

SECTOR ASSESSMENT (SUMMARY): TRANSPORT¹

A. Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Transport investments.** Myanmar's transport infrastructure lags the rest of Southeast Asia. Investments were 1.0%–1.5% of gross domestic product (GDP) during 2005–2015. The most recent data available, for fiscal year 2017-2018, also indicates that the transport sector investments were 1.1% of the GDP.² At a similar level of development, other countries typically invest 3%–5% of their gross domestic product in transport infrastructure. Myanmar's transport sector has also suffered because few investments have been effective and/or efficient. About 60% of the rail network serves fewer than 1,000 passengers per day, a level too low to justify even maintaining rail services. Spending on road and rail maintenance has been 2–3 times below what is needed.

2. **Institutional arrangement.** In April 2016, the new government created a combined Ministry of Transport and Communications (MOTC) to lead the sector. The government also allocates a significant transport role to the Ministry of Construction (MOC), which manages the expressway and national highway network, and the rural roads network. The Department of Rural Road Development under the MOC is responsible for the management of more than 75,000 kilometers (km) of rural roads in Myanmar.³ The department was created in 2017 with the transfer to the MOC of the Roads and Bridges Division from the Department of Rural Development under the Ministry of Agriculture, Livestock and Irrigation.

3. **Road network.** Myanmar's road network has about 600 km of expressways among the main national arterial highway network of about 5,700 km. The network is three times less dense than that of neighboring Thailand. It is also of lower quality—only 20% of the roads are paved, against 53% in Thailand—and the roads are narrower. Despite a lack of funds, during 2004–2014 the Department of Highways of the MOC added more than 10,000 km of new trunk roads. However, because of insufficient maintenance, the network's condition has been declining since 1990 to well below international standards. An Asian Development Bank (ADB) 2014 survey found that 60% of the trunk road network was in poor condition.⁴ In particular, the highways along the Greater Mekong Subregion (GMS) North–South and East–West Economic Corridors carry 85% of Myanmar's border trade but are substandard and in poor condition.

4. Meanwhile, the MOC contracted 26 private concessionaires to manage and improve the main highways (5,700 km), other than the expressways managed by Department of Highways itself. These concession contracts face important issues such as low profitability, limited access to financing, low standards, and limited enforcement. As a result, they hamper government efforts to modernize the network, and it has resulted in concessionaires' operation and maintenance activities not meeting international standards.

5. **Rural roads.** Myanmar has 95,000 km of rural roads, of which 6% are paved and another 28% have an improved (gravel or stone macadam) surface, typically in poor condition. It is estimated that 14 million people—half the rural population—do not yet have basic road access.

¹ This summary is based on Asian Development Bank (ADB). 2016. *Myanmar Transport Sector Policy Note*. Manila.

² Myanmar Ministry of Planning, Finance and Industry. *Public Investment Plan 2017-2018*, Nay Pyi Taw.

³ The Ministry of Border Affairs manages another network of almost 20,000 km.

⁴ Asian Development Bank (ADB). 2014. *Myanmar: Unlocking the Potential. Country Diagnostic Study*. Manila.

People's transport costs are 10 times higher without a road than with one. Myanmar's village road densities are lowest in ethnic minority areas, particularly in the states of Chin, Kachin, and Kayin.⁵ Despite progress, rural connectivity in Myanmar remains weak, impeding physical and economic access. The country only has a few all-weather roads, so travel is difficult and often impossible for much of the year.

6. **Road safety.** Myanmar's road crash fatality rate is the third worst in Southeast Asia with 21 fatalities per 100,000 inhabitants, and road safety is a serious issue.⁶ Myanmar's fatality rate has not been declining over the past decade, and little effort has been made to remedy the issue. Education and enforcement (lack of which attributes for 95% of the fatalities in Myanmar) need to be significantly strengthened. Meanwhile, crash data is less than 50% accurate, due to data collection and reporting issues (footnote 5).⁷

2. Government's Sector Strategy

7. In 2017, the government prepared the National Strategy for Rural Roads and Access with support from ADB. This strategy has the objective of connecting 80% of all registered villages by all-season roads by 2030, for which the government estimates that Myanmar needs to upgrade about 42,000 km of existing rural roads and construct 10,000 km of new roads. To focus the available investment funding, it introduces the concept of a core rural road network as being "the minimum rural road network in a township required to connect all villages to each other and to the higher-level road network."⁸ To implement the strategy, the government plans to introduce a national rural road program, with funding to be provided by union and state or regional governments, development partners, and the proposed road fund that is being introduced. The government has requested ADB to support the implementation of the strategy and the creation of the national rural road program. The Rural Roads and Access Project approved by ADB in 2019 will improve the accessibility of the rural road network in poorer areas (Ayeyarwady and Magway regions) that have low levels of access and are more vulnerable to natural disasters. While Ayeyarwady being in a delta area experiences yearly flooding disasters while Magway, in dry zone, is susceptible to droughts.

B. Major Development Partners: Strategic Foci and Key Activities

8. Development partners have helped the Government of Myanmar establish a planning and policy framework. In 2014, the Japan International Cooperation Agency (JICA) prepared the National Transport Development Plan⁹ for the MOTC, and the Greater Yangon Urban Transport Master Plan. In 2016, the Korea International Cooperation Agency assisted the MOC to prepare the Arterial Roads Development Master Plan. During 2014–2016, ADB prepared the Myanmar Transport Sector Policy Note, a series of nine reports that provided the government with a policy framework and identified investment priorities.¹⁰ In 2017, ADB helped the Ministry of Agriculture, Livestock and Irrigation prepare the National Rural Roads and Access Strategy and Program,¹¹

⁵ Myanmar uses "ethnic groups" rather than "indigenous peoples."

⁶ World Health Organization. 2018. *Global Status Report on Road Safety 2016*. Geneva.

⁷ ADB. 2019. *Technical Assistance to the Republic of the Union of Myanmar for Road Safety for Highway Development in the Greater Mekong Subregion East–West Economic Corridor*. Manila.

⁸ Government of the Republic of the Union of Myanmar. 2018. *National Strategy for Rural Roads and Access*. Nay Pyi Taw (p. vii).

⁹ JICA. 2014. *Myanmar's National Transport Master Plan*. Tokyo.

¹⁰ ADB. 2016. *Myanmar Transport Sector Policy Note*. Manila.

¹¹ ADB. 2017. *National Rural Roads and Access Strategy and Program*. Manila.

and assisted the MOTC to draft the Myanmar Railways Strategy, a medium-term business plan for Myanmar Railways.

9. Since then, development partners have gradually assisted the Government of Myanmar to expand the investment and technical assistance portfolio significantly. Tables 1 and 2 list all such interventions.

Table 1: Major Development Partners—Investments

Development Partner	Project Name	Duration	Amount (\$ million)
Road Transport (Non-urban)			
ADB	Maubin–Phyapon Road Rehabilitation Project	2014–2018	80.0
	GMS EWEC Eindu–Kawkareik Road Improvement Project	2015–2019	120.0
	GMS Highway Modernization Project	2019–2024	202.1
Government of India	Trilateral Highway: (i) construction of 69 bridges, including approach roads in the Tamu–Kyigone–Kalewa section, and (ii) construction and upgrading of the Kalewa–Yargi road section	2017–2020	245.0
	Rih–Tedin Road	2017–2020	60.0
	Kaladan Transport Project: Paletwa to India–Myanmar Border Road	2017–2020	287.0
JICA	Project for Improvement of Road Construction and Maintenance Equipment in Rakhine State	2015–2016	6.7
	Project for Improvement of Road Construction and Maintenance Equipment in Kachin State and Chin State	2015–2017	24.9
	East–West Economic Corridor Improvement Project	2015–2023	307.9
KfW	Rural Development Program	2014–2016	33.8
	Rural Roads Rehabilitation Program	2016–2018	11.3
NEDA	Myawaddy–Kawkareik Road Project	2013–2017	40.0
World Bank	Flood and Landslide Emergency Recovery Project	2016–2022	200.0
Urban Roads and Traffic Management			
KEXIM	New Dala Bridge	2016–2021	137.8
JICA	Project for Construction of New Thaketa Bridge	2014–2018	38.3
	Project for Construction of Bago River Bridge	2016–2019	282.3
Urban Public Transport			
JICA	Yangon Circular Railway Line Upgrading Project	2015–2022	226.1
Rail Transport (Non-urban)			
JICA	Yangon–Mandalay Railway Improvement Project Phase I	2014–2022	181.8
	Project for the Installation of Operation Control Center System and Safety Equipment	2014–2017	36.4
KfW	Railway Workshop Ywataung	2016–2018	5.7
Water Transport (Non-urban)			
World Bank	Ayeyarwady Integrated River Basin Management Project	2014–2020	100.0
Urban Sector Development			
ADB	Local Governance and Community Development Program ^a	2008–2013	106.3
	Urban Environment Improvement Project	2003–2010	30.0
KfW	Town Development Program II	2001–2009	8.0
	Town Development Program III	2009–2012	7.5
UNDP	Public–Private Partnership for Urban Environment	2002–2012	1.4

Development Partner	Project Name	Duration	Amount (\$ million)
Waste Management			
Government of Finland	Regional Waste Management Project	2010–2014	4.4
Water Supply and Sanitation			
ADB	Small Towns Water Supply and Sanitation Sector Project	2001–2008	34.0
	Melamchi Water Supply Project	2001–2014	317.0

ADB = Asian Development Bank, EWEC = East–West Economic Corridor, GMS = Greater Mekong Subregion, JICA = Japan International Cooperation Agency, KEXIM = Export-Import Bank of Korea, NEDA = Neighboring Countries Economic Development Cooperation Agency, UNDP = United Nations Development Programme.

Source: Asian Development Bank.

Table 2: Major Development Partners—Technical Assistance

Development Partner	Project Name	Duration
ADB	Preparing the Asset Management Program for Myanmar Roads	2013–2015
	Preparing the GMS EWEC Eindu–Kawkareik Road Improvement Project	2013–2016
	Transport Sector Reform and Modernization	2014–2021
	Improving Road Network Management and Safety	2015–2018
	Preparing the Rural Roads and Access Project	2016–2018
	Project Restructuring Support for Ministry of Construction Road Concessions	2017–2018
	Preparing the GMS EWEC Highway Development Project	2017–2018
KOICA	Road Safety for Highway Development in the Greater Mekong Subregion East-West Economic Corridor	2019–2021
	Master Plan for Arterial Road Network Development Plan in Myanmar	2013–2015
JICA	Pre-Feasibility Study on Expressway Network Development in Myanmar	2016–2018
	The Survey Program for National Transport Development Plan of the Republic of the Union of Myanmar	2012–2014
	Project for Comprehensive Urban Transport Plan of the Greater Yangon	2012–2014
	Project on Improvement of Service and Safety of Railways	2013–2016
	Project for Capacity Development on New CNS/ATM Systems	2014–2018
	Public–Private Partnership Feasibility Study for Construction of Hanthawaddy International Airport	2015–2016
	Project for Capacity Development of Road and Bridge Technology	2016–2019
	Technical Cooperation Project to Myanmar Government and Local People for Their Sustainable and Self-reliant Implementation of Labor-intensive-type Road Pavement Works	2016–2021
	Updating the Urban Transport Development Plan in Greater Yangon	2016–2017

ADB = Asian Development Bank; ATM = air traffic management; CNS = communications, navigation, and surveillance; EWEC = East–West Economic Corridor; GMS = Greater Mekong Subregion; JICA = Japan International Cooperation Agency; KOICA = Korea International Cooperation Agency.

Source: Asian Development Bank.

C. Institutional Arrangements and Processes for Development Coordination

10. In 2013, the Ministry of Planning and Finance established 15 sector working groups to coordinate development partner assistance for national development. The Transport Sector Working Group (TSWG) comprises (i) the MOTC, which leads policy making in the sector; (ii) other ministries including the MOC; the Ministry of Agriculture, Livestock and Irrigation; the Ministry of Planning and Finance; and city development committees; and (iii) development partners.

11. The TSWG meets regularly to ensure that sector strategies and priorities are in line with national priorities and that the programs and initiatives are implemented with the support of development partners. ADB and JICA are the lead development partners for the TSWG as facilitators, which is led by the MOTCr.

12. Programs and projects are well-coordinated between the various development partners. ADB and JICA cooperate closely through aforementioned regular meetings and cofinancing arrangements for several road and bridge projects, including the GMS EWEK Eindu–Kawkareik Road Improvement Project and the proposed GMS EWEK Highway Development Project (planned for 2020 approval).

D. ADB Sector Experience and Assistance Program

13. **Investments.** Transport has been a pillar of ADB assistance since its reengagement with Myanmar in 2012. Before 2012, the last major ADB transport project was the Yangon–Pyay Road Improvement Project in the 1980s.¹² Since 2012, ADB has financed the improvement of the Maubin–Pyapon road, the first section of the GMS East–West Economic Corridor, and the Greater Mekong Subregion Highway Modernization Project.¹³

14. **Policy and institutional assistance.** ADB prepared an initial assessment in 2012 and a policy note in 2016, both for the transport sector (footnote 1).¹⁴ Technical assistance for Transport Sector Reform and Modernization has been supporting the MOTC and MOC in planning and implementing reform.¹⁵ ADB helped the MOC survey the highway network in 2015, set up an asset management system, and prepare a maintenance program.¹⁶ In 2016, ADB launched technical assistance for improving road network management and safety.¹⁷

15. **Lessons learned.** ADB’s initial policy and institutional assistance was well received and could be scaled up. Key lessons emphasized in the country partnership strategy are that the support should (i) be designed considering the long-term and gradual process of improving the sector and (ii) focus on a few strategic high-return or high-impact programs.¹⁸

16. **Strategy.** The strategic objective of ADB’s transport sector assistance is to help reorient Myanmar’s transport system to better support economic growth and poverty reduction. During 2016–2020, the main focus will be on transport sector reforms and trunk road and rural road improvements, continuing the work from ADB’s assistance during 2012–2016. Engagement in urban transport in Yangon and/or Mandalay may be considered if the opportunity arises.

17. **Priority investment areas.** ADB will seek to establish and finance long-term investment programs in the following areas: (i) trunk road rehabilitation, maintenance, and safety; (ii) GMS

¹² ADB. 1983. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Burma for the Rangoon Prome Road Improvement Project*. Manila.

¹³ ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of the Union of Myanmar for the Maubin–Phyapon Road Rehabilitation Project*. Manila; ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of the Union of Myanmar for the Greater Mekong Subregion East–West Economic Corridor Eindu to Kawkareik Road Improvement Project*. Manila; and ADB. 2018. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of the Union of Myanmar for the Greater Mekong Subregion Highway Modernization Project*. Manila.

¹⁴ ADB. 2012. *Myanmar: Transport Sector Initial Assessment*. Manila.

¹⁵ ADB. 2014. *Technical Assistance to the Republic of the Union of Myanmar for Transport Sector Reform and Modernization*. Manila.

¹⁶ ADB. 2013. *Technical Assistance to the Republic of the Union of Myanmar for Developing the Asset Management Program for Myanmar Roads*. Manila.

¹⁷ ADB. 2015. *Technical Assistance to the Republic of the Union of Myanmar for Improving Road Network Management and Safety*. Manila.

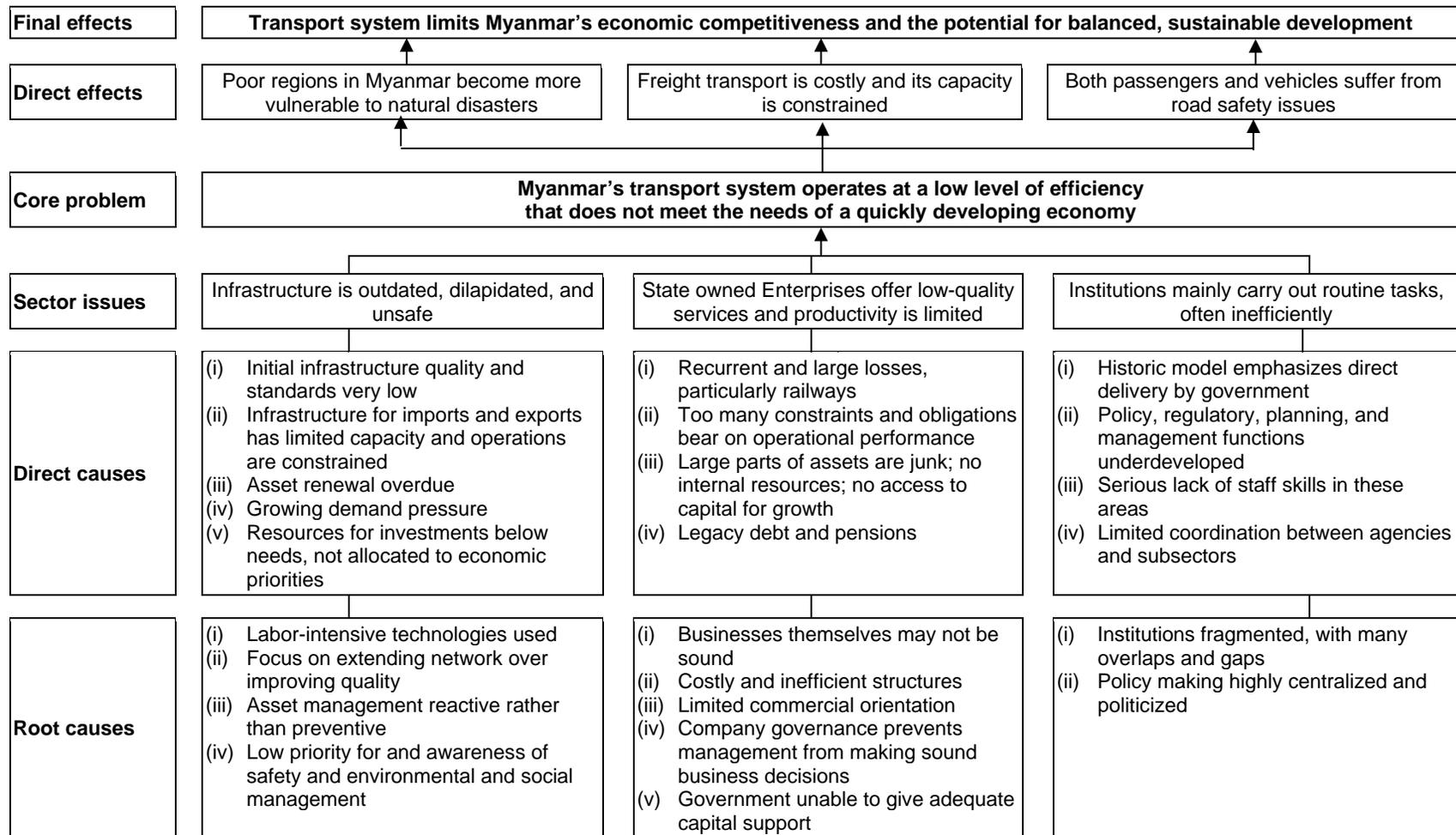
¹⁸ ADB. 2017. *Country Partnership Strategy: Myanmar, 2017–2021—Building the Foundations for Inclusive Growth*. Manila.

economic corridors; (iii) rural road access; and (iv) urban public transport. Support will focus on the following aspects:

- (i) **Greater Mekong Subregion transport corridors.** ADB operations are expected to gradually feature larger stand-alone investments such as new highway alignments, and highway or railway upgrading that will contribute to structural economic change. The regional corridors—particularly the GMS East–West and North–South Economic Corridors—are natural priorities, as they cater to most of Myanmar’s border trade.
- (ii) **Road rehabilitation and maintenance.** ADB will finance the periodic maintenance and rehabilitation of trunk roads. To support sustainability, it will continue to assist in consolidating the MOC’s road asset management system and seek to build the capacity of the national contracting industry. Initially on a pilot basis, ADB will help the Department of Highways develop a model for restructuring and financing highway Build Operate and Transfer arrangements.
- (iii) **Road safety.** ADB will seek to help establish and finance a national road safety improvement program. This program will combine with policy reforms related to road safety to curb the rise in road-related fatalities.
- (iv) **Rural roads and accessibility.** ADB will support the government’s efforts to improve access to basic roads and transport services in rural areas. Lack of access is associated with high poverty and low human development outcomes, particularly in ethnic minority areas. This project will pilot test an initial large-scale rural roads project in support of a nationwide program as a long-term process.¹⁹
- (v) **Urban transport.** ADB may consider financing improvements to the public transport system and the main transport corridors in Yangon and Mandalay.

¹⁹ The government announced the launch of a national rural roads program in May 2016 and the National Strategy for Rural Roads and Access was issued in 2017.

Problem Tree for Transport Sector



Source: Asian Development Bank.