

JICA Global Agenda for No.02 Transportation

Cluster Strategy for “Road Traffic Safety” Toward a World Where No One is Killed in a Traffic Accident Summary



Japan International Cooperation Agency (JICA) works toward the achievement of the Sustainable Development Goals (SDGs).

2026.03

1. Position in JGA (Transportation)

- The objective of JGA “Transportation” is to promote low-carbon and decarbonization efforts in the field of transport by advancing measures such as modal shift, while supporting the development, sustainable maintenance and management, and safety of transportation infrastructure both domestically and globally. Through these efforts, JGA aims to create a society where everyone can move safely and freely, and where essential goods can be delivered reliably to people around the world.
- ¹To achieve this objective, JGA “Transportation” has established three clusters, through which it will promote enhanced connectivity and climate change measures that contribute to sustainable growth of developing countries.
- Today, road traffic accidents are the leading cause of death among younger generations, and Japan, as a leader in the global automobile industry, has a significant role to play in improving road traffic safety. As an organization that has long supported road development, JICA also recognizes its responsibility to address the issue of road traffic accidents. In this context, JICA has established the Cluster Strategy “Road Traffic Safety: Toward a World Where No One is Killed in a Traffic Accident.”

2. Objective of the Cluster

- With regard to the SDGs target, the United Nations General Assembly stated: “the number of global fatalities and injuries from road traffic accidents should be reduced by half by 2030.” ² In line with this target, this cluster aims to contribute to that goal by working toward “bringing the number of global road traffic fatalities as close to zero as possible.”

¹ In addition to “Road Traffic Safety,” JICA established “Maritime Security and Safety,” and “Road Asset Management.”

² SDG Target 3.6 states, “By 2020, halve the number of global deaths and injuries from road traffic accidents.” However, a new time frame was set at the UN General Assembly in September 2020 (A/RES/74/299). https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf

3. Current Development Issues and Scenario

3.1 Current development issues

- According to the WHO, as motorization and the development of road transport infrastructure continue to expand rapidly alongside economic growth, the number of people killed in road traffic accidents reached 1.19 million worldwide in 2021³. This figure exceeds the number of deaths caused by HIV/AIDS and tuberculosis, ranking road traffic injuries as the 12th leading cause of death globally. Road traffic accidents also often leave long-lasting consequences that significantly affect the lives of those involved. When measured by road traffic fatality rate per 100,000 population, countries in Southeast Asia and Africa in particular exceed the global average of 15 deaths, causing severe social and economic impacts. As a result, road traffic safety has become a pressing and common challenge across developing countries.
- Among individuals aged 5 to 29, road traffic accidents are the leading cause of death. The loss of young people – who represent valuable human capital for the future development of their countries - poses serious social and economic challenges in developing nations. Furthermore, although low-income countries account for 9% of the global population and only 1% of the world's vehicle fleet, they bear 13% of global road traffic fatalities, highlighting the severity of the issue. Ensuring road safety is essential for realizing “human security”, as it enables all people to live free from fear and uphold their dignity.

³ WHO, Global status report on road safety 2023

Table 1: Leading Causes of Death for All Ages and for Ages 5-29 years (2019)

Rank	All ages	Ages 5-29 years
1	Ischaemic heart disease	Road Injury
2	Stroke	Tuberculosis
3	Chronic obstructive pulmonary disease	Diarrhoeal diseases
4	Lower respiratory infections	Interpersonal violence
5	Neonatal conditions	Self-harm
6	Trachea, bronchus, lung cancers	HIV/AIDS
7	Alzheimer’s disease and other dementias	Lower respiratory infections
8	Diarrhoeal diseases	Maternal conditions
9	Diabetes mellitus	Drowning
10	Kidney diseases	Cirrhosis of the liver
11	Cirrhosis of the liver	Malaria
12	Road injury	Meningitis

Preventing injuries and violence: an overview. Geneva: World Health Organization; 2022 (<https://iris.who.int/handle/10665/361331>, accessed 15 June 2023).

3.2 Development scenario

- In order to reduce the number of road traffic fatalities, it is essential to implement a combination of preventive measures commonly referred to as the 3Es: 1) Enforcement (road safety rules and enforcement) , 2) Engineering (traffic engineering measures), and 3) Education (road safety education and public awareness) .⁴ In addition, as a post-accident measure, 4) Emergency response -including rescue and medical care- is considered critical. It is also widely recognized within the international community and in relevant research that the appropriate collection and analysis of road traffic accident data, and the use of such analyses to inform and strengthen both preventive and post-crash measures, are indispensable for establishing a continuous and sustainable cycle for reducing road traffic accidents. Through the approaches shown in Figure 1, this cluster aims to contribute to halving the number of road traffic fatalities.
- Taking into account the circumstances of developing countries, this cluster will, for the time being, position the three “E” components as its core activities, while maintaining close coordination with Emergency measures.
- In addition, recent years have seen significant advances in digital technologies in the field

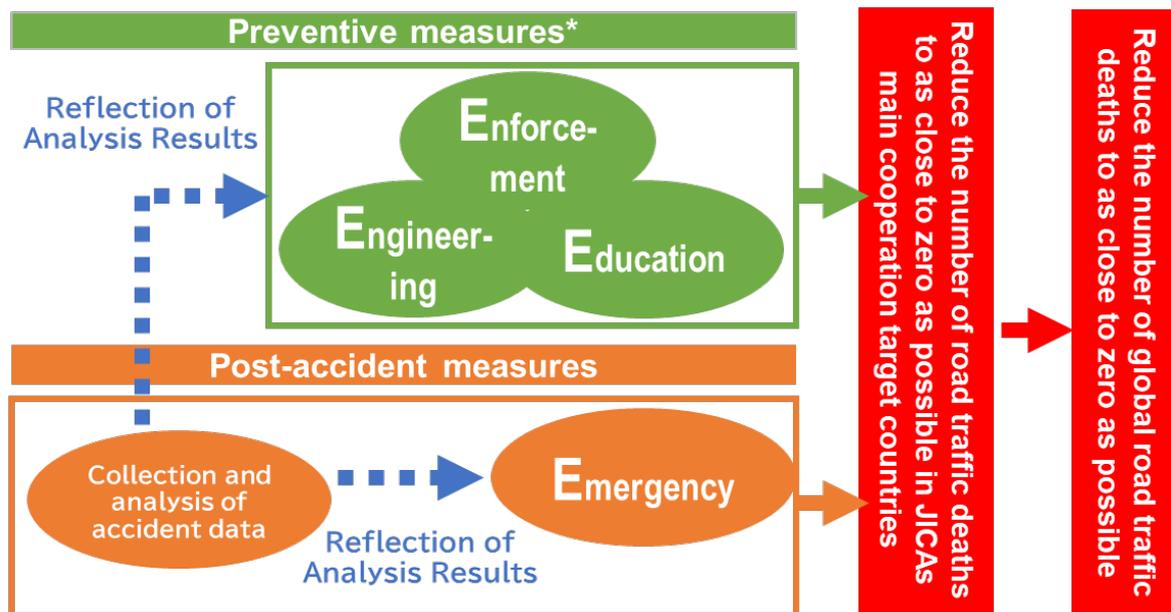
⁴ National Police Agency: 2005 White Paper on Police, Chapter 1, Section 2, “Current Status of Traffic Police Activities.” <https://www.npa.go.jp/hakusyo/h17/hakusho/h17/index.html>

of road traffic safety, including the use of big data and AI. These include mapping high-risk locations using vehicle driving data and the introduction and promotion of advanced safety vehicles equipped with automated driving technologies. This cluster will also explore the potential application of such technologies in its activities.

Table 2: Road traffic safety measures before and after accidents (focused on the 3Es)

	Area	Details	Potential Players
Preventive measures [※]	(1) Traffic rules and Enforcement (Enforcement)	Develop traffic systems and rules, Regulate traffic and provide corresponding traffic guidance and enforcement, etc.	JICA, other donor agencies, partner governments
	(2) Traffic engineering measures (Engineering)	Plan urban cities and regions with road safety in mind, Improve and maintain roads/ safety facilities, Introduce public transportation, Improve and maintain traffic control systems, traffic signals, and other traffic safety facilities, Conduct vehicle inspections according to the vehicle inspection system, Improve vehicle safety by introducing automated driving technology, etc.	Civil engineering area: JICA, other donor agencies, partner governments Vehicles: private companies
	Traffic safety education and public awareness (Education)	Raise public awareness of traffic safety, Provide traffic safety education in communities and schools, etc., Provide training to obtain driver's license in accordance with the driver's license system, Provide safety education for driving automobiles, etc.	School education: JICA, other donor agencies, Japanese government, NGOs Driving skill: private companies
Post-accident measures	4) EMS: emergency medical services (Emergency)	Improve and maintain emergency vehicles and emergency medical facilities, Improve emergency medical technology, etc.	JICA, other donor agencies, partner governments

* Measures (1), (2), (3) are also taken after road traffic accidents.



*Enforcement, Engineering, and Education measures are also assumed to be taken after road traffic accidents.

Figure 1 Conceptual diagram of approaches to reduce road traffic deaths

3.3 Implementation of development scenario

- Through the above approach, the intermediate outcomes will be progressively developed - moving from <initial condition> through <Phase 1>, <Phase 2>, and <Phase 3> in attachment 2 by collecting and analyzing accident data. This process is expected to lead to the final outcome of “bringing the number of road traffic fatalities as close to zero as possible in JICA’s main cooperation target countries.”
- As a concrete approach, the first stage <Phase 1> focuses on countries that, despite having achieved a certain level of economic growth, continue to experience persistently high number of road traffic fatalities; countries where rapid motorization driven by economic growth may lead to a sharp increase in traffic deaths; and countries where the proportion of pedestrian fatalities is relatively high. In these countries, accident data will be collected and the causes of accidents will be scientifically analyzed. Based on the results of the analysis, intellectual support will be provided in terms of policies and systems for both preventive and post-accident measures to establish approaches for developing road infrastructure that can be effective, and identify best-practice models. Then, in the second state <Phase 2>, these approaches will be scaled up nationwide. In the third stage <Phase 3>, the aim is to foster and institutionalize a continuous cycle for reducing the number of road traffic deaths in the target countries. This initiative is also positioned as an effort within the broader field of digital and scientific technologies, taking into account potential future

advances in automated driving. As a prerequisite for the first phase, it is also important to analyze the perception of road traffic safety issues and problems by the partner governments and administration, and to raise the importance of road traffic safety at the governmental level.

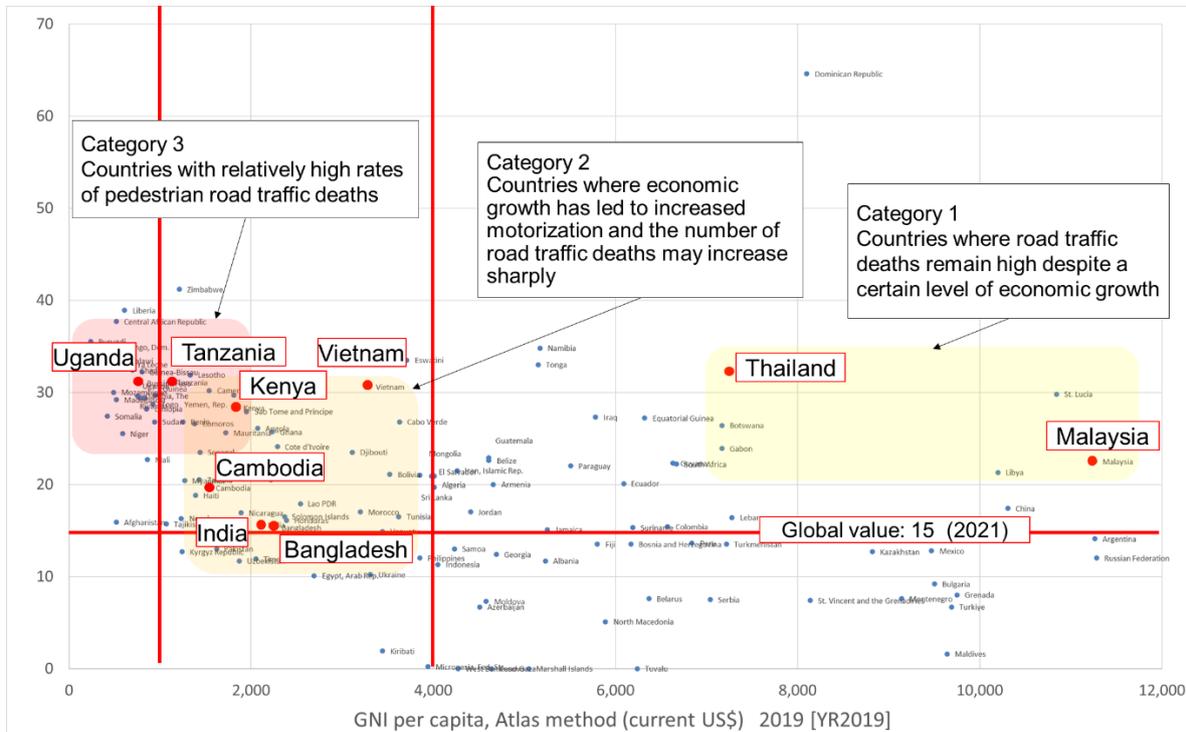


Figure 2: Correlation between traffic deaths per 100,000 people and gross national income per capita (GNI per capita)

4. Cluster targets and indicators

In order to achieve the objective of this cluster, “Bringing the number of global road traffic fatalities as close to zero as possible,” specific intermediate targets and intermediate outcomes, as well as the final target and outcomes are defined as follows.

Table 3: Cluster outcomes/ targets and indicators

Final outcome/target (2050)	Bringing the number of road traffic fatalities as close to zero as possible in JICA’s main cooperation target countries Indicator (optional): Road traffic deaths per 100,000 people
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<p>Intermediate outcome/ target (2030)</p>	<p>Halving the number of road traffic fatalities in JICA's main cooperation target countries</p> <p>Indicator: Less than 7 road traffic deaths per 100,000 people</p>
<p>Immediate targets (2026)</p>	<p>① The number of target countries where traffic violation control training will be deployed nationwide will increase. Indicator: By 2026, training systems/guidelines on traffic violation control will be developed and utilized in 3 countries in non-pilot area (Note: the target by the end of FY2030 is 5 countries)</p> <p>② More target countries will have road and transportation facility development plans that take road safety into consideration and road safety audits will be conducted nationwide. Indicator: By 2026, road safety facilities will be in place in pilot areas in 3 countries, and road safety audits will be implemented in non-pilot areas. (Note: the target by the end of 2030 is 5 countries)</p> <p>③ The number of target countries to be covered by the national development of road safety education and awareness activities appropriate to the culture and customs of the country concerned will be increased. Indicator: By 2026, road safety education and awareness methods and systems appropriate to the culture and customs of the countries will be developed in 3 countries, and be implemented outside the pilot areas. (Note: the target by the end of FY2030 is 5 countries)</p> <p>④ The number of target countries where nationwide development plans for facilities and equipment necessary for EMS (emergency medical services) will increase. Indicator: By 2026, plans for the development of facilities and equipment necessary for EMS in 3 countries will be developed outside the pilot area. (Note: the target by the end of 2030 is 5 countries)</p>

Annex

Annex 1. JICA's Experience

Annex 2. Conceptual Diagram of Development Scenario

Annex1. JICA's Experience

JICA's Experience - major development cooperation results in road traffic safety

Kenya: Technical Cooperation Project (2025-2028)

Counterpart agencies (CA): Kenya National Police, National Highway Authority, etc.

· High number of pedestrian fatalities. Plan to implement an evidence-based traffic enforcement plan, technology transfer, and multi-stakeholder road safety activities.



Inside the police station office (current status)

Cote d'Ivoire: Grant Aid

Completed in 2019: Abidjan intersection improvements. Enhanced intersection safety by further increasing traffic capacity through the two-way operation of multi-level intersections.

Ghana: Grant Aid

Completed in 2020. Tema Intersection multi-leveling. Traffic congestion occurs in the morning and evening due to commuter traffic. The multi-leveling of the intersection improved traffic flow and safety.

Tanzania: Finance and Investment Cooperation

Started in 2020: Arusha-Holili road improvement project. Improve the safety of pedestrian, bicycle, and automobile traffic by widening the road to four lanes.

Tanzania: Grant Aid

Completed in 2017: Dar es Salaam intersection improvements. It is expected to significantly reduce the number of traffic accidents at the intersection and improve road safety.

Uzbekistan: Individual Expert Dispatch

Started in 2023. Collect and analyze traffic accident data and conduct publicity activities.

Nepal: JOCV Dispatch (Volunteer)

Continuously dispatch senior volunteers such as former police officers from Japan, to support traffic safety activities at the Kathmandu Metropolitan Area Traffic Police Department (Kathmandu).

Thailand: Technical Cooperation Project (2020-2024)

CA : Ministry of Transport, National Police of Thailand

· Increased automobile traffic has led to a high number of traffic accidents, and the number of traffic deaths is among the highest in the world. Analyze traffic accidents and assist in improving traffic in high-risk areas.



Accident investigation training for police officers

Vietnam: Technical Cooperation Projects/ Finance and Investment Cooperation

2006-2009 (Traffic safety human resource development in Hanoi); 2010-2013 (Enhanced training for traffic police officers) Completed in 2014: Traffic Safety Enhancement Project on the Northern Vietnam National Highway. Contributed to capacity building in traffic control, enforcement, and traffic management. Fatalities decreased in many provinces despite increase in number of registered vehicles. (e.g., in Hanoi, the number of fatalities decreased by about 30%.

Bangladesh: Technical Cooperation Project (2021-2025)

CA: Dhaka Metropolitan Police

· Provide support and pilot projects for road safety education and accident data collection, and improve the road safety capacity of the Dhaka Metropolitan Police through these activities.



Safety Education in Schools

Cambodia: Technical Cooperation Project (2021-2025)

CA: Ministry of Public Works and Transportation, Ministry of Health, etc.

· With economic growth expected, implement measures related to road traffic safety on National Road No. 5 and other arterial roads.



Self-assessment of safe driving

Cambodia: Finance and Investment Cooperation

Started in 2013: National Road No. 5 Improvement Project. It is expected to reduce the number of traffic deaths through traffic safety measures in the areas along the route.

Group and Region-Focused Training (for all countries)

2018-2020: Traffic police administration training

2019 - Road traffic safety training Received over 80 short-term trainees from 33 countries. Provided comprehensive lectures and site visits on road safety measures through learning about Japan's "traffic war" experience and efforts since the 2000s.

Training in Japan



Annex2. Conceptual Diagram of Development Scenari

