200 works

Theme of the Poster
Make a poster with the theme of "Road Safety". Focusing on one of the following situations:
1. Crossing the road by using zebra crossing/ Foot-over Bridge
2. Fastening the seatbelt in vehicle
3. Walking on the sidewalk safely
4. Other situations related to road safety or road accident prevention awareness

Schedule
25th (Tue) April to 4th May (Thu), 2023

Size of Poster
Use approximately A3 size (portrait: 420mm x 297mm) to make poster. You can use any kind of colors or drawing materials.

Winning posters will be used for road safety activities

* Check the other side

Dhaka Metropolitan Police
In collaboration with Dhaka Road Traffic Safety Protocol (DRSP) supported by JICA

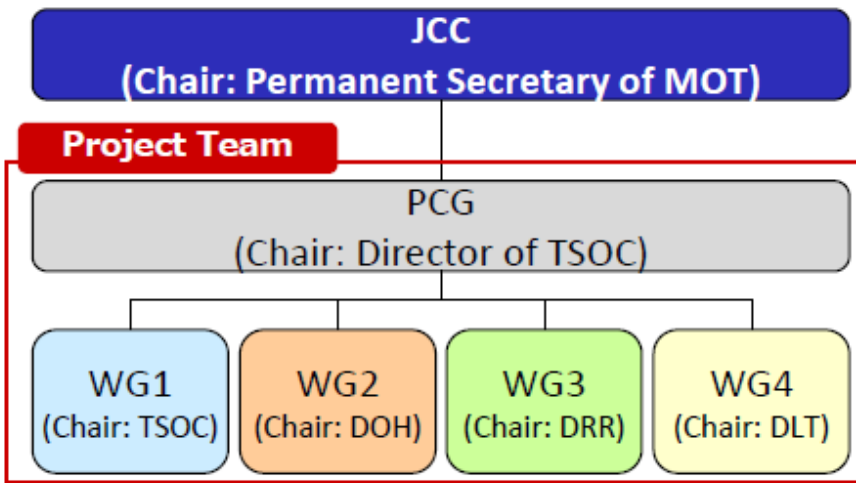
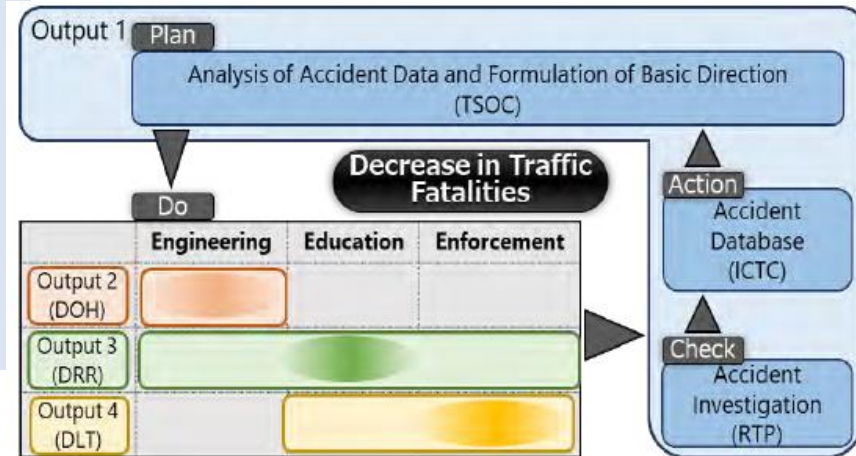
- Accident investigation training



Project Purpose The capacity improvement of road traffic safety institutions and implementation is realized.

Counterpart Ministry of Transport
 -Transport Safety Operation Center
 -Information Communication Technology Center
 -Department of Highways
 -Department of Rural Roads
 -Department of Land Transport
 Royal Thai Police

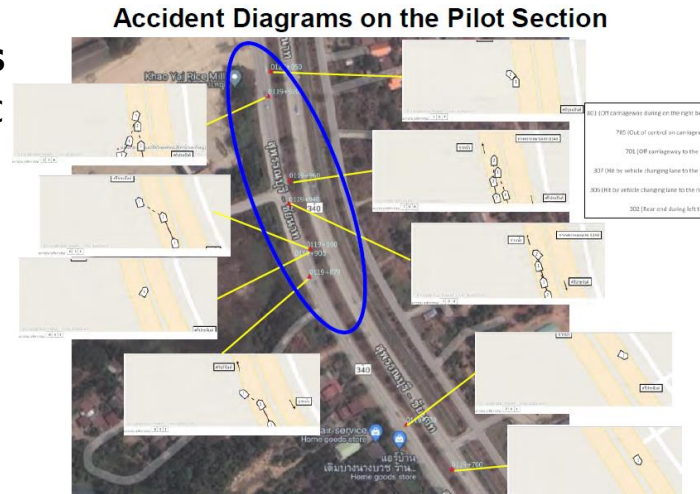
- Output**
1. The reliability and utilization of New Transport Road Accident **Management System** (New New-TRAMS) are improved.
 2. The countermeasures for safer road **engineering** are developed and implemented through the activities in the pilot sections on National Highways and /or Motorways.
 3. Comprehensive road **safety programs** on the Rural and/or Local Roads are implemented in the pilot areas.
 4. Land transport administration for road safety on driver licensing and operation management for commercial vehicle is improved.



Activities

Output2:

- Selection of **pilot sections** based on analysis of traffic accident data.
- The **workshops** to learn how to analyze/assume accident mechanism by using accident data



Site Investigation

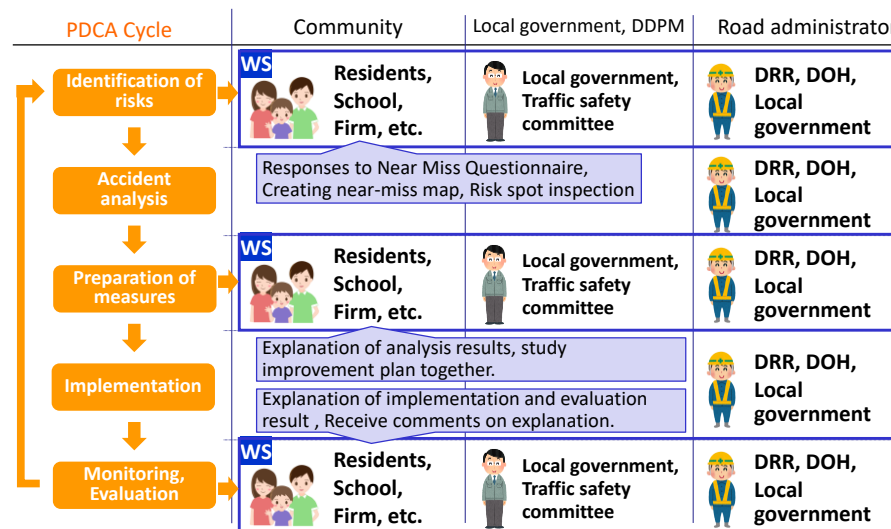


Workshop



Output3:

- Implementation of traffic safety programs utilizing **resident participation** methods
- Cooperation with related agencies for **nationwide development** of traffic safety programs

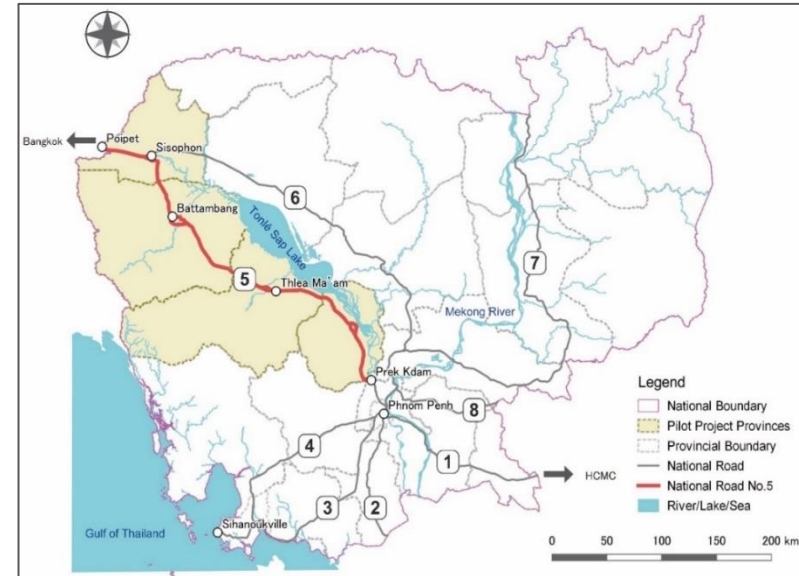


Project Purpose The number of fatalities due to traffic accidents on the National Road No.5 will decrease.

Counter part

- Ministry of Public Works and Transport
- Department of Road Traffic Safety
- Department of Road Infrastructure
- Department of Public Works and Transportation
- Ministry of Interior
- Ministry of Health
- Ministry of Education, Youth and Sport

- Output**
1. The capacity of the relevant organizations for **Research & Analysis** for road safety is improved.
 2. The capacity of the relevant organizations for road safety **engineering** is improved through activities in the pilot area on the National Road No.5
 3. The capacity of the relevant organizations for traffic **enforcement** is improved through activities in the pilot area on the National Road No.5
 4. The capacity of the relevant organizations for the promotion of the safe behavioral **manners** for road traffic is improved through activities in the pilot area on the National Road No.5



The project targets pilot areas on National Road No.5



Used to be...

- Very simple analysis of collected accident data
- **The causes of accidents have not been investigated in depth**, and the traffic accident countermeasures to be developed lack specificity.



In this Project

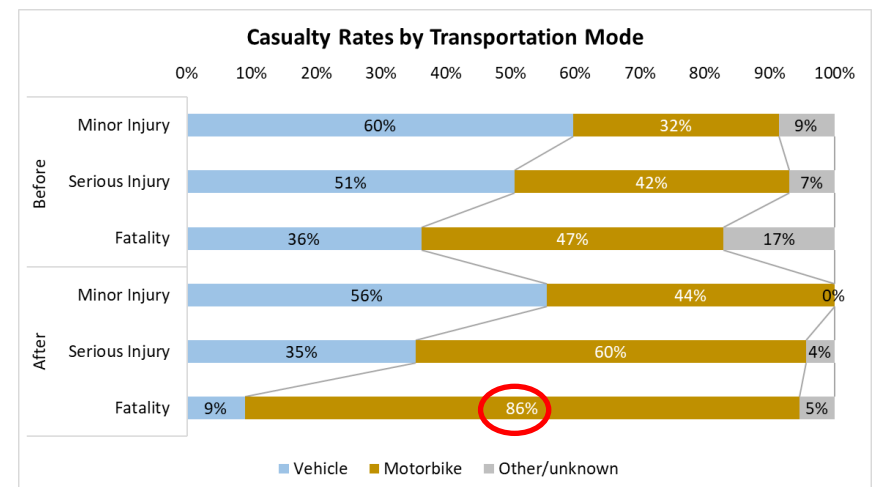
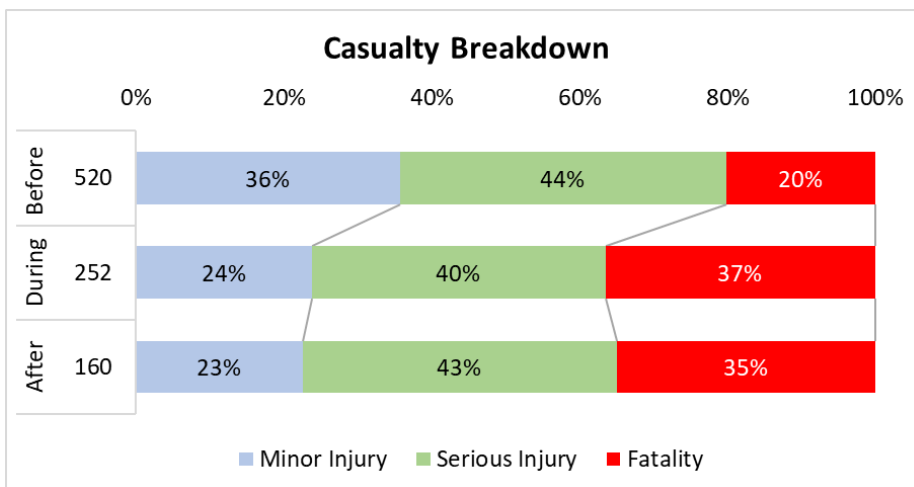
- **More precise and detailed data analysis (crosstabulation)** allows for deeper investigation of accident causes.
- Also used as **a communication tool** for interagency collaboration.

Guideline for Traffic Accident Statistics and Analysis

Table of Content

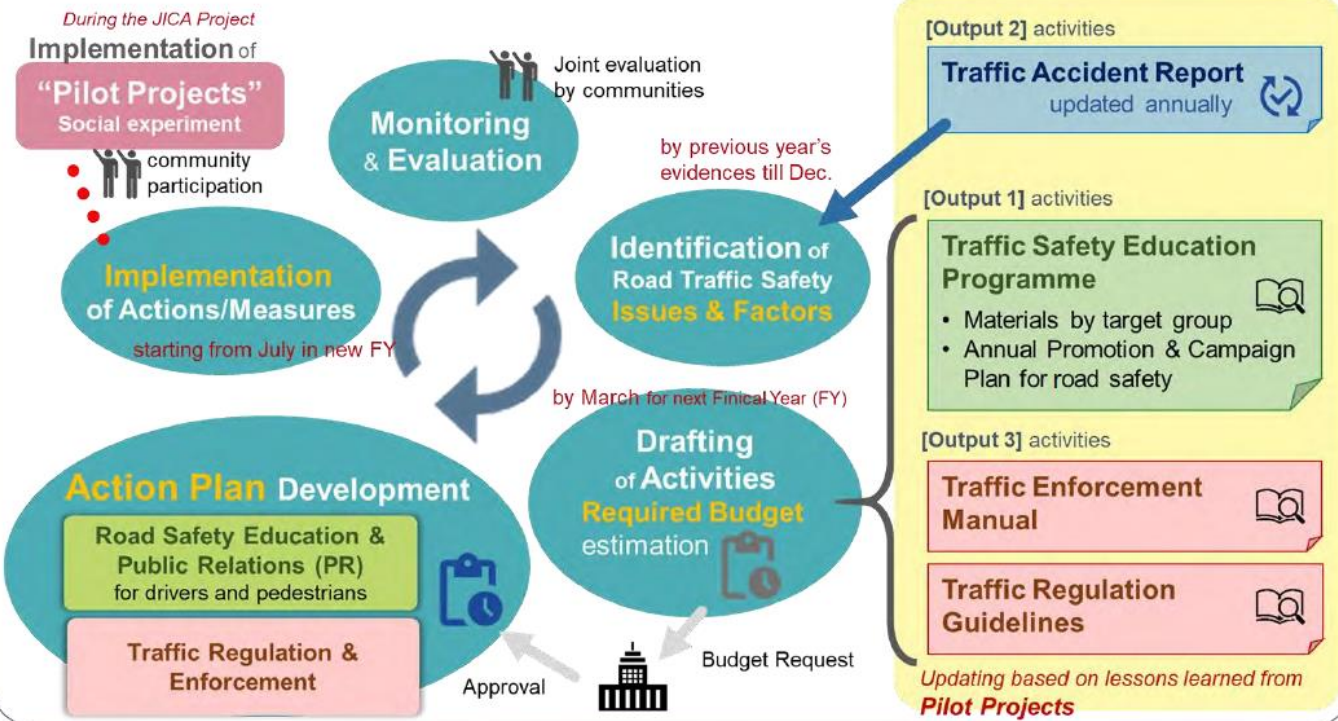
1	Overview	1-2
1.1	Purpose of Traffic Accident Statistics and Analysis	1-2
1.2	Definitions	1-2
1.3	Traffic accident database	1-3
1.3.1	COLLECTION OF CRASH DATA BY THE POLICE	1-3
1.3.2	COLLECTION OF CASUALTY DATA BY HOSPITAL	1-4
1.4	Utilization of Traffic Accident Statistical Analysis Results	1-6
1.5	Analytical Methods for Traffic Accidents Data	1-6
1.6	Standard Analysis Items for the Annual Report (Draft)	1-8
2	Traffic Accident Analysis Structure	2-9
2.1	2.1 Department in charge	2-9
2.2	2.2 Mission of the department in charge	2-9

<Road Traffic Accidents on NR5 : Before and After of construction>



Project Purpose	DMP's capacity to implement comprehensive road traffic safety measures in DMA is strengthened..
Counterpart	Dhaka Metropolitan Police
Output	<ol style="list-style-type: none"> 1. Capacity of Traffic Safety Education and Public Relations is strengthened. 2. Capacity of Traffic Accident Report/Analysis is strengthened. 3. Capacity of Planning/Implementation of Traffic Safety, Traffic Regulation and Enforcement is strengthened

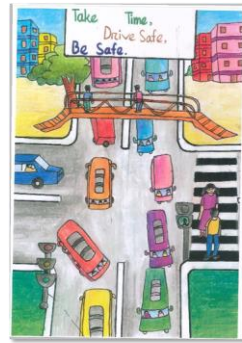
Operation Cycle for Comprehensive Road Traffic Safety Programme



Activities

Output1:

- **Behavioral change** based on the **mindset** of citizens
- Development of road safety **education**
 - teaching materials
 - poster contests
 - slogan



DMP Commissioner Award (Poster)



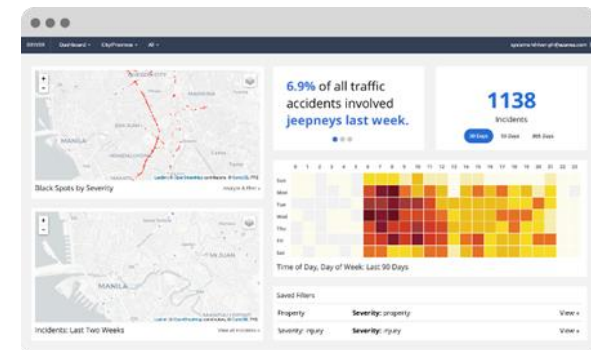
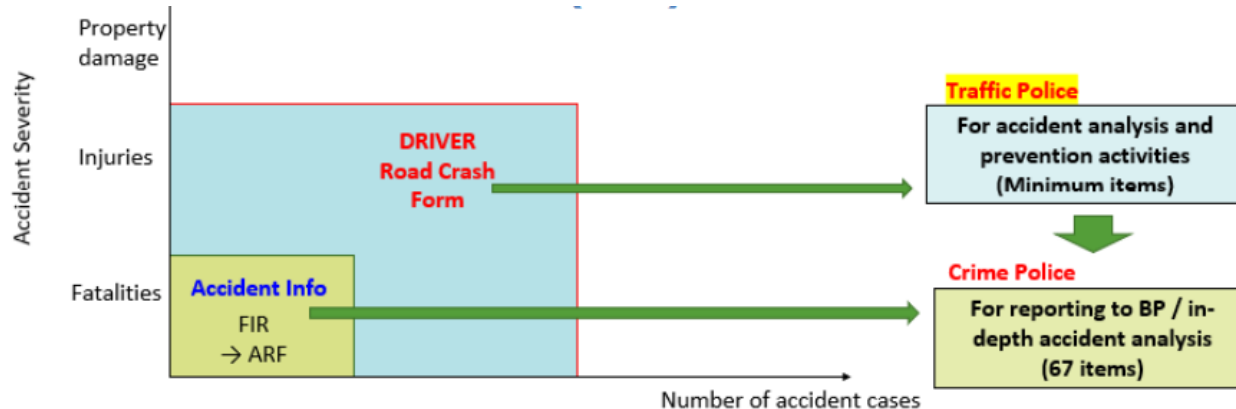
National Road Safety day (22 OCT)



- Provide drive training course
- Driver Training Institute - 3
- Driving Training Centre - 19

Output2:

- **Customize DRIVER** system prototype (web and android app).
- Data of "Road Crash Form" and ARF (record for trial) with GPS can be input in DRIVER



- Participants shall learn the overview of the experiences, knowledge and countermeasures for traffic safety accumulated in Japan through lectures/site visits.

In case Year 2022

Duration	2 weeks
Participants	<p>Group A</p> <ul style="list-style-type: none"> ✓ 7 members from Thailand, Cambodia, East Timor, Bhutan, Bangladesh, Nepal <p>Group B</p> <ul style="list-style-type: none"> ✓ 11 members from Colombia, Ecuador, Egypt, Ghana, Nigeria, Uganda, Tanzania, Kyrgyz, Democratic Republic of the Congo
Subjects	<ul style="list-style-type: none"> ✓ Traffic enforcement including traffic police system, collection and analysis of accident data, and driving license system ✓ Traffic safety education and campaign, Traffic safety facilities ✓ Emergency rescue system ✓ Traffic safety policy ✓ Operation management of passenger and cargo transport company, etc.





The Knowledge Co-Creation Program (KCCP)

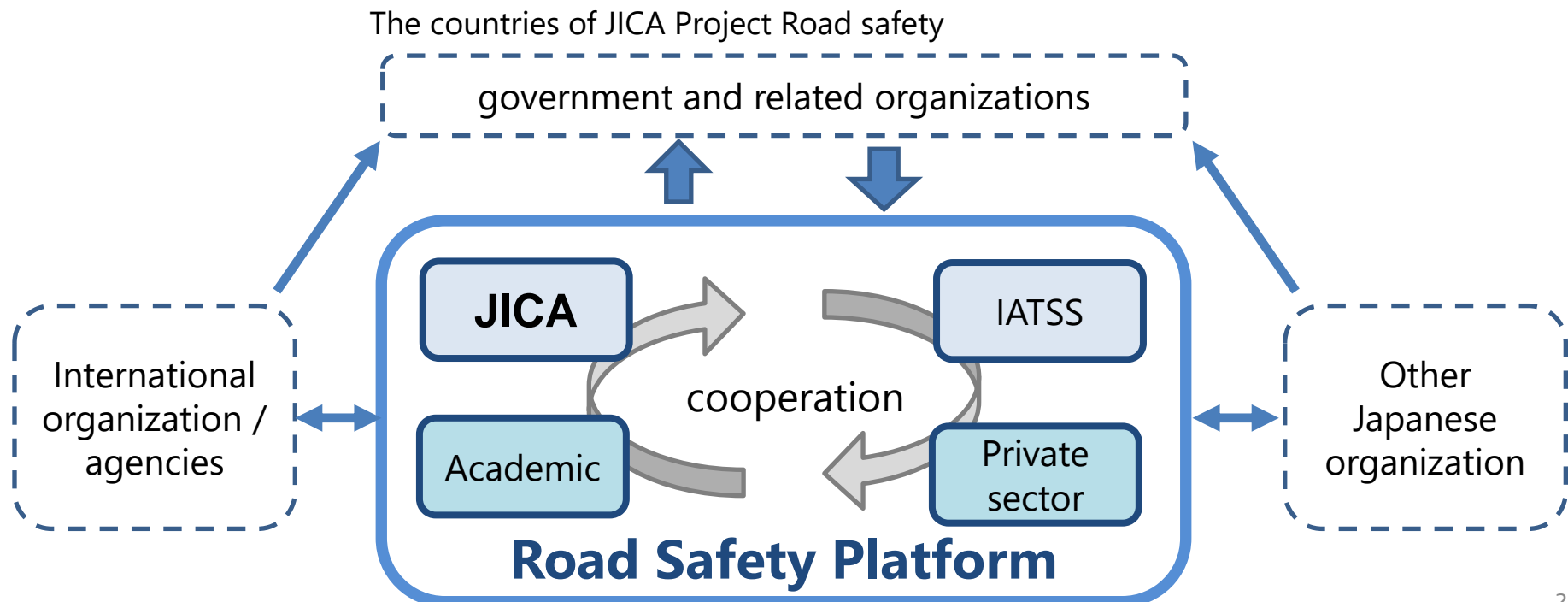
Group and Region-Focus

Date	Time			Type	Contents	Lecturer
Nov.8, Wed.					Arrival in Japan :Haneda Airport	
Nov.9, Thu.	10:00	to	12:00	Lecture	Briefing	JICA
	14:00	to	16:00	Lecture	JICA Program Orientation	Consultant
Nov.10, Fri.	10:00	to	12:00	Lecture	Instruction of Road Safety Audit	University*
	14:00	to	16:30	Lecture	Applying and utilizing big data to city roads	University*
	18:00	to	20:00		Welcome party	
Nov.11, Sat.					Free time	
Nov.12, Sun.					Free time	
Nov.13, Mon.	10:00	to	12:00	Lecture	Traffic safety measures of national road	University*
	14:00	to	16:00	Site visit	Intersections at national road	University*
Nov.14, Tue.	10:00	to	12:00	Lecture	Visualization of accident data	University*
	14:00	to	16:30	Workshop	Visualization of accident data	University*
Nov.15, Wed.	10:00	to	12:00	Lecture	Traffic safety measures of local road	University*
	14:00	to	16:00	Site visit	Intersections at local road	University*
Nov.16,Thu.	9:30	to	10:30	Lecture	Collection, analysis of traffic accident data	ITARDA
	13:30	to	16:30	Lecture	Collection, analysis of traffic accident data	ITARDA
Nov.17, Fri.	10:00	to	12:00	Lecture	Traffic safety measures of arterial road	Consultant
	14:00	to	16:00	Site visit	Intersections at arterial road	Consultant
Nov.18, Sat.					Preparation of report	
Nov.19, Sun.					Preparation of report	
Nov.20, Mon.	10:00	~	12:00	Discussion	Presentation, Evaluation Meeting, Closing ceremony	Consultant JICA
Nov.21, Tue.					Departure from Haneda airport	

Idea of “ Road Safety Platform ”

Activities of Platform

- Collect information and analyze the issues of road safety in the countries of JICA Project implementation.
- Evaluate and collect information of road safety Project their own in the countries of JICA Project implementation.
- Formulate /Monitor/Evaluate JICA's ongoing Project.
- Examine another cooperation and collaborate with JICA's others scheme.
- Share information and cooperate with international agencies and bilateral assistance agencies.





Thank you for your kind attention.

