

SECTOR ASSESSMENT (SUMMARY): TRANSPORT¹

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. Roads and railways are the two main transport subsectors. Ports, both inland (Phnom Penh) and on the coast (Sihanoukville), also play an important role in the economy, as do the two international airports (Phnom Penh and Siem Reap). The domestic need is to provide access and rural connectivity; the regional need is to facilitate connectivity and trade within the Greater Mekong Subregion (GMS), as well as with the member countries of the Association of Southeast Asian Nations (ASEAN). By far, the largest subsector is road transport. However, rail infrastructure is now being rehabilitated and freight rail services resumed in October 2010. The principal goods to be carried by rail are cement, containers, and petroleum—relieving, to some extent, the traffic and burden on the road network.

2. The policy, legal, and regulatory framework is not complete for the transport sector. Some important advances include the road traffic law and the law on concessions for the private sector, but to improve the effectiveness, efficiency, and sustainability of the road system, the road law and policies for the transport subsectors must be formalized.

3. Efficient transport is critical for economic and social development in Cambodia. Tourism relies on domestic road transport and international air travel; the construction industry relies on water ports and road transport for access to raw construction materials; the industrial exports market (primarily garments) relies on road and water transport; and the agriculture sector relies on road and sea transport for exports. Advances in trade and economic development also depend on efficient transport. Insufficient access, and slow and expensive transport services slow the rate of poverty reduction.

4. The primary road network comprises 2,263 kilometers (km) of paved roads, connecting the country with its borders, the GMS, and the ASEAN network; 3,360 km of secondary national roads, most of which are unpaved; and 6,641 km of provincial roads, most of which are unpaved. The target is to have 4,100 km of paved roads by 2015. The Ministry of Public Works and Transport manages an ongoing annual infrastructure investment program with a total value of \$2,706 million over the next 5 years (2014–2017), predominantly for roads and bridges, financed by 10 major development partners.

5. The Ministry of Rural Development (MRD) manages about 40,000 km of rural roads of earth or laterite standard—77% of the entire road network. Recent investments have raised some of these roads to good standard. However, local materials available for gravel surfacing are often poor, leading to poor durability, with high loss of gravel and the need for graveling, often as frequently as every 3 years. In 2009, small investments (of less than \$10,000) for road works under the decentralization and deconcentration program totaled \$18.6 million. MRD's ongoing investment program for rural road development totals \$172 million with six development partners; its high-priority pipeline projects for rural road infrastructure amount to \$306 million.

6. The railway system comprises the northern line from Phnom Penh to Poipet (386 km) on the border with Thailand, and the southern line from Phnom Penh to Sihanoukville port (264 km).

¹ This summary is based on: Asian Development Bank. 2011. *Cambodia: Transport Sector Assessment, Strategy, and Road Map*. <http://www.adb.org/documents/cambodia-transport-sector-assessment-strategy-and-road-map>.

The system forms part of the GMS Southern Economic Corridor, which aims to provide seamless transport services on a fully integrated GMS transport network. This will benefit Cambodia by promoting multimodal transport, leading to greater competitiveness through reduced travel times and transport costs. The railway is now being rehabilitated under a series of reforms and investments, with a private concession agreement for operations. The Department of Railways was formed, investment funds are in place, and a concessionaire appointed. Freight service was introduced on part of the southern railway line in October 2010. The newly established railway is not expected to provide passenger service.

7. Of the 1,750 km of inland waterways in Cambodia, all-year navigation is only possible along 580 km of the Mekong River and its tributaries. Primary usage is for containers, general cargo, and petroleum. Barges operate along the river to Phnom Penh. Inland water transport has been declining as cargoes have switched to roads. Phnom Penh and Sihanoukville ports are being upgraded and a 70-hectare economic development zone is being created in Sihanoukville.

8. Under the “open skies” policy, Phnom Penh and Siem Reap have international airports and Sihanoukville has a domestic airport operated under private sector arrangements with the Société Concessionnaire de l’Aéroport. Phnom Penh and Siem Reap airports provide access for 1.5 million tourists, who account for a third of Cambodia’s gross domestic product. The domestic airports, managed by the State Secretariat of Civil Aviation, offer only infrequent service to very few passengers. The Ministry of Planning has identified six high-priority pipeline infrastructure development projects for five of these domestic airports.

9. The core issue in the transport sector is inadequate institutional and sector development support evidenced by (i) incomplete national and regional transport policy and regulatory frameworks, and low institutional capacity; (ii) low private sector participation; (iii) incomplete and inefficient transport infrastructure networks, especially for provincial and rural roads, and railways; and (iv) lack of transport network sustainability caused by low maintenance capability, vehicle overloading, low climate change resilience, and poor traffic safety. The main results have been lack of connectivity to services and markets, resulting in lost economic opportunity; high transport operation, maintenance, and logistics costs resulting in low competitiveness; and unsafe and unsustainable transport infrastructure.

2. Government’s Sector Strategy

10. The government’s national strategy for growth is set out in the Rectangular Strategy Phase III (2013–2018). It emphasizes the need for development of physical infrastructure with three other core areas (agriculture sector promotion, private sector development and employment, and capacity building and human resource development. The primary document to guide government is the National Strategic Development Plan (NSDP), 2006–2010, which at the midterm review in 2008 was extended to 2013 to match the term of the fourth legislative period. The NSDP midterm review recorded that developments collectively had reduced poverty from 34.7% in 2004 to 30.1% in 2007, or approximately 1% per year. The government will launch the new Rectangular Strategy, Phase III in early 2014 with the overarching objective of reducing poverty by more than 1% annually.

11. In the Rectangular Strategy, Phase III, the role of the transport sector was clearly defined. It emphasized that although progress had been made, further rehabilitation and construction of transport infrastructure was 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 the 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 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.

12. Finally, the NSDP midterm review 2008 stated that rural infrastructure (construction, improvement, and maintenance) is vital for rural progress, to take services and inputs to the interior and to improve market access to outputs from the interior. In 2006 and 2007, 1,030 km of new roads were constructed, 1,604 km of rural roads were repaired, 3,761 km of rural roads were regularly maintained, and 96 small bridges and 726 culverts were built.

13. The Senate approved the Law on Concessions in October 2007. To accelerate the development of the transport sector, additional regulations are needed to convince potential private sector entities to contribute to infrastructure development. In addition, innovative schemes, such as longer-term contracts for building and maintenance—about 15 years, which is longer than the implementation of loans—could be considered. They would lead to large national contractors delegating smaller contracts of long-term maintenance to local contractors, including contractors that are eligible for deconcentration and decentralization contracts.

3. ADB Sector Experience and Assistance Program

14. Poverty reduction is the overarching objective of the country partnership strategy, 2011–2013 of the Asian Development Bank (ADB) for Cambodia, in line with the government's socioeconomic development priorities. The strategy focuses on (i) inclusive economic growth through provision of physical infrastructure, as well as interventions in other development activities such as vocational training, agriculture, and finance sector development; and (ii) social development and equity.

15. ADB assistance in the transport sector has comprised six loan projects,² four grant projects financed by bilateral donors, and 13 technical assistance operations, for a total of \$235 million (24% of the total assistance program). A midterm review of the country strategy and program in 2007 concluded that a sharper focus was required on rural development and private sector growth. The projects are rated satisfactory and successful. Progress has been made to increase transport efficiency by reducing vehicle operating costs, reducing travel times, and enhancing robust economic growth. Technical assistance projects have contributed to improved transport planning and policy making directly aimed at improving efficiency and resource allocation, although the policies remain as drafts. The key issue raised in the 2007 review was that the focus should shift to rehabilitating the provincial (and rural) road network.

16. From 1992 to 2012, 13 multilateral or bilateral development partners provided funds for the sector, totaling about \$1,395 million. Nine of these have sourced transport infrastructure development or maintenance since 1992. In addition to investment projects, development partners have supported knowledge-based services, such as master plans for all the transport subsectors. Currently, the rural roads subsector has three active development partners in addition to ADB: German development cooperation through KfW, Republic of Korea through the Export-Import Bank of Korea, and the World Bank.

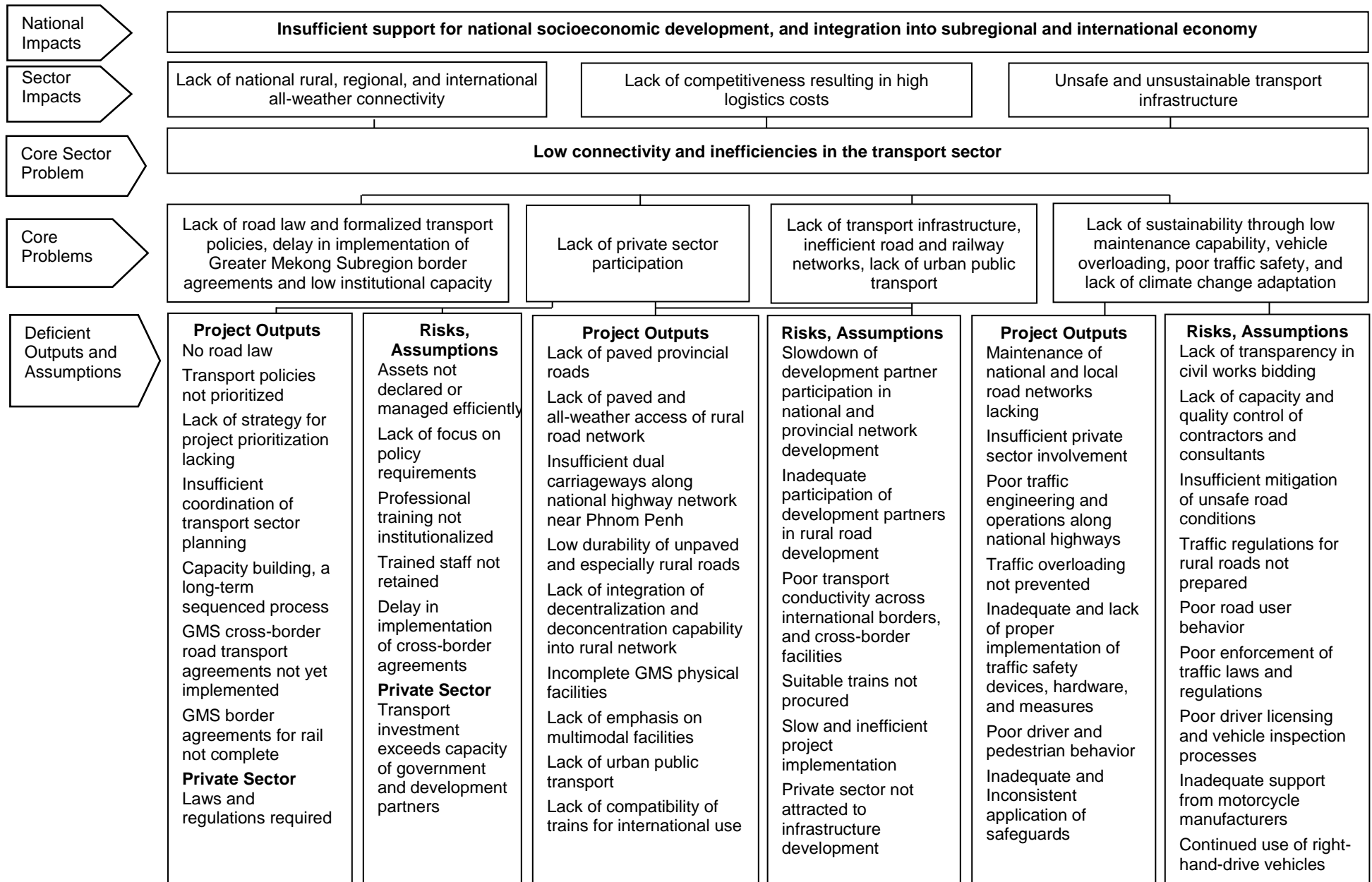
² "Excluding ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Flood Damage Emergency Reconstruction Project*. Manila, which has main road rehabilitation components.

17. Current and pipeline ADB investment projects are directed to rural and provincial road improvement. In addition, a second national road asset management project will likely be required to develop the private sector road maintenance program before it can be wholly financed from government resources. The overall forward strategy for ADB 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 network, making markets and services accessible at low cost. To achieve this, ADB's strengths in the transport sector (road and rail, national, and GMS) must be sustained. At the same time, the private sector must be engaged to maintain and then accelerate development of transport infrastructure.

18. The planned program comprises (i) the Rural Road Improvement Project II for 2014 to connect rural roads to the national network, and improve access to markets and social services for the rural poor; (ii) the GMS Deepening Connectivity of the Southern Economic Corridor Project planned for 2015; (iii) the Second Road Asset Management Project for 2016; and (iv) the Rural Road Improvement Project III for 2018.

19. In terms of GMS infrastructure, the role of ADB is to implement the currently planned rail improvements and dry ports for road and rail movements. Completing the GMS cross-border facilities and helping implement bilateral agreements for road and rail to achieve the objectives of the GMS Cross-Border Transport Agreement will also be important. The urban development strategy needs to be supported such that rural and provincial roads connect to these growth centers with paved roads. The establishment of GMS towns will also be an important factor in identifying priority roads for improvement to paved standard.

PROBLEM TREE FOR TRANSPORT



SECTOR RESULTS FRAMEWORK (TRANSPORT SECTOR, 2014–2018)

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Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations	
Outcomes with ADB Contribution	Indicators with Targets and Baselines	Outputs with ADB Contribution	Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
<p>Increased movement of heavy goods by road and rail, in line with weight regulations</p> <p>Improved road and rail connectivity (interprovincial and regional)</p> <p>Improved road and rail safety (e.g., fewer accidents and derailments)</p>	<p>Cross-border road traffic allowance from Viet Nam increased to 300 vehicles at one time in 2013 (baseline 2009: 150)</p> <p>Rail-freight traffic (ton km) increased to 1 million in 2013 (baseline 2009: 151,152)</p> <p>Total % of overloaded trucks inspected by all weigh stations reduced to 5% by 2013 (baseline 2011: 20%)</p> <p>100% of provinces connected by paved roads by 2013 (baseline 2008: 70%)</p> <p>Road traffic fatalities reduced to 7.0 of 10,000 vehicles by 2013 (baseline 2009: 12.3).</p> <p>Rail derailments and accidents reduced to 0 by 2013</p>	<p>Roads Increased length of paved road network</p> <p>Increased length of primary and secondary roads receiving periodic maintenance</p> <p>Weighbridges New and existing weigh bridges operating</p> <p>Laws, Policies Improved policies, laws, and funding for transport issues by MPWT and MRD Effective PPPs</p> <p>Rail Completion of rail linkages and extensions (e.g., south) Adherence to rail safety systems and standards</p>	<p>Indicators Paved road length increases at 1.3% per year</p> <p>Length of primary and secondary roads (km) subject to routine maintenance increased to 2,947 km in 2013 (baseline 2009: 2,138 km)</p> <p>Number of weighbridges operating increased to 8 in 2013 (baseline 2009: 0)</p> <p>Road law, transport sector, and rural road policies published (websites) by 2013</p> <p>Heavy vehicle fines by 2011</p> <p>Number of PPP agreements in place: 25 in 2015 (baseline 2010: 13)</p> <p>Length of extensions and links completed (km) by 2013</p> <p>Rail safety systems installed, and trains fitted to travel nationally by 2013</p> <p>Traffic safety measures installed on northern line: 100% in 2013 (baseline 2010: 0%)</p>	<p>Pipeline projects Loan program</p> <p>Rural Roads Improvement II</p> <p>GMS Deepening Connectivity of the Southern Economic Corridor</p> <p>Second Road Asset Management</p> <p>Rural Roads Improvement III</p> <p>PPP program Support for railways</p> <p>Ongoing projects Road Asset Management</p> <p>GMS rehabilitation of the railway in Cambodia (including supplementary)</p> <p>GMS: Southern Coastal Corridor</p> <p>GMS: Cambodia Northwest Provincial Road Improvement</p> <p>Rural Roads Improvement</p> <p>Provincial Roads Improvement</p> <p>TA program Strengthening the Institutional Capacity of the Ministry of Public Works and Transport</p>	<p>Planned key activity areas Road and rail contracts</p> <p>Construction of dry port</p> <p>GMS border facility contracts</p> <p>Road and rail cross-border transport agreements</p> <p>1,000 km rehabilitated to paved road standard, MRD capacity building, road maintenance program</p> <p>200 km of provincial roads rehabilitated to paved road standard</p> <p>Ongoing projects Periodic maintenance of primary road network (950 km)</p> <p>Rehabilitation and reconstruction of railway, including branch railway lines, new stations, sidings, terminals</p> <p>NR56: 113 km rehabilitated to paved road, road maintenance, safety and safeguards program</p>

ADB = Asian Development Bank, CBF = cross-border facility, GMS = Greater Mekong Subregion, km = kilometer, MPWT = Ministry of Public Works and Transport, MRD = Ministry of Rural Development, NR = national road, PPP = public-private partnership.

Source: Asian Development Bank.