

Part 2: Overview of GMS Transport Sector

Filologo Pante, Jr. ADB Consultant



GMS SUBREGIONAL TRANSPORT FORUM

26 September 2024 Beijing, People's Republic of China

Overview of the GMS Transport Sector

Key developments in the GMS transport sector that need to be considered in updating TSS 2030.



GMS countries have made substantial progress in improving physical connectivity.

Achieved through efforts of GMS countries with ADB as a major provider of support to GMS transport projects. Independent evaluation of ADB's contribution to the GMS Program concluded:

"ADB support for connectivity significantly enhanced road transport infrastructure... ADB supported the construction and/or rehabilitation of about 3,300 km of roads, helping to double the number of cross-border road passengers and the volume on roads during 2010–2018."

"ADB support in the transport sector is likely to connect 19.2 million residents to the GMS Economic Corridor network along the project sites, reduce transport costs, including the costs of vehicle operations and road maintenance, and improve economic efficiency."

Source: ADB Independent Evaluation Department. 2021. ADB Support for the Greater Mekong Subregion Program, 2012-2020: Performance and Results. Manila



However, the main focus of GMS transport infrastructure development has been on roads and less on other modes.

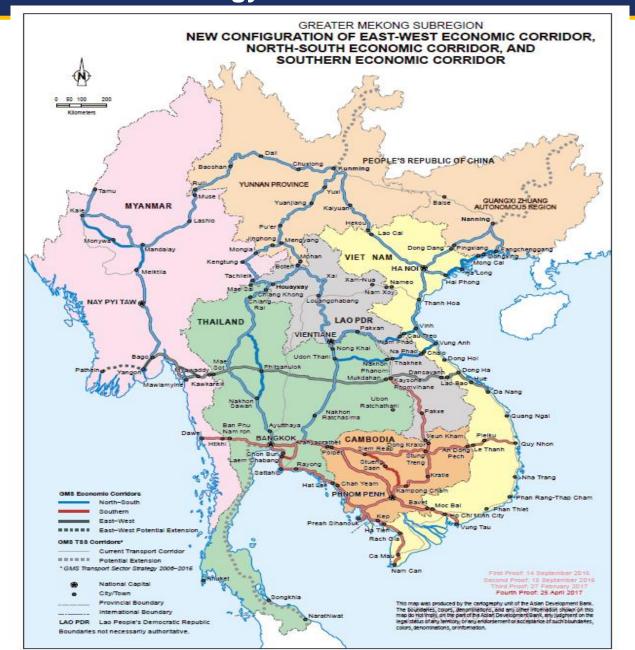
GMS Passenger and Freight Volume on Road and Rail Transport

Indicator	2010	2018
Road transport		
Passenger (passengers-km-million)	178,616	313,595
Freight (tons-km-million)	209,459	361,629
Rail transport		
Passenger (passengers-km-million)	44,208	77,413
Freight (tons-km-million)	132,824	113,063 (2016)

Source: GMS Statistical Data Base

The TSS 2030 Update has to place more emphasis on intermodal and multimodal transport development, especially railway and inland waterways.







Cross-border trade and transport facilitation (TTF) is necessary to maximize improved physical connectivity.

Value of intra-GMS trade increased from \$203 billion in 2010 to \$552 billion in 2019, with one-half of 2019 value being accounted for by trade with PRC. There is significant potential for expanding and diversifying intra-GMS trade.

Accelerating and enhancing the effectiveness of CBTA implementation needs to be placed at the forefront of the strategy in the TSS 2030 Update.



Transport infrastructure and TTF have to be complemented by logistics development to effectively contribute to the GMS 2030 vision. The COVID-19 pandemic highlighted the importance of logistics and supply chain management.

Logistics Performance Index 2023

Country	Overall	Customs	Infrastructure	International Shipments	Logistics competence and quality	Timeline ss	Tracking and tracing
CAM	2.4	2.2	2.1	2.3	2.4	2.7	2.8
PRC	3.7	3.3	4.0	3.6	3.8	3.7	3.8
LAO	2.4	2.3	2.3	2.3	2.4	2.8	2.4
MYA	2.30	2.17	1.99	2.20	2.28	2.20	2.91
THA	3.5	3.3	3.7	3.5	3.5	3.5	3.6
VIE	3.3	3.1	3.2	3.3	3.2	3.3	3.4

Note: The LPI score of Myanmar is for 2018. The top scorer in 2023 was Singapore with 4.3, while the lowest scorer was Libya with 1.9.

Source: World Bank Logistics Performance Index for selected years.

The TSS 2030 Update needs to strengthen the approach to logistics development in the GMS. It should look into aspects of supply chain management that can be included in the strategy.



Climate change is a cross-cutting concern in TSS 2030. Efforts of GMS countries to reduce national emissions and adapt to climate change are embodied in nationally determined contributions (NDCs).

NDCs of GMS Countries in the Transport Sector (Page 1)

Country	y Climate Change Mitigation			Climate Change Adaptation
	Unconditional Targets Conditional Targets		Targets	
	Measures	Measures	Necessary financial support (\$ million)	Measures
CAM	 Establish green belts along major roads for climate change mitigation^a 	 Promote integrated public transport systems in main cities 	-	-
	 Shift long distance freight movement from trucks to train^a 	 Enhance maintenance and inspection of vehicle 	0.0006 (\$600)	
		 E-mobility 	-	

^a The Cambodia NDC does not show whether this is unconditional or conditional.



Climate change is a cross-cutting concern in TSS 2030. Efforts of GMS countries to reduce national emissions and adapt to climate change are embodied in nationally determined contributions (NDCs).

NDCs of GMS Countries in the Transport Sector (Page 2)

Country	Climate Change Mitigation			Climate Change Adaptation
	Unconditional Targets	Condition	onal Targets	
	Measures	Measures	Necessary financial support (\$ million)	Measures
PRC	 Improve green transportation system and standards Foster urban low-carbon transportation system Optimize the transportation structure Accelerate the replacement and optimization of transportation fuels Encourage new energy vehicle development 			 Urban greenways Strengthening of the maintenance of transportation facilities, and raising of design and construction standards Resilience of national highway network



NDCs of GMS Countries in the Transport Sector (Page 3)

Country	Climate	Climate Change Mitigation			
	Unconditional Targets	Condition	nal Targets		
	Measures	Measures	Necessary financial support (\$ million)	Measures	
LAO	 New bus rapid transit system in Vientiane capital and associated non-motorized transport component Lao-China railway 	30% electric vehicles penetration for 2-wheelers and passengers' cars in national vehicle mix	500	 Increase the resilience of urban development and infrastructure to climate change, including through the use of green infrastructure and nature-based solutions Promote ecosystem-based 	
		 Biofuel to meet 10% of transport fuels 	230	adaptation solutions	

Sources: unfccc.int/sites/default/files/NDC/2022-06/20201231 NDC_Update_Cambodia.pdf; 附件 (unfccc.int) NDC 2020 of Lao PDR (English), 09 April 2021 (1).pdf (unfccc.int); Myanmar Updated NDC July 2021.pdf (unfccc.int); Thailand Updated NDC.pdf (unfccc.int); Viet Nam_NDC_2022_Eng.pdf (unfccc.int)



NDCs of GMS Countries in the Transport Sector (Page 3)

Country	Climate Change Mitigation			Climate Change Adaptation
	Unconditional Targets	Targets Conditional Targets		
	Measures	Measures	Necessary financial support (\$ million)	Measures
MYA	 Electric vehicles Development of a Shipping Energy Efficiency Management Plan and a Green Shipping Strategy 	 Inland marine sector for GHG emission reduction Green ship strategy for coastal shipping 	1.2	

Sources: unfccc.int/sites/default/files/NDC/2022-06/20201231 NDC_Update_Cambodia.pdf; 附件 (unfccc.int) NDC 2020 of Lao PDR (English), 09 April 2021 (1).pdf (unfccc.int); Myanmar Updated NDC July 2021.pdf (unfccc.int); Thailand Updated NDC.pdf (unfccc.int); Viet Nam_NDC_2022_Eng.pdf (unfccc.int)



NDCs of GMS Countries in the Transport Sector (Page 4)

Country	Climate	Climate Change Adaptation		
	Unconditional Targets	nal Targets Conditional Targets		
	Measures	Measures	Necessary financial support (\$ million)	Measures
THA	 Environmentally Sustainable Transport System Plan (2013-2030) NDC Roadmap identifies key measures and allocates emission reduction targets and responsibilities to relevant agencies in energy, transport, industry, and waste management sectors 	-		

Sources: unfccc.int/sites/default/files/NDC/2022-06/20201231 NDC Update Cambodia.pdf; 附件 (unfccc.int) NDC 2020 of Lao PDR (English), 09 April 2021 (1).pdf (unfccc.int); Myanmar Updated NDC July 2021.pdf (unfccc.int); Thailand Updated NDC.pdf (unfccc.int); Viet Nam NDC 2022 Eng.pdf (unfccc.int)



NDCs of GMS Countries in the Transport Sector (Page 4)

Country	Climate Change Mitigation			Climate Change Adaptation	
	Unconditional Targets	Conditional Targets			
	Measures	Measures	Necessary financial support (\$ million)	Measures	
VIE	 Reduction of emission from fuel combustion in energy industry, industrial production and construction, transportation and others. 	 For transport sector, improve energy efficiency and conversion in transportation, including passenger, freight, and private transportation 	46,097 ^b	 Updating transport facilities in areas with high disaster risk and vulnerability to climate change Developing and completing the expressway network and the inter-regional transport system 	

b The figures are GHG reduction volume in energy industry, industrial production and construction, transportation, and others (household, agriculture, services and trade) in the country.

Sources: unfccc.int/sites/default/files/NDC/2022-06/20201231_NDC_Update_Cambodia.pdf; 附件 (unfccc.int) NDC 2020 of Lao PDR (English), 09 April 2021 (1).pdf (unfccc.int); Myanmar Updated NDC July 2021.pdf (unfccc.int); Thailand Updated NDC.pdf (unfccc.int); Viet Nam NDC 2022 Eng.pdf (unfccc.int)



Climate change is a cross-cutting concern in TSS 2030. Efforts of GMS countries to reduce national emissions and adapt to climate change are embodied in nationally determined contributions (NDCs).

The TSS 2030 Update needs to incorporate the NDCs in the transport sector of the GMS countries in the strategy for GMS transport development.



RECAP and CONCLUSION

KEY ASPECTS OF GMS TRANSPORT DEVELOPMENT REQUIRING MORE EMPHASIS AND ATTENTION IN THE TSS 2030 UPDATE:

- Intermodal and multimodal development
- Trade and transport facilitation (CBTA)
- Logistics development
- Climate change

Increased participation of the private sector through closer public-private collaboration is a critical success factor in addressing these concerns.





















