SECTOR ASSESSMENT (SUMMARY): TRANSPORT

Sector Road Map

I. Sector Performance, Problems, and Opportunities

1. The main modes of transport in Cambodia are roads and railways.¹The country's ports, both inland (Phnom Penh) and on the coast (Sihanoukville), also play an important role in the sector, as do the three international airports (Phnom Penh, Siem Reap, and Sihanoukville). So far, road transport is the principal mode for the movement of goods and people in Cambodia and between countries in the Greater Mekong Subregion (GMS). Roads are critical to social and economic development, especially in areas where they are the only available transport mode. The domestic need is to provide access and rural connectivity; the regional need is to facilitate connectivity and trade within the GMS and with the economies of the Association of Southeast Asian Nations (ASEAN). After rehabilitation of rail infrastructure, freight rail services resumed in October 2010. The principal goods to be carried by rail are cement, petroleum, rice, cassava, and containers—relieving, to some extent, traffic and loading on the road network.

2. The primary road network has 2,254 kilometers (km) of national paved roads that connects the country with its borders, the GMS, and the ASEAN network; 5,007 km of inland national roads, of which 70.43% are paved; and 9,031 km of provincial roads, of which only 30.40% are paved. The management of national and provincial roads is the responsibility of the Ministry of Public Works and Transport (MPWT). Funded by 10 development partners, this budget is spent primarily on roads and bridges. Currently, the MPWT and its development partners are largely targeting secondary national roads and roads that link to other GMS countries, as well as rural road access to provincial towns.

3. The remaining network of about 45,241 km of rural roads (about 74% of the total road network) is the responsibility of the Ministry for Rural Development (MRD). Until 2017, only about 4.8% of rural roads were paved with either single-bituminous surface treatment, double-bituminous surface treatment, or reinforced concrete. The rest are still basically laterite or earth roads. The MRD's ongoing investment program for rural road development totals \$313 million, involving six development partners. The ministry's high-priority project pipeline for rural road infrastructure amounts to \$306 million. The budget for rural road rehabilitation enables the government to improve only 400 km–500 km of roads per year. The MRD has presented a substantial expansion plan for its high-priority pipeline and will require investment and institutional capacity support from development partners.

4. Cambodia's underdeveloped transport sector constrains regional integration as well as regional and global trade, and therefore holds back economic development and poverty reduction. The main challenge facing the sector is a lack of connectivity to services and markets, resulting in (i) lost economic opportunity; (ii) high operating, maintenance, and logistics costs; (iii) lack of competitiveness; and (iv) unsafe and unsustainable infrastructure. These problems are caused by (i) incomplete national and regional transport policies, and incomplete legal and regulatory frameworks; (ii) low institutional capacity; (iii) low private sector participation; and (iv) incomplete

¹ This summary is based on: ADB. 2011. Cambodia: Transport Sector Assessment, Strategy and Road Map. Manila (<u>http://www.adb.org/documents/cambodia-transport-sector-assessment-strategy-and-road-map</u>); MPWT and MRD. 2018. Cambodia: 2017 Annual Congress Reports and 2018 Annual Work Plans of MPWT and MRD; and ADB. 2017. Cambodia: Sector Assessment (Summary): Transport (Road Transport). Manila (<u>https://www.adb.org/sites/default/files/linked-documents/41123-015-ssa.pdf</u>).

and inefficient transport infrastructure networks—especially regarding provincial and rural roads, railways and inland waterway—combined with the lack of intermodal transport. The poor condition of the transport network is caused by a variety of factors, such as low capacity for performing maintenance, vehicle overloading, low resilience to climate change, and poor traffic safety. The government is tackling these issues systematically.

5. Efficient transport is critical for trade and the economic and social development of Cambodia. The agriculture sector relies on road and sea transport for exports, the tourism sector on international air travel, the construction industry on water ports and road transport for access to raw construction materials, and the industrial export industry (primarily garments) on road and water transport. Advances in trade and economic development also depend on efficient transport. Insufficient access and slow, expensive transport services severely constrain the development of Cambodia and therefore slow down the rate of poverty reduction.

6. To improve transport efficiency, the government and its development partners will undertake additional road development, which should target the paving of selected rural roads to enhance connectivity. It will also be essential for the private sector to undertake other big projects largely or entirely on its own, such as the north–south rail link, which will be crucial for shipping ore if mineral exploration in northern provinces leads to successful mining ventures. Although the development of the primary national road network is almost complete, paving of the secondary or provincial and rural roads provide the foundation for reducing poverty. Unfortunately, these roads have yet to reach and benefit the rural poor. To raise rural incomes, rural roads must be improved so that farmers and rural agro-enterprises can transport their products to market on time and undamaged.

7. The government has committed to increase maintenance funding by 5.5% per year to improve the sustainability of the road network. Although a road fund is an appropriate mechanism to ensure annual funding, the government prefers to allocate funding from central government resources. The Road Asset Management Project, cofinanced by the Asian Development Bank (ADB), the World Bank, and the Government of Australia, contributes to improving the maintenance of the national road network.² Similarly, Rural Roads Improvement Project (RRIP) II financed by ADB is improving systematically the maintenance of the rural road network.³ The government has established the Working Group on Overloading Control and Management to achieve overloading control on national roads. The National Road Safety Committee is dealing with traffic safety through its 15-point National Road Safety Action Plan, supported by information collected and reported under the Road Crash and Victim Information System.

8. Substantial support for the transport sector has been provided through the GMS regional cooperation and integration initiative. The vision of the GMS is to provide an integrated, prosperous subregion with a focus on connectivity, competitiveness, and community through an economic corridor approach, and its priorities are aligned with ADB's Strategy 2020 and the regional cooperation initiatives. Three of the nine GMS transport corridors traverse Cambodia. The aim of regional cooperation initiatives is to promote multimodal transport and increase private sector participation in the overall transport sector.

² ADB. 2007. Report and recommendation of the President to the Board of Directors: Propose Loan for the Road Asset Management Project. Manila (Loan 2406-CAM).

³ ADB. 2010. Report and recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant to the Kingdom of Cambodia for Rural Roads Improvement Project II. Manila (Loan 3151-CAM)

II. Government's Sector Strategy

9. The government's national strategy for growth is set out in the Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III, 2013–2018, which was launched in January 2014 with the objective of reducing poverty by more than 1 percentage point annually.⁴ It emphasizes the need for the development of physical infrastructure along with three other core areas: agriculture sector promotion, private sector development and employment, and capacity building and human resource development.

10. Through the National Strategic Development Plan (NSDP), 2014–2018, the government and development partners have planned a sector expenditure program of \$910.4 million (12% of the NSDP budget) to improve the economy through better transport infrastructure. The plan emphasizes that although progress has been made, further rehabilitation and construction of transport infrastructure is essential. In the current context of Cambodia, the transport network plays a role as a prime mover of economic growth, with arteries linking all parts of Cambodia into a cohesive economic body, and is a means to integrate the Cambodian economy into the region and the world. The strategy gives high priority to the rehabilitation and reconstruction of a multimodal transport network connecting all parts of the country and neighboring countries. This will enable the provision of convenient, stable, safe, economically efficient, lower-cost transportation and logistics services, aimed at fostering trade, tourism promotion, rural development, regional and global economic integration, and national defense.

11. In 2016, the government spent 0.8% of Cambodia's gross domestic product (GDP) on the transport sector, while development partners—e.g., ADB, the World Bank, Japan International Cooperation Agency, Government of Australia, German development cooperation through KfW, the Government of France through Agence Française the Développement (AFD), Export-Import Bank of Korea (KEXIM), Nordic Development Fund, Export-Import Bank of China—contributed grants, credits, or loans totaling about 1.1% of Cambodia's GDP. The collaborative budget of 1.9% of GDP was used to build, upgrade, rehabilitate, and maintain bridges, roads, railways, and ports, and to build the capacity of staff in transport sector institutions.⁵ Since the government and its development partners cannot shoulder all the costs of improving transport infrastructure, private investors are required.

12. To accelerate private sector participation in the economic development—as envisaged in the Rectangular Strategy Phase II (2008–2013) and Phase III (2013–2018)—Cambodia approved on 22 June 2016 the Policy Paper on Public–Private Partnerships for Public Investment Project Management (2016–2020),⁶ including the mechanisms to implement that policy: setting up an interministerial committee for steering the implementation of policy on public–private partnerships (PPPs) and a technical working group for formulating the policy paper on PPPs for 2016–2020; defining the Action Plan 2016–2020 as well as an institutional capacity and human resource development plan to manage public investment projects through PPPs; redefining the scopes of two units of the Ministry of Economy and Finance (central PPP unit and risk management unit), which were created during the fifth government mandate 2013–2018, and of a PPP unit in each sector or specialized ministry.

⁴ Government of Cambodia. 2013. *Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III.* Phnom Penh.

⁵ World Bank Group. 2017. Doing Business in Cambodia (<u>http://www.doingbusiness.org/data/exploreeconomies/cambodia</u>).

⁶ The paper aimed to promote and encourage participation of the private sector and financial institutions in reconstructing and developing public infrastructure in an innovative and effective manner, to help support the sustainability of long-term economic growth and increase Cambodia's competitiveness.

III. ADB Sector Experience and Assistance Program

13. The overarching objective of ADB's country partnership strategy, 2014–2018 for Cambodia is poverty reduction in line with the government's socioeconomic development priorities.⁷ The strategy will support the government in reducing poverty and vulnerability, and in laying the foundations for Cambodia's future economic and social development. The thrust of the strategy is built around two core pillars (rural–urban–regional links, and human and social development) and a facilitating crosscutting pillar (public sector management). The rural–urban–regional links focus on the development of transport and economic corridors to connect national value chains with regional and global markets. In this context, rehabilitating provincial and rural road networks to reduce transport costs and promote trade and tourism will contribute significantly to inclusive growth.

14. ADB assistance to the country's transport sector up to 2016, as shown in the fact sheet for Cambodia, amounts to \$529.70 million in cumulative loans, grants, and technical assistance (including cofinancing), or 18.52% of ADB's total assistance to Cambodia.⁸ These interventions focused on rural development and private sector growth. Projects were rated *satisfactory* and *successful*. Progress was made in increasing transport efficiency by reducing vehicle operating costs and travel times and supporting robust economic growth. Technical assistance projects contributed to better transport planning and policy-making directly aimed at improving efficiency and resource allocation, although the policies remain drafts.

15. From 2005 to 2016, 14 multilateral or bilateral development partners provided funds for the sector, totaling about \$4.12 billion. Nine of these have funded transport infrastructure development or maintenance since 1992. Currently, seven development partners, besides ADB, are active in the rural roads segment: AFD, the Government of Australia, the People's Republic of China, KEXIM, KfW, the Nordic Development Fund, and the World Bank.

16. ADB's ongoing and pipeline loan projects are focused on rural and provincial road improvements. ADB's transport strategy for Cambodia is to connect transport infrastructure to growth sectors such as agriculture and reach out to the rural poor through improvements in the rural and provincial road networks, making markets and services more accessible at low cost. To achieve this, ADB's strengths in the transport sector—roads (national, provincial, and GMS)— must be sustained. At the same time, the private sector must be engaged to maintain and then accelerate the development of transport infrastructure. The ongoing projects are RRIP II (footnote 3), Road Network Improvement Project,⁹ and Provincial Roads Improvement Project,¹⁰ whereas the pipeline program comprises the RRIP III, and the Road Network Improvement Project–Additional Financing (to be approved in 2019).

17. Transport sector synergies are extensive in several areas of decentralization and deconcentration, gender, climate resilience, social safety, tourism, and transport and trade facilitation. The ongoing portfolio has strengthened such links and will continue to do so.

⁷ ADB. 2014. Country Partnership Strategy: Cambodia, 2014–2018. Manila.

⁸ ADB. 2017. Asian Development Bank and Cambodia: Fact Sheet. Manila.

⁹ ADB. 2017. Report and recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Road Network Improvement Project. Manila (Loan 3576-CAM).

¹⁰ ADB. 2011. *Report and recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Provincial Roads Improvement Project. Manila (Loan 2839-CAM).*

National Impacts	Insufficient support for national socioeconomic development and integration into subregional and international economy					
Sector Impacts	throughout national,	her connectivity , rural, regional, and road networks	Lack of competitiveness resulting in high logistics costs		Unsafe and unsustainable transport infrastructure	
Core Sector Problem	Low connectivity and inefficiency in the transport sector					
Core Problems	Lack of formalized incomplete Greater border agreements, capacity and la developm	Mekong Subregion and low institutional ck of economic	Lack of private			
Deficient Outputs and Assumptions	Outputs of Projects and TAs Formal transport policies not prioritized Lack of strategy for project prioritization Insufficient coordination of transport sector planning Capacity building a long-term sequenced process GMS border agreements for road are not complete GMS border agreements for rail are not complete Private sector laws and regulations required	Risks and Assumptions Assets not declared or managed efficiently Lack of focus on policy requirements Professional training not institutionalized Trained staff not retained Insufficient cross- border agreements with neighboring countries Private sector transport investment exceeds capacity of government and development partners	Outputs of Projects and <u>TAs</u> Lack of provincial roads Lack of paved and all- weather access of local road network Insufficient dual carriageways along national highway network near Phnom Penh Low durability of unpaved ad especially rural roads Lack of integration of decentralization and deconcentration capability into rural network Incomplete GMS physical facilities Lack of emphasis on multimodal facilities Lack of urban public transport Lack of compatibility of trains for international use	Risks and Assumptions Slowdown of development partner participation in national and provincial network development Inadequate participation of development partners in rural road development Poor transport conductivity across international borders, and cross-border facilities not developed Suitable trains not procured Slow and inefficient project implementation Private sector not attracted to infrastructure development	Outputs of Projects and TAs Lack of maintenance system of national and local road network Insufficient private sector involvement Poor traffic engineering and operations along national highway network persist Traffic overloading is poorly prevented Inadequate and lack of proper implementation of traffic safety devices, hardware, and measures Poor driver and pedestrian behavior Inadequate and inconsistent application of safeguards	Risks and Assumptions Lack of transparency in civil works bidding Lack of capacity and quality control of contractors and consultants Insufficient mitigation of unsafe road conditions Traffic regulations of rural roads not prepared Poor road user behavior persists Poor enforcement of traffic laws and regulations Poor driver licensing and vehicle inspection processes Inadequate support from motorcycle manufacturers Continued use of right- hand drive vehicles

PROBLEM TREE FOR TRANSPORT SECTOR

TA = technical assistance.