

**ASIAN DEVELOPMENT BANK  
Independent Evaluation Department**

**SECTOR ASSISTANCE PROGRAM EVALUATION**

**ON**

**TRANSPORT SECTOR IN CAMBODIA—FOCUSING ON RESULTS**

In this electronic file, the report is followed by Management's response, and the Board of Directors' Development Effectiveness Committee (DEC) Chair's summary of a discussion of the report by DEC.



## Evaluation Study

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Sector Assistance Program Evaluation  
September 2009

# Transport Sector in Cambodia—Focusing on Results

Independent Evaluation Department

**Asian Development Bank**

## ABBREVIATIONS

ADB	– Asian Development Bank
ADF	– Asian Development Fund
ADTA	– advisory technical assistance
AusAID	– Australian Agency for International Development
CAPE	– country assistance program evaluation
CBTA	– Cross-Border Trade Agreement
COBP	– country operations business plan
COS	– country operational strategy
CPS	– country partnership strategy
CSP	– country strategy and program
DMC	– developing member country
DOT	– Department of Transport
EIRR	– economic internal rate of return
FIDIC	– Federation Internationale des Ingenieurs Conseils
FIRR	– financial internal rate of return
GDP	– gross domestic product
GMS	– Greater Mekong Subregion
ICB	– international competitive bidding
IED	– Independent Evaluation Department
JICA	– Japan International Cooperation Agency
MEF	– Ministry of Economy and Finance
MPWT	– Ministry of Public Works and Transport
MRD	– Ministry of Rural Development
NR	– national road
OCR	– ordinary capital resources
ODA	– overseas development assistance
PCR	– project completion report
PPER	– project performance evaluation report
PPP	– public private partnership
PPR	– project performance report
PPTA	– project preparatory technical assistance
RRC	– Royal Railways of Cambodia
RRP	– report and recommendation of the President
SAPE	– sector assistance program evaluation
SSCA	– State Secretariat of Civil Aviation
TA	– technical assistance

## NOTE

In this report, “\$” refers to US dollars.

### Key Words

adb, asian development bank, cambodia, civil aviation, development effectiveness, greater mekong subregion, gms, infrastructure, performance evaluation, railway, road, transport

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The guidelines formally adopted by the Independent Evaluation Department (IED) on avoiding conflict of interest in its independent evaluation were observed in the preparation of this report. Peter Darjes assisted as consultant for the study. To the knowledge of the management of IED, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

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## EXECUTIVE SUMMARY

The Asian Development Bank (ADB) has been the lead funding agency in the transport sector in Cambodia over the past two decades. This sector assistance performance evaluation (SAPE) aims to provide an independent assessment of ADB assistance to the Cambodian transport sector during 1992–2008 and identify key areas for further improving the effectiveness of its operations. The SAPE's findings will also be used as inputs to the broader country assistance program evaluation (CAPE) that is being carried out by ADB's Independent Evaluation Department.

### Sector Background

The Cambodian road network covers about 39,500 kilometers (km) and includes seven national roads (NRs 1–7) with a combined length of about 4,800 km. The management of the road network is split between the Ministry of Public Works and Transport (MPWT), which is responsible for national (primary) and provincial (secondary) roads; and the Ministry for Rural Development, which is responsible for rural (tertiary) roads. The national roads are in relatively good condition, but the provincial and rural roads are in disrepair due to many years of limited investment and neglected maintenance. Road traffic has been increasing rapidly due to the rehabilitation of the road network and the sustained economic growth in recent years. A negative consequence of increased traffic growth is the deterioration in road traffic safety. Cambodia has one of the highest incidences of road accidents in Asia, with 15 fatalities per 10,000 vehicles in 2008, a fourfold increase over the 1998 figure.

The railway network consisting of about 640 km of track is operated by the Royal Railways of Cambodia (RRC), a state-owned enterprise reporting to MPWT. Railway infrastructure has been deteriorating because of insufficient maintenance and investment. In addition, Cambodia has 10 airports, including international airports in Phnom Penh, Siem Reap, and Sihanoukville. The Phnom Penh and Siem Reap airports each handle about 1.4 million passengers per year.

Private sector participation in providing transport services and operating and managing infrastructure has increased over the SAPE period. In particular, the Government has adopted public-private partnership approaches for operating and maintaining NR 4 (Phnom Penh to Sihanoukville) and operating the three international airports of Phnom Penh, Siem Reap and Sihanoukville. The Government recently signed a concession agreement with a private sector operator for operation and maintenance of the railway network under a long-term agreement. Road projects have so far had limited impact on the development of a domestic contracting industry.

Over the past 15 years, policies and strategies adopted by the Government to develop its transport sector have been aimed at restoring, reconstructing, and modernizing the country's core transport system. Early Government strategies focused on restoring the arterial transport system and on supporting integration of the national economy into the regional and global economies. In implementing the strategies, the bulk of financial resources has gone to the rehabilitation of the national road network. After completing the initial restoration phase, the Government shifted its strategy to addressing critical reform issues cited in the ADB-financed Cambodia transport sector strategy study. Some reforms that had been implemented within MPWT aimed especially at improving the planning and execution of road maintenance. To deal with the chronic concern of inadequate road maintenance funding, the Government formed the Interministerial Committee for Road Maintenance, which has helped mobilize significant funding

for routine maintenance of national roads. The next step will be to introduce a road asset management system that will ensure the availability of maintenance funding on a more systematic basis. Cambodia has also been an active participant in the annual Asian Regional Environmentally Sustainable Transport Forum, which aims to promote environmentally sustainable policies and strategies in the sector.

### **ADB's Transport Sector Strategy and Program**

Since 1992, the transport sector has continually been a focus in ADB's Cambodia country strategies, including in the 2005 country strategy and program (CSP), which provided the strategic focus of ADB assistance to Cambodia during the period 2005–2009. In the transport sector, the 2005 CSP proposed that ADB continue its lead role in assisting the Government to improve access by further restoring Cambodia's provincial roads and by rebuilding the institutional and physical infrastructure of RRC. The 2007 CSP Midterm Review reoriented ADB's assistance away from large-scale public sector lending for national roads and railway operations and toward (i) fostering technical cooperation, setting standards, and private investment in national transport; and (ii) supporting selected subregional projects that promote access to remote rural areas, operationalization of cross-border transport agreements, and fostering of Greater Mekong Subregion (GMS) trade and logistics support. To monitor sector results, transport sector road maps setting out specific sector-level output and outcome targets were prepared in conjunction with the 2005 CSP, the 2006 country operational business plan (COBP), and the 2008 COBP. In general, the targets included in the road maps were not specific enough and, thus, difficult to monitor.

During 1998–2008 (the CAPE period), ADB's assistance to the transport sector consisted of 6 ADB loan projects, 4 grant projects financed by bilateral donors, and 13 technical assistance (TA) operations, for a total amount of \$235 million (24% of the total assistance program). During 1992–2008, ADB's assistance consisted of 29 projects for a total amount of \$254 million. During this latter period, ADB approved 7 loans amounting to \$228 million, 4 grants financed by the Australian and Japanese governments and administered by ADB amounting to \$15.9 million, and 18 TA operations amounting to just over \$10 million. The roads and highway subsector deservedly received the bulk of the assistance including 5 of the 7 ADB transport loans, all of the transport grants, and 10 of the 18 TA projects. The civil aviation and railways subsectors each received one loan and two TA projects, while the four remaining TA projects were aimed at multimodal transport and sector development. Four of the seven loan projects and one of the grants were regional GMS projects (four for roads and one for the railway).

### **Sector Outcomes of ADB's Assistance**

Overall, the SAPE finds that ADB contributed significantly to improvements in Cambodia's transport sector. An assessment of the effectiveness of ADB programs in relation to the main envisaged outputs and outcomes from the 2008 Cambodia COBP's transport sector road map reveals the following progress:

- (i) **Increased Transport Efficiency.** Progress has been made in addressing this outcome. Completed projects in the roads subsector have been successful in raising the general efficiency of the transport sector through reduced vehicle operating costs, shorter travel times, and achievement of robust economic rates of return. Aside from loans, advisory TA projects have contributed to improved transport planning and policy-making directly aimed at improving efficiency and resource allocations.

- (ii) **Improved Sustainability of the Transport Sector.** This outcome relates to efforts being undertaken to introduce a sustainable road asset management system. ADB has persevered in addressing this outcome and while progress has been made on the institutional front, the outcome is still evolving and will hinge on the successful implementation of the system.
- (iii) **Improved Rural Access.** Upgrading the provincial road network so as to improve rural access has been a strategic objective since the 2005 CSP. ADB has made modest progress in improving accessibility in four provinces in northwestern Cambodia by upgrading 50 bridges along two provincial roads and in one province in southeastern Cambodia through the rehabilitation of about 100 km of provincial roads.
- (iv) **Improved Traffic Safety.** Modest progress has been made in addressing this outcome through various efforts. One advisory TA initiated improvements in the regulatory and legislative environment for road safety. Road loans have also included design elements and other measures to minimize road traffic accidents on the respective project roads. The recently-approved Road Asset Management Project will also finance parts of the Government's national road safety action plan. However, little attention has been given to an important contributing factor: the inadequate enforcement of existing rules.

**Key Issues.** The main issues that have been identified are as follows:

- (i) **The Subsectoral Focus of ADB's Transport Sector Strategies and Programs Needs to be Sharpened.** There is good reason to believe that ADB's transport operations would benefit from a sharper subsector focus, but this first should be underpinned by thorough analysis of the transport sector. Without preempting this suggested analysis, possible options include (a) shifting the focus in the roads subsector to rehabilitating the provincial road network; (b) reviewing future strategy in the railway subsector; and (c) considering shifting the focus toward areas where ADB could have a high impact, such as road traffic safety, urban transport, and transport service delivery.
- (ii) **Sector Road Map Needs Improvement.** The transport sector road maps had two main drawbacks: (a) some of the indicators chosen were not sufficiently specific, and (b) most of the indicators were not monitorable using the data sources available in Cambodia. To address the first issue, ADB's next strategy should formulate a comprehensive transport sector road map with more specific indicators. To address the monitoring issue, support for the collection of sector data should be considered.
- (iii) **Resettlement Management has been an Issue.** Serious resettlement problems in the two completed road rehabilitation loans led to implementation delays. Both projects have undergone resettlement audits to investigate the complaints received. Despite these project-level difficulties, on a policy level ADB's assistance and practice of project processing have to some extent closed the gap between ADB's safeguard policies and Government legislation. Coordination is improving between the Interministerial Resettlement Committee and MPWT, which bodes well for addressing safeguard issues and timely completion of future projects. In light of ADB's significant ongoing and future transport sector investments, the resident mission's capacity to supervise resettlement implementation should be reinforced.

**Lessons.** The following are the main lessons learned:

- (i) **Cambodia's Participation in GMS Initiatives has had a Beneficial Impact.** A main feature of ADB's program of assistance in the transport sector has been its strong focus on regional/subregional initiatives, with four of the seven loan projects having been designated "GMS projects" and two other projects having strong regional dimensions. The GMS Transport and Trade Facilitation SAPE rated the impact of ADB's assistance as "substantial," indicating that there have been positive economic impacts at the project level, corridor level and national level. In the medium to long term, once the Cross-Border Trade Agreement is fully operational, traffic mobility and international trade will be further enhanced. This is an important impact and a positive lesson of ADB's assistance. However, in the future more synergies between the GMS Program and the national program need to be emphasized to multiply the benefits.
- (ii) **Country Ownership and Political Will are Prerequisites for Progress on the Railway Subsector Reform Agenda.** ADB's project-cum-policy dialogue approach for the GMS Railway Rehabilitation Project has only recently (June 2009) achieved a breakthrough after 2.5 years of implementation in terms of improved effectiveness with the support of private sector. In general, policy and institutional reforms require strong political will and country ownership, and externally-driven initiatives are unlikely to succeed on their own. Advancing policy and institutional changes in the country requires champions and coherent support, as well as a realistic time schedule for achieving the desired reform.
- (iii) **Improved Law Enforcement will Lead to Better Road Safety and Better Road Maintenance.** The effectiveness of ADB assistance can be enhanced if it can build on a vigorous regime of law enforcement. The traffic safety situation in Cambodia demonstrates that ADB efforts remain isolated and less effective without proper law enforcement activities by the authorities. Lax enforcement of vehicle overloading rules is likewise an impediment to endeavors to improve road maintenance.

## **Overall Assessment**

Overall, the SAPE assesses ADB assistance to the Cambodian transport sector as "successful." The performance of the transport strategy is rated "successful" based on separate assessments of strategic aspects, contribution to development results, and responsiveness of ADB's performance. The performance of the transport sector program is rated "partly successful," but on the high side, based on separate assessments of relevance, effectiveness, efficiency, sustainability, and impact. Detracting from a higher program rating was the relatively poor rating of the transport sector's impact (mainly due to the problems experienced with implementing resettlement, the worsening trend in road traffic safety, and less-than-expected cross-border trade). Continued investments in the sector, particularly in the road subsector, should emphasize and ensure adequate maintenance allocation, appropriate road safety standards, giving emphasis to software issues, as well as address resettlement concerns in a timely manner.

**Recommendations.** On the basis of the evaluation findings, the following recommendations are made.

### Recommendations

Action	Responsibility	Time Frame
1. ADB should engage in further policy dialogue with the Government to expedite the issuance of the Transport Policy, which is expected to contribute to efficiency gains in sector institutions and foster more consistent policies that keep overall economic and social concerns in view (para. 110).	SERD	2009–2010
2. ADB should continue to pursue private sector involvement in future transport infrastructure investments, including public private partnerships in focus areas (para. 111).	PSOD; SERD	2010
3. TAs for capacity development and institutional strengthening should focus on a clear capacity development framework and a long-term perspective with proper sequencing and incentives for capacity retention (para. 112).	SERD	2010

PSOD = Private Sector Operations Department, SERD = Southeast Asia Regional Department.

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## I. INTRODUCTION

### A. Objective and Scope

1. The objective of this sector assistance program evaluation (SAPE) is to provide the first sector-level independent assessment of the Asian Development Bank (ADB) assistance to the transport sector in Cambodia. The SAPE findings feed into the broader Cambodia country assistance program evaluation (CAPE) being carried out by the Independent Evaluation Department (IED). The SAPE evaluates the performance of ADB assistance during 1992–2008,<sup>1</sup> identifies issues and lessons, and makes recommendations for improving current and future operations.

2. The scope of the SAPE is limited in that it focuses mainly on the road, railway, and aviation subsectors, which are the subsectors related to ADB lending operations. In the project-level analysis, the SAPE focuses on both completed and ongoing operations; however, the assessment of ongoing projects is limited by availability of data on project implementation progress.

### B. Evaluation Framework and Methodology

3. The evaluation framework adopted for the SAPE draws on the guidelines<sup>2</sup> for preparing CAPE reports and follows a top–down/bottom–up approach. Top–down assessment comprises three separate assessments: (i) strategic, (ii) contribution to development results (value addition of ADB support), and (iii) ADB’s performance. Bottom–up assessment comprises the standard evaluation criteria used to evaluate individual operations: relevance, effectiveness, efficiency, sustainability, and impact.

4. The evaluation draws upon a review of documents and other relevant studies, a review of the performance of the Cambodia transport portfolio, and information gathered during the SAPE mission from ADB staff, officials of government agencies concerned with the transport sector, and other development partners and beneficiaries. The evaluation also incorporates the results of the SAPE mission’s interviews and field inspection of ADB-financed project facilities in the provinces of Banteay Meanchey, Battambang, Kampong Cham, Kampong Thom, Pursat, Siem Reap, and Takeo.

### C. Findings of Earlier Evaluations

5. The first Cambodia CAPE<sup>3</sup> was completed in 2004 and assessed the performance of ADB’s country operational strategy and country assistance programs for Cambodia during 1992–2002. The transport program evaluated by the previous CAPE consisted of four loans amounting to \$173 million (26% of total amount of loans) and 13 technical assistance (TA) grants totaling \$6.8 million (10% of the total amount of TA grants). The CAPE concluded that while the overall performance of the transport sector was satisfactory, there remained questions as to the sustainability of the projects due to lack of proper maintenance. The CAPE recommended that future assistance in the transport sector remain focused on the road subsector and that such assistance be targeted on improving linkages between national and rural roads, since the phase of reconstruction and rehabilitation of national roads was considered to be

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<sup>1</sup> Although the SAPE covers 1992–2008, emphasis has been placed on activities and developments during 1998–2008, corresponding to the period covered by the second Cambodia CAPE.

<sup>2</sup> ADB. 2006. *Guidelines for the Preparation of Country Assistance Program Evaluation Reports*. Manila.

<sup>3</sup> ADB. 2004. *Country Assistance Program Evaluation for Cambodia*. Manila.

nearing completion. Toward that end, greater emphasis was to be placed on public-private partnerships (PPPs). To ensure the sustainability of ADB road projects, the CAPE recommended that future ADB assistance to the road sector be made contingent on an effective use of the road maintenance fund that had been created with ADB assistance. While most of these recommendations are still valid, the recommendation on the road maintenance fund has been superseded by subsequent events. This is discussed further in paras. 21, 87, 94 and Table 5.

6. A SAPE<sup>4</sup> assessing the regional transport and trade facilitation activities undertaken in the Greater Mekong Subregion (GMS) was completed in 2008. The program evaluated by the SAPE consisted of 26 loans and 57 TA grants. Five of the loans and 19 of the TA grants involved Cambodia. The SAPE rated the overall ADB assistance during the evaluation period as “successful” and indicated that improving the GMS roads has resulted in significant savings in vehicle operating costs and reduced travel time. Border-crossing time in Cambodia, Lao People’s Democratic Republic (Lao PDR), and Viet Nam has also been reduced. Although several benefits were apparent from the completed projects, the SAPE highlighted two main issues that were hampering the full realization of benefits: (i) delay in implementing the GMS Cross-Border Transport Agreement (CBTA), and (ii) missing infrastructure links. The SAPE’s recommendations for ADB’s future assistance were as follows: (i) provide more assistance to fill gaps in transport infrastructure, and implement the CBTA with an agreed-upon timetable and monitoring mechanisms; (ii) exert greater efforts to facilitate the development of regional institutions that address cross-border issues; (iii) encourage partnerships between the GMS program and other regional cooperation initiatives outside Asia and derive lessons from them; and (iv) mobilize alternate forms of funding, either from the private sector or from other development partners—bilateral and multilateral.

7. Several ADB TAs have supported capacity building in road planning and administration in Cambodia. Early objectives were to rebuild the economic, social, and physical systems ravaged during two decades of conflict. Subsequent capacity building was aimed at staff training and at establishing and strengthening the planning function in the road sector ministry. A TA performance audit report<sup>5</sup> (TPAR) evaluated the performance of the TAs<sup>6</sup> and drew the following lessons and recommendations: (i) there is a need to develop a long-term cost-effective strategy for capacity building, (ii) knowledge management should be improved to ensure that the results of capacity building can take root, and (iii) government ownership should be ensured to improve TA effectiveness.

#### **D. Organization of the Report**

8. Section II of the SAPE describes the context and challenges in the transport sector in terms of available capacity, demand for transport services, existing constraints and challenges, and the way Cambodia has responded to these challenges. Section III assesses ADB’s performance in the transport sector in terms of strategic focus (top–down assessment). Section IV assesses the performance of ADB’s program (bottom–up assessment). Section V

<sup>4</sup> ADB. 2008. *Sector Assistance Performance Evaluation of Transport and Trade Facilitation in the Greater Mekong Subregion – Time to Shift Gears*. Manila.

<sup>5</sup> ADB. 2001. *Technical Assistance Performance Audit Report on Institutional Strengthening in Transport Planning and Administration in Cambodia and Viet Nam*. Manila.

<sup>6</sup> ADB. 1993. *Technical Assistance to Cambodia for a Transport Rehabilitation Study (Financed by UNDP and SIDA)*. Manila. ADB. 1995. *Technical Assistance to the Kingdom of Cambodia for Developing a Planning Capability in the Ministry of Public Works and Transport*. Manila.

summarizes the SAPE's overall transport sector performance ratings. The last section contains conclusions, key issues, lessons identified, and recommendations and options for improving ADB's partnership with Cambodia in the transport sector.

## II. SECTOR BACKGROUND AND CONTEXT

### A. Background

9. Cambodia's transport modes comprise road and rail, ports and harbors, inland waterways, and civil aviation. Road transport is the dominant mode. Its share in total transport output is frequently stated as 65% for passengers and 70% for freight.<sup>7</sup> However, these figures seem to be understated and date back to a time when both inland waterways and the Royal Railway of Cambodia (RRC) played a greater role in moving passengers and freight. Over the last two decades, both modes have lost significance, with both passenger and freight traffic on a steady decline. Although domestic civil aviation is important for the growing tourism industry, its contribution to overall transport output is minimal. There are no official sources, but, it is highly likely that the share of road transport in both passengers and freight is currently about 95%.

10. The responsibility for managing the transport sector is divided among various government agencies. The Cambodian road network covers about 39,500 kilometers (km) and includes seven national roads (NRs 1–7) or primary highways with a combined length of about 4,800 km. The management of the road network is split between the Ministry of Public Works and Transport (MPWT), which is responsible for about 11,500 km of national (primary) and provincial (secondary) roads; and the Ministry for Rural Development (MRD), which oversees about 28,000 km of rural (tertiary) roads. The railway network of about 640 km of track is currently operated by RRC, a state-owned enterprise reporting to MPWT. The railway system consists of two lines: (i) the 388-km-long Northern Line connecting Phnom Penh to Poipet on the border with Thailand, and (ii) the 254-km-long Southern Line connecting Phnom Penh to Cambodia's main seaport in Sihanoukville. The State Secretariat for Civil Aviation is responsible for the control, regulation, and orderly development of the civil aviation sector as well as the operation of domestic airports. Cambodia has 10 airports, including international airports in Phnom Penh, Siem Reap, and Sihanoukville. The Phnom Penh and Siem Reap airports each handle about 1.4 million passengers per year. Domestic freight traffic is insignificant. The civil aviation sector has undergone major changes to improve its compliance with international safety and security standards and to encourage private sector participation in operating the terminals.

11. Private sector participation in providing transport services and operating and managing infrastructure has increased over the SAPE period. In particular, the Government has adopted PPP approaches for the operation and maintenance of NR 4 (Phnom Penh to Sihanoukville) and the operation of the three international airports of Phnom Penh, Siem Reap, and Sihanoukville. The Government recently signed a concession agreement with a private sector operator for operation and maintenance of the railway network under a long-term agreement. Road projects have so far had limited impact on the development of a domestic contracting industry.

12. At the beginning of 1992, after war, internal strife, and international isolation had devastated the country, ADB was instrumental in spearheading Cambodia's recovery process by resuming operations in Cambodia soon after the Paris Peace Accord was signed in 1991.<sup>8</sup>

<sup>7</sup> JICA. 2007. *The Evaluation Study on Japan's Assistance to Transport Sector in Cambodia*. Tokyo. See also: ADB. 2002. *Greater Mekong Subregion: Cambodia Road Improvement* (Loan No. 1945). Manila.

<sup>8</sup> The World Bank considered resumption of operations premature and took a "wait-and-see" stance. World Bank staff joined the first ADB missions as observers.

Cambodia's movement toward democracy began only with the 1993 elections, and, as insurgencies continued in selected regions, political stability was attained by 1998, after a series of elections.

13. Although the economic environment had improved with rising prospects of a political settlement,<sup>9</sup> in 1992 Cambodia was still among the poorest countries in the world. The state of its transport infrastructure mirrored the damage inflicted on it by two decades of hostilities, intentional destruction, and subsequent neglect. About two thirds of the road network was in disrepair, many of the country's bridges were destroyed, the railway could not maintain regular service, the two ports lacked essential equipment, and the authorities, confronted with the task of expeditious restoration, had neither the resources nor the technical capability to do so.<sup>10</sup> This situation, combined with the security problems, created regional disparities, with some areas fairly well-serviced and other areas not serviced at all.<sup>11</sup>

14. Any evaluation, particularly the assessment of the relevance of operations, needs to be undertaken in the light of the prevailing historical context. In evaluating ADB's operations, the initial conditions noted above have to be considered and the subsequent stages of recovery and the priorities linked to them have to be taken into account. The recovery process had to address two key challenges—those emanating from the destruction of infrastructure and institutions, and those inherent in the transition from a command economy to a market system. Limited implementation capacities and financial resources required proper prioritization and sequencing of the restoration, reconstruction, and reform activities.<sup>12</sup> Therefore, it appears useful to divide the process of recovery into the four stages described in paras. 15–18.<sup>13</sup>

15. **Emergency Restoration (1992–1995).** During this phase, the priority was to temporarily restore essential facilities so as to open roads to traffic, facilitate the movement of goods and persons, and spur economic activities in rural areas. The most urgent tasks were to repair the most dilapidated sections of the primary road network and to procure essential equipment and material to resume transport services. Institutional constraints and the lack of suitably qualified personnel at the operational level were persistent concerns throughout the restoration process.

16. **Transition, Disruptions, and Recovery (1996–1998).** The restoration work undertaken during the preceding period produced the intended results, albeit it was mostly of a temporary nature. Emphasis at the transition stage was therefore placed on rehabilitation and improvement works of a more permanent nature. However, institutional constraints and ongoing internal strife caused rehabilitation programs to proceed more slowly than expected.

17. **Consolidation, Strategies, and Structural Change (1999–2002).** Previous restoration and reconstruction activities had been partial and ad hoc in nature and were not integrated into an overall transport strategy. It was therefore important that the Government define its medium- to long-term strategy and to lay down the foundation for the transition from the restoration and rehabilitation phase to the reconstruction and sustainable development of the sector. Investment decisions were to be guided by a consistent transport policy. In particular, policy options, strategic choices, and financing scenarios all reflecting market considerations had to be

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<sup>9</sup> Prior to the Paris Peace Accord, the process of transition toward a market economy had commenced with small-scale privatization among other reforms.

<sup>10</sup> World Bank. 1995. *Cambodia - Rehabilitation Program: Implementation and Outlook*. Report for the 1995 ICORC Conference. Washington DC.

<sup>11</sup> World Bank. 1994. *Cambodia - From Rehabilitation to Reconstruction*. Washington DC.

<sup>12</sup> Investment requirements of the transport sector for rehabilitation were largest among all sectors.

<sup>13</sup> The 2004 CAPE divides the recovery process in a similar way.

prepared on the basis of priorities among the transport modes and within each mode. To this end, the following three priority areas had to be addressed: (i) develop MPWT's capacity to plan, formulate, and prepare transport policies and programs; (ii) strengthen the financial and technical capacity of MPWT at the central and local levels by introducing a suitable maintenance management system; and (iii) restructure transport services to improve service delivery and reduce the burden on the budget.

18. **Sector Reforms and Evolving Sector/Subsector Priorities (2003–present).** Since 2003, the Government has initiated a sizeable agenda of reforms, which is still unfinished to date. The reforms have included increased private sector involvement in operating, providing, and financing infrastructure; road maintenance; enforcement of safety regulations; railway and port subsector operations; and urban public transport. All have been pushed forward to varying degrees. In terms of physical infrastructure, there has been a shift from purely national to regional/subregional transport projects. More recently, following the upgrading of most of the national road network, there has been a further shift toward improving the provincial and rural road networks. Cambodia has also been an active participant in the annual Asian Regional Environmentally Sustainable Transport Forum, which aims to promote environmentally sustainable policies and strategies in the sector.

## B. Key Development Challenges

19. Cambodia and its transport sector continue to face a number of complex and interconnected key development challenges:

- (i) Inadequate road and railway networks;
- (ii) Insufficient maintenance of rehabilitated roads;
- (iii) Deteriorating traffic safety;
- (iv) Neglect of railway subsector;
- (v) Absence of efficient urban transport; and
- (vi) Inadequate transport logistics.

20. **Inadequate Road and Railway Networks.** Overall, the transport network remains inadequate to meet the rapidly growing demand for transport facilities and services. The density of the road and railway networks in Cambodia is average by regional standards. While standard indicators, such as road density and proportion of paved roads, are good measures of the maturity of a country's road network, they are also largely a function of the geography and demography of a country (Table 1). In the GMS for example, Thailand's road length per capita is lower than Cambodia's, but the proportion of paved roads is much higher, thus putting Thailand ahead in terms of road development. Conversely, the Lao PDR has more paved roads per capita than Cambodia principally on account of its sparse population.

**Table 1: Comparative Transport Density Indicators, 2006**

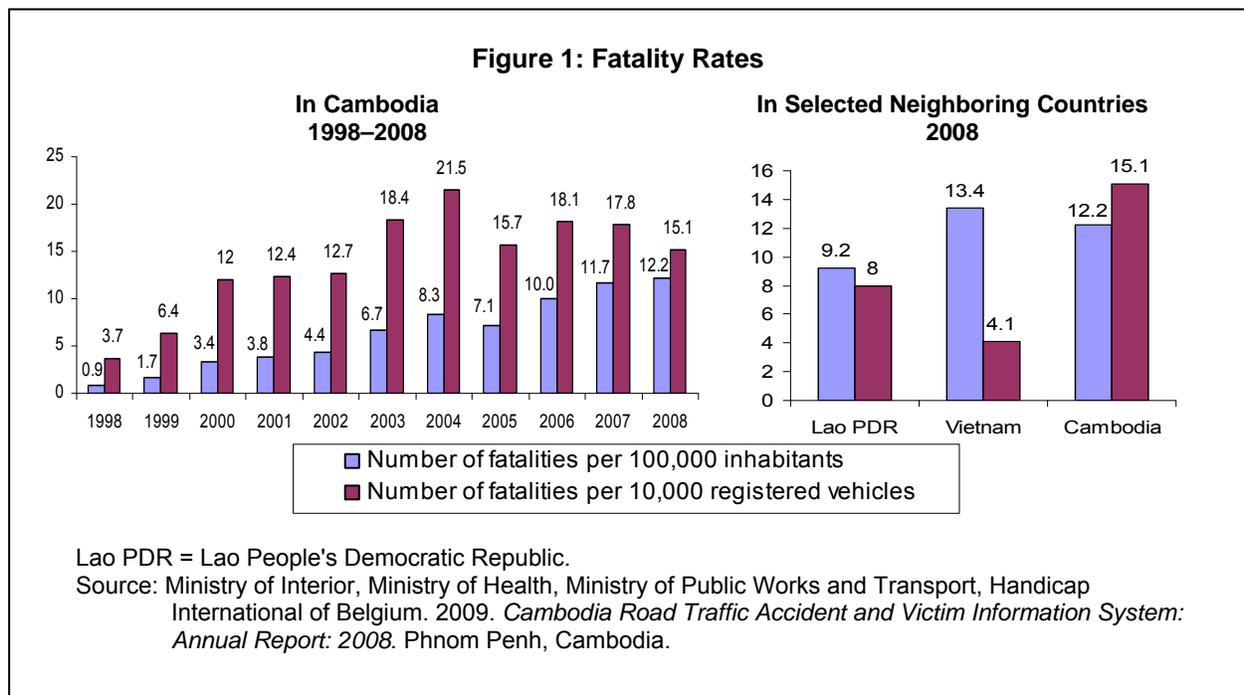
Item	Cambodia	Lao PDR	GZAR, PRC	Thailand	Viet Nam	Yunnan, PRC
Population Density (people/km <sup>2</sup> )	81.60	24.70	198.20	126.40	258.80	113.80
Road Density						
km per 1,000 people	2.64	5.44	1.11	0.83	2.64	4.34
km per km <sup>2</sup>	0.22	0.13	0.22	0.11	0.68	0.49
Rail Density						
km per 1,000 people	0.04	—	0.07	0.06	0.03	0.04
km per 1,000 km <sup>2</sup>	3.41	—	13.67	7.95	7.99	4.89

GZAR = Guangxi Zhuang Autonomous Region, km = kilometer, km<sup>2</sup> = square kilometer, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: ADB. 2008. *Sector Assistance Performance Evaluation of Transport and Trade Facilitation in the Greater Mekong Subregion – Time to Shift Gears*. Manila.

21. **Insufficient Maintenance of Rehabilitated Roads.** Most of the national road network has been rehabilitated and is in good condition. In contrast, the provincial and rural road networks are in disrepair due to many years of limited investment and neglected maintenance of rehabilitated roads. To address the long-standing issue of shortage of maintenance funds, an interministerial committee was created in 2005 to determine the annual maintenance allocations. As a result, road maintenance funding has increased from about \$2–\$3 million in fiscal year 2002/03 to about \$26 million in 2007, about \$33 million in 2008, and about \$32 million in 2009. In addition to the issue of maintenance funding, vehicle overloading has been a persistent problem to the detriment of road conditions. MPWT has made efforts to improve its monitoring and control of axle loads. Eight automated “weigh in motion” sites were installed in September 2006 and seven more permanent weigh stations were installed in 2008.

22. **Deteriorating Traffic Safety.** In Cambodia, road traffic safety is a growing problem, with crashes, casualties, and fatalities all increasing faster than the growth in population and road traffic. Figure 1 shows that the fatality rates in 2008 were 12.2 per 100,000 inhabitants and 15.1 per 10,000 registered vehicles. Whereas the fatality rate per 100,000 inhabitants had increased since 2005, the fatality rate per 10,000 registered vehicles had dipped over the last 2 years but is still four times its 1998 level and double the Government's target for 2010 of 7 per 10,000 registered vehicles. Compared with its neighboring countries, the Lao PDR and Viet Nam, Cambodia has a significantly higher fatality rate per 10,000 registered vehicles.



23. The Ministry of Interior and MPWT are jointly implementing a National Road Safety Action Plan, which covers important topics such as road accident data systems, road safety audits, road safety education for children, law enforcement, vehicle inspections, and drivers training. Recent enforcement measures instituted by MPWT include mandatory use of helmets for motorcyclists in cities.

24. **Neglect of Railway Subsector.** The railway network is in poor physical condition because of war damage and decades of neglect. Railway traffic has dropped sharply over the past decade because the poor condition of track and equipment renders the railway

increasingly unreliable and slow. Currently, traffic is about 3 to 5 trains per week, down from 6 to 7 trains per week in 2005. The Government made a major step forward in June 2009 when it signed a concession agreement with a private sector operator for operation and maintenance of the railway for 33 years. Going forward, the key challenge will be to define a core market for the railway and to restructure its organization with a view to making it more responsive to the demands of a competitive transport market.

**25. Absence of Efficient Urban Transport.** In the last decade, urban traffic has steadily worsened in the major cities. There is no public mass transport system, and urban transport relies overwhelmingly on motorcycles. Due to lax enforcement of traffic rules, the majority of accidents are caused by motorcycles in urban areas. Responsibility for managing transport infrastructure and services in urban areas is fragmented and spread over several government departments. Policy making, planning, and management of urban transportation, as well as control of vehicle and driver licensing and registration, are divided among national, provincial, and local authorities. Investments in urban transport are also fragmented and not well coordinated.

**26. Inadequate Transport Logistics.** Cambodia is a small international freight market with relatively small bulk commodity flows. However, if growth in container transport continues at its current rate, the transfer of containers to and from Sihanoukville will likely put a strain on the capacity of NR 4 linking the port city with Phnom Penh. This outlook is part of the justification for investing in the rehabilitation of the railway system. The main constraints to efficient and competitive trade logistics emanate from operational, procedural, and organizational causes. Customs procedures at Sihanoukville Port are slow, reflected in the average dwell time of containers of about 5 days.

27. Appendix 1 provides a detailed overview of Cambodia's transport sector, including details of other transport subsectors such as ports, inland waterways, and air transportation.

### **C. Government Strategies and Plans**

28. Over the past 15 years, the Government strategy has been to restore, reconstruct, and modernize the country's core transport system.<sup>14</sup> Early Government strategies focused on restoring the arterial transport system and on supporting regional and global integration of the national economy. In implementing the strategies, the bulk of financial resources has gone to the rehabilitation of national highways. Appendix 2 provides an overview of the major thrusts of the Government's various strategies.

29. After the restoration phase had been completed, the Government's strategy shifted to addressing critical reform issues based on the Cambodia transport sector strategy study that was financed by ADB and completed in December 2002. Some reforms have been implemented within MPWT, aimed especially at improving the planning and execution of road maintenance. The Government has also adopted PPP approaches for the operation and maintenance of NR 4 (Phnom Penh to Sihanoukville) and the operation of the three international airports of Phnom Penh, Siem Reap, and Sihanoukville. To deal with the chronic concern of inadequate road maintenance funding, the Government formed the Interministerial Committee for Road Maintenance, which has helped mobilize significant funding for routine maintenance of NRs. The next step will be to introduce a Road Asset Management System that will ensure the allocation of maintenance funding on a more systematic basis.<sup>15</sup> Subsequently,

<sup>14</sup> ADB, 2008. *Country Operations Business Plan – Cambodia 2008-2010*. Manila.

<sup>15</sup> ADB, the World Bank, and the Australian Government support this by financing a Road Asset Management Project, which will fund periodic maintenance of national roads to ensure the sustainability of the national road

in 2000 the Government prepared a Five-Year Road Master Plan (2000–2005) that pursued three objectives: (i) rehabilitate and reconstruct the main NRs, thereby improving land transport throughout Cambodia; (ii) build road links to neighboring countries, thereby opening up some of the more remote areas of the country to international trade and tourism; and (iii) develop a sustainable road maintenance program, thereby ensuring that investment in road rehabilitation and reconstruction would generate sustainable benefits.

30. MPWT has prepared a draft strategy for future development of the transport sector, based on the Cambodia transport sector strategy study. The main objectives of the Government's draft strategy and how it relates to the transport sector are described below:

- (i) **Sustained Economic Growth and Promotion of External Trade and Foreign Direct Investments.** A cost-effective transport system is prerequisite for Cambodia's export drive and for the successful development of its tourism potential. The Government recognizes that efficient transport logistics that relies on multimodal transport will be needed to improve Cambodia's trade competitiveness and its attractiveness to direct foreign investors.
- (ii) **Poverty Reduction and Integration of the Country.** By encouraging productive activities in areas not previously integrated into the economy, transport creates the foundation for more inclusive and pro-poor economic growth. The Government recognizes that dependable transport networks, especially provincial and rural roads, are needed to link the provinces and to integrate rural areas into the mainstream economy.
- (iii) **Efficiency of Sector Institutions and Private Sector Involvement in Infrastructure Provision.** The Government emphasizes strengthening of institutions, notably through the provision of clear mandates,<sup>16</sup> as the basis for institutional reform. The Government recognizes that, given Cambodia's human resource constraints, flexibility and a long-term perspective on capacity building will be required.
- (iv) **Focus on Private Sector Participation.** The Government has demonstrated its willingness to involve foreign and domestic investors in financing, developing, and managing transport infrastructure. It intends to pursue this avenue further and also strongly supports the development of domestic contractors to build infrastructure and provide maintenance services.
- (v) **Safety and Law Enforcement.** The Government is aware of the rapidly growing social and economic cost of poor traffic safety (paras. 22–23).<sup>17</sup> It recognizes that inefficient enforcement due to a weak legal foundation, inadequate resources, and corrupt practices is the root cause of the traffic safety problem.

31. In June 2006, the Government adopted the National Strategic Development Plan (NSDP),<sup>18</sup> which spells out the Government's strategies to reduce poverty rapidly and to achieve the Cambodian Millennium Development Goals (MDGs).<sup>19</sup> The NSDP included the following

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network. TA will be provided to establish a maintenance unit in MPWT. ADB. 2008. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Cambodia for the Road Asset Management Project* (Loan 2406-CAM). Manila.

<sup>16</sup> The World Bank has provided TA to draft a Road Law that will soon be sent to the National Assembly and will form the future basis for road administration and the regulation of road traffic.

<sup>17</sup> Japan International Cooperation Agency is providing assistance for an urban road safety initiative and Handicap International is developing and operating an enhanced road accident reporting system.

<sup>18</sup> Kingdom of Cambodia. 2007. *National Strategic Development Plan 2006-2010*. Phnom Penh, Cambodia.

<sup>19</sup> Kingdom of Cambodia. 2005. *Achieving the Cambodia National Millennium Development Goals: 2005 Update*. Phnom Penh, Cambodia.

road subsector priorities: (i) finalize and enact a Road Law; (ii) prioritize, rehabilitate, and reconstruct as many roads as possible; (iii) expand the rural road networks; (iv) address in a humane manner resettlement issues and the plight of people affected by road construction works; (v) ensure proper prioritized maintenance of all roads; (vi) use labor-intensive measures as much as possible, especially for constructing and maintaining rural roads; and (vii) involve the private sector in constructing and maintaining roads and bridges in cases where costs could be recovered by tolls. The quantitative target to be achieved during the NSDP period (2006–2010) was to upgrade an additional 2,000 km of national and provincial roads, raising the total of such upgraded roads to 4,100 km. In the civil aviation subsector, the priority was to improve the Phnom Penh and Sihanoukville international airports and to raise the standards of selected domestic airports with high tourism potential. In the railway subsector, the priority was to rehabilitate the Southern Line to handle higher volumes of cargo traffic from Sihanoukville Port.

32. There has been recent progress in the area of subregional interconnectivity, following the implementation of the Bilateral Road Transport Agreement between Cambodia and Viet Nam. Under the agreement, both countries agreed on 17 March 2009 to increase the number of vehicles that can cross the border from 40 to 150 for each side, and since 5 May 2009 Cambodian trucks and Vietnamese trucks can cross the border. In addition, the Customs Department of Cambodia and the Customs Department of Viet Nam signed on 2 June 2009 a bilateral agreement establishing a single-stop inspection point between the two Customs agencies at the Bavet-Moc Bai border-crossing. Under a separate agreement, on 17 September 2009 Cambodia and Thailand signed a memorandum of understanding to allow access of 40 trucks per day to and from both countries. Notwithstanding these bilateral agreements, progress on the implementation of the GMS CBTA is still delayed.

## D. ADB Strategies and Program

### 1. ADB Strategies

33. **Strategic Frameworks.** ADB's relevant strategies comprise four strategic frameworks, as well as a host of sectoral, thematic, subregional, and country-specific strategies. Since 2001, ADB's operations have been guided by both its long-term and medium-term strategic frameworks, which are intended to help ADB respond to the challenges of poverty and to help achieve the MDGs in the Asia-Pacific region. The two long-term strategic frameworks (LTSF) were approved in 2001<sup>20</sup> and 2008,<sup>21</sup> and the medium-term frameworks were approved in 2001<sup>22</sup> and 2006.<sup>23</sup> The 2008 LTSF set out five core operational areas: infrastructure, environment, regional integration, financial sector development, and education. ADB aims to invest in infrastructure to enable more and better job creation and new products and services by increasing transport, power, energy, and communication connectivity within and between cities, towns, and villages, and between neighboring countries. The baseline diagnostic of Strategy 2020 shows that a weak enabling environment has hampered the private sector from contributing to infrastructure provision and has led to high costs and risks for private business. To address these constraints, ADB is committed to brokering partnerships between public and private investors. ADB will assist developing member countries (DMCs) in attracting direct private sector investments that support inclusive growth and improve the environment. To spur market-led growth, ADB will

<sup>20</sup> ADB 2001. *Moving the Poverty Reduction Agenda Forward in Asia and the Pacific: The Long-Term Strategic Framework of the Asian Development Bank (2001–2015)*. Manila.

<sup>21</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank (2008–2020)*. Manila.

<sup>22</sup> ADB. 2001. *Medium-Term Strategy (2001–2005)*. Manila.

<sup>23</sup> ADB. 2006. *Medium-Term Strategy (2006–2008)*. Manila.

invest in infrastructure and advise on the development of an enabling business-friendly environment, including reliable rules, regulations, and policies that do not disadvantage private sector enterprise.

34. The focus of ADB's "informal strategy" for the transport sector has been on increasing efficiency and improving service quality.<sup>24</sup> The strategy focused on facilitating PPP, strengthening inclusiveness, promoting regional cooperation and integration, transport and the environment, improving governance, and preventing corrupt practices. The strategy included promoting policy reforms and sector restructuring to create the environment necessary for the efficient and sustainable provision of infrastructure. Mobilization of resources using PPP arrangements for financially viable transport infrastructure development was to be consistently pursued. Policy dialogue was to be centered on cost recovery, tariffs, regulations, and competition. Where market orientation was not appropriate, ADB would support introduction of market surrogates by adopting arrangements that created competition for the market, and rules and regulations to ensure satisfactory and cost-efficient delivery of services.

35. Since 1992, ADB has been undertaking regional-level activities in the GMS. The regional transport sector is one of the most established sectors under the GMS program and the one for which the most ADB projects have been provided, with over 26 loans and 57 TA grants to date. Many projects have centered around the three key economic corridors flagship projects of the GMS: the East-West Corridor, the North-South Corridor, and the Southern Corridor. Both the North-South and Southern Corridors include Cambodia. Recent key activities have revolved around the Cross-Border Transport Agreement and the Transport Sector Strategy Study.<sup>25</sup>

36. **Country-Specific Strategies.** The assistance strategies and programs of ADB for Cambodia for the CAPE period, including those for the transport sector, are described in various country operational strategies, country strategy and programs (CSPs), CSP updates (CSPUs), and country operations business plans (COBPs). A country operational strategy (COS) study was prepared in October 1995 (1995 COS); it was the first ADB country strategy document after the 1993 Cambodia elections and the approval of the new Government's broad development strategy in March 1994. The 1995 COS was followed by the 2000 COS, the 2005 CSP, and the 2007 Midterm Review, all of which refined the strategic thrusts of the 1995 COS.<sup>26</sup> Appendix 3 gives an overview of the major thrusts of ADB's various strategy documents for Cambodia and its transport sector. Section III discusses the assessment of the strategy.

37. A steady reduction in poverty was identified as the single overarching objective of the 1995 COS.<sup>27</sup> The transport sector was to focus on the road subsector, with assistance mainly directed at the restoration of as much of the national network as possible. Secondary emphasis was to be on the railway and civil aviation subsectors. Support to the railway sector was to be limited to supporting the restoration of the basic infrastructure—bridges and track—to ensure that it operates with reasonable levels of safety and efficiency for passengers and freight. Support to civil aviation aimed to assist with the provision of safe and reliable air transport by improving existing facilities to safe operating levels in compliance with international civil aviation

<sup>24</sup> ADB. 2007. *ADB's Transport Intervention: Looking Forward*. Manila. The report is not a strategy paper *per se*, but rather a forward-looking document intended to highlight future areas of focus for transport operations.

<sup>25</sup> ADB. 2007. *GMS Transport Strategy 2006-2015: Coast to Coast and Mountain to Sea: Toward Integrated Mekong Transport Systems*. Manila.

<sup>26</sup> Other ADB documents stipulating ADB's strategic thrusts and programs for Cambodia include the 2002 and 2003 CSPUs, and the 2006 and 2008 COBPs.

<sup>27</sup> ADB. 1995. *Country Operational Strategy Study for the Kingdom of Cambodia: Developing the Capacity for Reconstruction and Development*. Manila.

standards. No support was envisaged for the ports and telecommunications subsectors. The 2000 COS<sup>28</sup> broadly maintained the COS's strategic foci, but recommended that ADB assist the Government to strengthen its capabilities in multimodal transportation planning and PPPs to achieve maximum efficiency in the transportation system, particularly in the regional context.

38. The 2005 CSP<sup>29</sup> proposed that ADB continue its lead role in assisting the Government to improve access by further restoring Cambodia's provincial roads and by rebuilding the institutional and physical infrastructure of RRC. It was proposed that ADB also (i) support strengthening the Fund for the Repair and Maintenance of Roads by helping to establish appropriate institutionalized funding mechanisms; (ii) help develop the policy-making and regulatory oversight capacities of the road transport agencies; and (iii) continue to support the harmonization of cross-border trade and transport regulations, through the GMS program, to ensure that Cambodia derives more value-added from its role as a "land bridge" between Thailand and Viet Nam.

39. The 2007 CSP Midterm Review<sup>30</sup> highlighted the significant progress made in the transport sector since the CSP, especially on adhering to key legislative and institutional milestones and initiating the critical steps needed for multimodal transport competitiveness. However, the review pointed out that given continuing challenges in terms of rural access and sectorwide best practice standards, ADB should shift from large-scale public sector lending for national roads and railway operations to (i) fostering technical cooperation, standard setting, and private investment in national transport; and (ii) supporting subregional projects that promote access to remote rural areas, operationalize cross-border transport agreements, and establish a basis for second-generation GMS trade and logistics support in the next country partnership strategy period.

40. A transport sector road map outlining the intended sector outcomes and sector outputs supported by ADB was first included in the 2005 CSP. The road map was based on the Cambodia transport sector strategy financed by ADB and is in line with the Government's draft transport sector strategy presented in para. 30. Subsequently, revised road maps were included in the 2006 Cambodia COBP<sup>31</sup> and the 2008 Cambodia COBP.<sup>32</sup> All three versions of the road map set out specific sector-level output and outcome targets. The latest road map shows ADB's operational focus is on the following areas.

- (i) **Increased Transport Efficiency.** This refers to reduction of vehicle operating costs, shorter travel times, and achievement of robust economic rates of return in the roads subsector. In the railway subsector, transport efficiency concerns the need to provide wider choices of mode and route. Progress to this goal is to be measured by monitoring long-distance bus and truck fares.
- (ii) **Improved Sustainability of Transport Infrastructure.** The Road Asset Management Project will address the issues related to adequate road maintenance management. Progress is to be measured by monitoring the share of MPWT roads in good condition.
- (iii) **Improved Rural Access.** The provincial road network is generally in need of repair. Many rural areas and some provincial towns are still without year-round road access to social services, markets, and schools.<sup>33</sup>

<sup>28</sup> ADB. 2000. *Cambodia: Enabling a Socioeconomic Renaissance*. Manila.

<sup>29</sup> ADB. 2005. *Country Strategy and Program: Kingdom of Cambodia 2005-2009*. Manila.

<sup>30</sup> ADB. 2007. *Cambodia: Country Strategy and Program Midterm Review 2005-2009*. Manila.

<sup>31</sup> ADB. 2006. *Cambodia: Country Operations Business Plan 2007-2009*. Manila.

<sup>32</sup> ADB. 2008. *Cambodia: Country Operations Business Plan 2008-2010*. Manila.

<sup>33</sup> These issues are being addressed in six provinces by ADB's Northwestern Rural Development Project and the

- (iv) **Improved Traffic Safety.** Traffic management and traffic law enforcement urgently need strengthening. ADB expects to support the nationwide implementation of the Government's Road User Education Campaign under the proposed Road Asset Management Project. A reduction in road fatalities to meet the Government's target of 7 per 10,000 vehicles should be attainable within the CSP period.
- (v) **Adequate Safeguard Policies.** ADB TA for Enhancing the Resettlement Legal Framework and Institutional Capacity Project<sup>34</sup> was to assist the Government in formulating legislation related to involuntary resettlement.

ADB's progress in achieving the above outcomes and targets is discussed in paras. 59, 60, 79 and Table 4.

## 2. ADB Program

41. Since ADB resumed assistance to Cambodia in 1992, it has approved a cumulative amount of \$1.27 billion, comprising 45 loans for about \$1.0 billion, 29 grants for \$171.5 million, and 159 TA projects for \$99.3 million. Over the same period, ADB approved 29 loans, grants, and TAs amounting to nearly \$254 million for the transport sector (20% of the total assistance program).<sup>35</sup> Broken down by type of assistance modality, the program has consisted of seven loans amounting to \$228.0 million (23% of total loans to the country), four grants financed by Australian and Japanese governments and administered by ADB amounting to \$15.9 million (9% of total grants), and 18 TA projects amounting to just over \$10 million (10% of total TA projects). The roads and highway subsector received the bulk of the assistance, namely, 5 of the 7 ADB transport loans, all (4) the transport grants, and 10 of the 18 TA projects. The civil aviation and railways subsectors each received one loan and two TA projects, while the four remaining TA projects were aimed at multimodal transport and sector development. Figure 2 shows the breakdown of ADB assistance by transport subsector. Four of the seven loan projects and one of the grants were regional GMS projects (four for roads and one for the railway). Policy dialogue with the Government has focused on issues in the roads and railways subsectors and on PPPs. It has also supported institution building and development of the policy making and regulatory oversight capacities of MPWT. Appendix 4 contains the list of ADB loan and TA projects for the transport sector in Cambodia and an assessment of their performance.

42. For the purpose of this SAPE, the program includes projects approved after 1992 defined as "transport sector" by ADB's Loan, Technical Assistance, Grant, and Equity Approvals Database. Not included are (i) emergency loans with transport component, such as the Special Rehabilitation Assistance approved in 1992 and the Emergency Flood Rehabilitation Project approved in 2000; (ii) the GMS Mekong Tourism Development Project approved in 2002, which had some road and airport infrastructure subprojects in Cambodia; and (iii) certain multisector projects with rural road components, which are assessed by the Cambodia Agriculture and

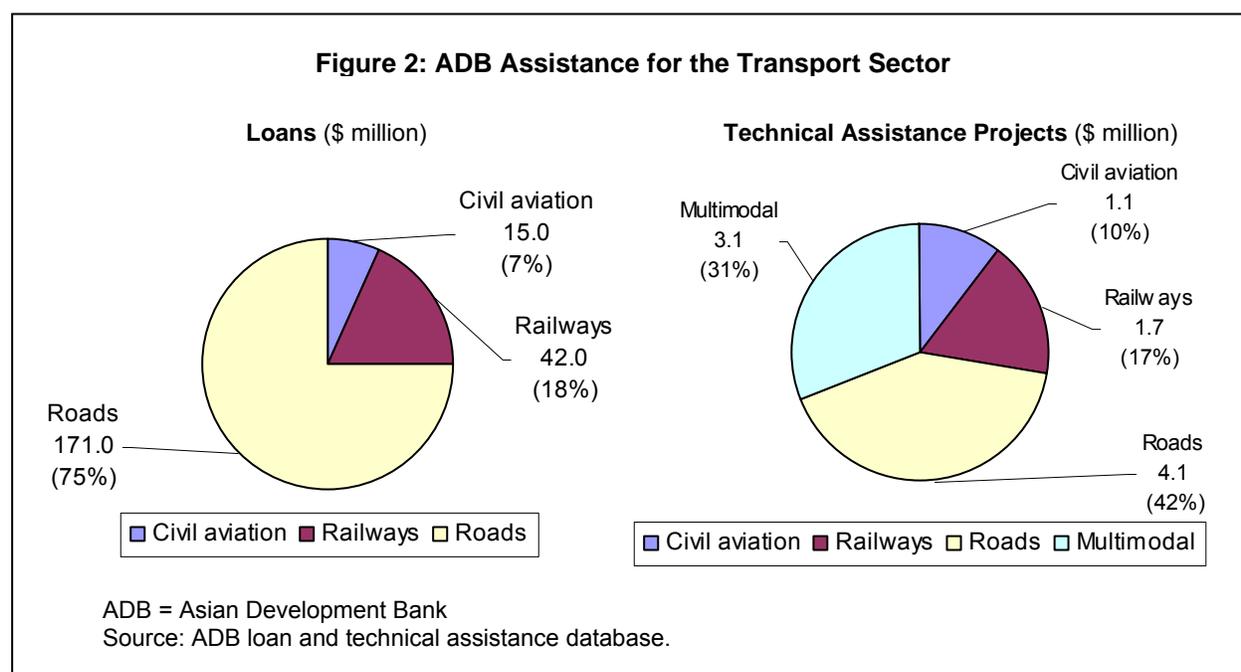
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Mainstreaming Labor-Based Road Maintenance to the National Roads Network Project. ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Cambodia for the Northwestern Rural Development Project* (Loan 1862-CAM). Manila; and ADB. 2004. *Proposed Grant Assistance to the Kingdom of Cambodia for Mainstreaming Labor-Based Road Maintenance to the National Roads Network Project* (JFPR 9048). Manila.

<sup>34</sup> ADB. 2004. *Technical Assistance to Kingdom of Cambodia for Enhancing the Resettlement Legal Framework and Institutional Capacity Project* (TA4490-CAM). Manila.

<sup>35</sup> By comparison, during 1998-2008 (the new CAPE period) ADB approved 23 projects consisting of 6 loans, 4 grants and 13 TAs amounting to nearly \$235 million for the transport sector (24% of the total assistance program).

## Rural Development SAPE.



43. A striking feature of ADB's transport program is the increasing amount of cofinancing that has become available from other development partners, such as the Organization of Petroleum Exporting Countries (OPEC) Fund for International Development, the World Bank's International Development Agency, and the Australian, Japanese, and Malaysian governments. At the same time the average amount of ADB's transport loans has become smaller over the years. Whereas in the 1990s and early 2000s, loans were usually in the range of \$40 million–\$70 million, the two most recent loans approved in 2007 and 2008 were only in the \$6 million–\$7 million range. Table 2 shows the breakdown between ADB loans, ADB-administered grants, and parallel/joint cofinancing.

**Table 2: Financing of ADB Transport Loans for Cambodia**

Project	Year	ADB Loan	ADB Grant	Parallel/Joint Cofinancing	Total
Siem Reap Airport	1996	15.0	-	-	15.0
GMS: Highway from Phnom Penh to Ho Chi Minh City	1998	40.0	-	-	40.0
Primary Roads Restoration	1999	68.0	0.86 <sup>a</sup>	6.0	74.86
GMS: Cambodia Road Improvement	2002	50.0	-	10.0	60.0
GMS: Rehabilitation of the Railway in Cambodia	2006	42.0	-	15.8	57.8
GMS: Southern Coastal Corridor	2007	7.0	8.0 <sup>a</sup>	-	15.0
Road Asset Management	2008	6.0	4.8 <sup>a</sup>	30.0	40.8
<b>Total</b>		<b>228.0</b>	<b>13.66<sup>b</sup></b>	<b>61.8</b>	<b>303.46</b>

ADB = Asian Development Bank, GMS = Greater Mekong Subregion.

<sup>a</sup> Financing was provided by Australia, but administered by ADB.

<sup>b</sup> Excludes the granted financed by the Japanese Fund for Poverty Reduction amounting to \$2.2 million.

Sources: Reports and recommendation of the President.

## E. Strategies and Plans of Other Development Partners

44. ADB is the leading development partner in the transport sector. Other major development partners in the sector include Japan International Cooperation Agency (JICA, for ports, highways, bridges, and technical assistance to MPWT) and the World Bank (highways, provincial roads, and technical assistance to MPWT). Japan Bank for International Cooperation (JBIC) recently started operations in Cambodia and is implementing its first lending pipeline to the country (port, energy, and special economic zone). The Mekong River Commission is driving a program for improving navigation on the Mekong River, which will help modernize inland water transport. The People's Republic of China (PRC), Republic of Korea, Thailand, and Viet Nam are all providing assistance to rehabilitate roads. The PRC is also providing assistance for studying feasibility of a new railway line from Phnom Penh to Ho Chi Minh City. Details on the activities of other development partners in Cambodia for the energy sector are in Appendix 5.

45. As shown in Table 3, total overseas development assistance (ODA) disbursed by development partners for transport/infrastructure was about \$78 million (representing 14.7% of total ODA) and \$65 million (12% of total ODA) for 2002 and 2003, respectively.<sup>36</sup>

**Table 3: Disbursements by Development Partners to the Transport Sector, 2002–2003**  
(\$ '000)

Major Donor	Mode of Assistance	Amount Disbursed	
		2002	2003
<b>IFIs</b>			
Asian Development Bank	Loan	35,238	32,143
IBRD/World Bank	Loan	11,741	17,102
<b>Subtotal for IFIs</b>		<b>46,979</b>	<b>49,245</b>
<b>EU</b>			
Belgium	Grant	36	419
France	Grant	9,959	1,641
Germany	Grant	655	1,871
Sweden	Grant	1,000	--
<b>Subtotal for EU</b>		<b>11,650</b>	<b>3,931</b>
<b>Other Major Bilateral DPs</b>			
Australia	Grant	197	232
Japan	Grant	8,098	5,345
	Loan	8,072	4,940
People's Republic of China	Grant	72	1,500
	Loan	3,000	--
Republic of Korea	Grant	--	50
<b>Subtotal for Bilateral DPs</b>		<b>19,439</b>	<b>12,067</b>
<b>Other DPs</b>	Grant	13	19
<b>Total Disbursements</b>		<b>78,081</b>	<b>65,262</b>

DP = development partner, EU = European Union, IFI = international financial institution

Source: Ministry of Economy and Finance of Cambodia. 2003.

<sup>36</sup> Ministry of Economy and Finance of Cambodia.2003. Public Financial Management Reform Program. Available at: [http://www.mef.gov.kh/documents/PFM/dcr\\_english\\_2003/dcr\\_eng\\_03\\_6.htm](http://www.mef.gov.kh/documents/PFM/dcr_english_2003/dcr_eng_03_6.htm).

### III. STRATEGIC AND INSTITUTIONAL (TOP-DOWN) ASSESSMENT

46. Overall, the top-down rating of the Cambodia transport sector is “successful.” The assessment is based on three criteria: strategic assessment, contribution to development results, and ADB performance. These criteria are discussed below. Performance assessment summaries are in Section V.

#### A. Strategic Assessment

47. This section examines whether ADB's strategies for the transport sector have provided appropriate directions in terms of Cambodia's needs and priorities, the assistance provided by other development partners, and ADB's comparative advantages. The criteria for the strategic assessment are (i) alignment of the sector strategy with country and ADB priorities, (ii) positioning of the sector strategy and program, and (iii) coordination and complementarities with initiatives of other funding agencies. At the strategic level, the priority areas of the transport strategies and interventions are assessed to be highly responsive to ADB's strategic thrusts and the national development strategies, and coordination with other development partners is good. However, subsector positioning has room for improvement. Overall, strategic assessment is “substantial,” but on the low side.

#### 1. Alignment of Sector Strategy with Country and ADB Priorities

48. This is rated “substantial.” ADB's transport sector strategy in Cambodia (paras. 36–40 and Appendix 3) has generally been well-aligned with the Government's priorities as they emerged over the four periods noted in paras. 15–18.<sup>37</sup> During the period 1992–1998 (the restoration and recovery phases), ADB's main concern was on restoring essential transport facilities, with relatively little attention given to institutional strengthening and capacity building. However, ADB shifted emphasis during 1999–2002 (the consolidation phase) to focus more on improving the capacities of the government institutions responsible for managing and maintaining the infrastructure facilities. In the subsequent phase, ADB's strategy was aimed at a phased and sustainable rehabilitation and development of the national transport system, with particular emphasis on policy reforms and increased private sector participation. ADB's strategies during each phase appear to have been relevant to the needs and strategic goals of the time; however, the requirements for institutional preparedness for change, management of change, and the time needed to generate outcomes in the transport sector appear to have been somewhat underestimated in the context of Cambodia's political economy. ADB's strategies have also been well-aligned with the Government's transport sector strategies, such as the 2000 Five-Year Road Master Plan, 2006 NSDP, and draft transport strategy (paras. 28–32 and Appendix 2). ADB loan projects also have regularly been listed as priority projects within the Government's public investment programs.<sup>38</sup>

49. ADB's transport sector strategy in Cambodia has also been fully in line with ADB's strategic priorities, including those for transport, regional cooperation and integration, private sector development, and social safeguards (paras 33–35). In particular, the Cambodia transport strategy appropriately emphasized policy directions enunciated in the 2007 ADB Draft Transport Intervention Report, which emphasized improvement of transport efficiency and service quality

<sup>37</sup> However, this SAPE does not discuss ADB's GMS-related strategies as these were comprehensively examined by the recent GMS SAPE: ADB. 2008. Sector Assistance Program Evaluation. *Transport and Trade Facilitation in the Greater Mekong Subregion—Time to Shift Gear*. Manila.

<sup>38</sup> The most recent public investment program listed five ADB transport projects. Ministry of Planning, Royal Government of Cambodia. 2007. Public Investment Programme: 2008-2010. Phnom Penh.

by facilitating PPPs, promoting regional cooperation and integration, and improving governance and preventing corrupt practices.

50. Under ADB's 2008 LTSF (Strategy 2020), private sector development and private sector operations are regarded as a key area and infrastructure is one of five core specializations. Although Strategy 2020 was launched in 2008, some of ADB's past operations in Cambodia had already been addressing the concerns of Strategy 2020. With the focus on PPP, the civil aviation projects and the ongoing project for railway rehabilitation and restructuring are notable examples in this regard. The Cambodian Government has passed a law on investment,<sup>39</sup> which aims to encourage the private sector to develop projects in the country such as in the area of financing railway rolling stock and terminals, as well as airport facilities. As such, Government strategy and ADB strategy have common elements.

## **2. Positioning of the Sector Strategy and Program**

51. ADB's positioning is assessed as "modest." The transport sector has consistently played a significant role, accounting, on the average, for about 20–26% of ADB's assistance. The positioning of ADB's strategy and programs within the resource envelope available to Cambodia has been strong, enabling ADB to play a lead coordinating role in the transport sector working group during the annual Development Partners Forum. In terms of program positioning, ADB's transport investments have mainly focused on the road subsector. ADB has also used its TA operations strategically in targeting institutional issues such as transport planning and in addressing the need for financing and maintaining transport assets. ADB's position in Cambodia's transport sector has also benefited from ADB's substantial contributions to the GMS program. Of the nine GMS transport corridors, three pass through Cambodia: (i) the Central Corridor running east-west from Poipet on the Thai border to the Viet Nam border, (ii) the Southern Coastal Corridor running from along the southern coast from Thailand to Viet Nam, and (iii) the Central Corridor running north-south from the Lao PDR border to Sihanoukville. According to the GMS Transport SAPE, these corridors are fully aligned with the priorities in Cambodia.

52. Overall, its sector strategies have generally positioned ADB to effectively provide support in areas where it has a comparative advantage, such as in the roads subsector where it has good experience and distinct competencies. ADB's comparative advantage is the size of its operations, which have sufficient critical mass to effectively leverage policy dialogue and ongoing institutional reforms. ADB's range of products—loans, grants, and TA—enable better sector planning, project preparation, and project financing.

53. Notwithstanding the generally positive assessment of ADB's sector positioning, there is scope for sharpening the subsectoral focus of ADB's transport sector strategies and programs in Cambodia. Subsector selectivity should be underpinned by thorough analysis of the transport sector. Since any individual project investment operation must be justified within a sector's strategic development framework, a more rigorous problem analysis on emerging sector issues and binding constraints, through sector strategy studies (advisory TAs and economic and sector work), could improve the rationale for ADB's operation. Without preempting the suggested problem diagnostic on the emerging sector issues and binding constraints, three areas that may be useful to look at in order to sharpen the subsectoral focus of ADB's future transport sector strategies and programs are discussed in paras. 54–56.

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<sup>39</sup> Law on Investment of the Kingdom of Cambodia (5 August 1994) and Its Amendment (25 March 2003). Available on website of the Council for the Development of Cambodia at <http://www.cambodiainvestment.gov.kh/>.

54. **Shift the Focus in the Roads Subsector to Rehabilitating the Provincial Road Network.** The national roads network has largely been rehabilitated and there is relatively little scope for future assistance in this area. Planning and maintenance of the rural roads network are under the mandate of MRD and are thus outside the purview of ADB's transport sector strategy.<sup>40</sup> In line with the 2005 CSP, which proposed the improvement of the provincial road network as one of its main objectives, ADB has already undertaken two projects<sup>41</sup> to rehabilitate provincial roads. It is time for ADB to further shift the main focus of its future road subsector operations to improving the provincial roads network, with first priority to provincial roads with possible subregional, cross-border links. In carrying out this work, ADB should involve MRD as a key stakeholder, and identify other key institutions at the provincial level as well as their roles in the development of the transport sector (e.g., road maintenance, road safety, stakeholder participation).

55. **Review Future Strategy in the Railway Subsector.** The 2005 CSP expanded the focus of ADB's transport sector strategy to include the railway subsector. However, the rationale for this expansion in focus was not fully explained in the CSP and the expansion was not consistent with the recommendation of the 2004 CAPE to retain a narrow focus on the roads subsector. An important sector issue that could provide a strong rationale for continued railway assistance in the next CSP is the potential advantage of railways vis-à-vis other transport modes (such as roads) in terms of lower greenhouse gas emissions. Another issue is the important role that railways could play in improving the efficiency of transport logistics in Cambodia. Depending on the problem diagnostic on the emerging sector issues and binding constraints, ADB may review its strategy in the railway subsector so as to provide a better rationale for its interventions and to chart a clearer course for future railway subsector activities.

56. **Shift the Focus to Transport Areas Where ADB Could Have a High Impact.** Three areas where external support appears critical and where ADB could make a difference are (i) road traffic safety, (ii) urban transport, and (iii) transport service delivery. Road traffic safety has become a growing problem, with accidents, casualties, and fatalities increasing faster than the growth in population and road traffic (para. 22). ADB has so far made a modest contribution to mitigating road safety hazards for its road projects and providing assistance as part of an umbrella TA, but has not extended any assistance to directly address road traffic safety. Another area where the needs are great, but where ADB has had only a minor influence so far, is urban transport. Urban transport requirements, both in terms of physical and capacity building needs, are increasing in line with urban population growth. Given that ADB has already undertaken considerable work in the area of multimodal transport, there may be some scope to extend the work and to undertake investment in multimodal urban transport. The level of transport services is low both in terms of asset sustainability via proper operation and maintenance (para. 21) and existence of efficient transport logistics (para. 26). ADB together with other funding agencies is addressing the sustainability concerns through coordinated assistance for improving road asset management and plans to extend this assistance to the subnational level. ADB is also considering addressing transport logistic issues in the railway subsector through a supplementary loan.

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<sup>40</sup> MPWT is in charge of primary and secondary roads, whereas the Ministry of Rural Development is in charge of tertiary roads. Reflecting this Government structure, ADB loans in the transport sector have addressed only the primary and secondary networks, while secondary and tertiary roads have been included as components of ADB's multisector rural development projects.

<sup>41</sup> The 2002 Cambodia Roads Improvement Project and the 2004 Mainstreaming Labor-Based Road Maintenance in the National Roads Network Grant were both aimed at improving secondary roads. In addition, there has been some limited assistance for rehabilitating secondary roads under ADB's multisector rural development projects.

### **3. Coordination and Complementarity**

57. This is rated “substantial.” Since the resumption of aid agency activities after the Paris Peace Accord of 1991, ADB has pioneered several initiatives that have served as a platform for development partner coordination and resource mobilization. Notable examples are the 1993 Transport Rehabilitation Study, which became the blueprint for the restoration work in the transport sector during the period 1993–1997. In addition, the transport sector strategy of 2001 served as a master plan for the reconstruction process and provided a policy framework to guide future transport investments and operations. ADB has also been successful in developing synergies and complementarities with other aid agency projects. The Road Asset Management Project, which is cofinanced by AusAID and the World Bank, is the culmination of previous ADB efforts to address the lingering problem of inadequate funding for road maintenance. While ADB has taken the leadership in supporting most transport initiatives, an effective consultation and coordination mechanism is in place and activities have generally been complementary and avoided duplication. As an indication of ADB's good coordination work, the Government requested that ADB co-chair the sector working group on transport, which is part of the Development Partners' Forum that annually reviews progress toward the MDGs and other strategic concerns. As indicated in para. 43 and Table 2, ADB has been successful in mobilizing a large amount of grant cofinancing from other development partners.

#### **B. Contribution to Development Result**

58. Contribution to development result is rated “substantial.” It is based on the extent to which ADB's transport sector activities in Cambodia have (i) achieved the transport sector outcomes/outputs envisaged in the various ADB strategies, and (ii) added value by introducing or improving sector reform and initiatives for institutional strengthening.

59. Evaluating the achievement of the transport sector outcomes/outputs is not straightforward because transport sector road maps were adjusted during 2005–2008, at times setting out different expected sector outcomes/outputs and corresponding indicators over the various time periods (para. 40). Table 4 shows the expected road map indicators for the year 2010, compared with the current status, and an assessment of their future achievement.

60. Table 4 shows a total of 10 indicators in the three road maps, of which five pertain to sector outcomes and five pertain to sector outputs. By and large, the original 2005 and 2006 road map indicators were not sufficiently specific and monitorable, which is why the 2008 road map dropped four of the original indicators and added three additional indicators. However, the additional outcome indicator (transport fares) and one of the additional output indicators (resettlement regulations) are still considered not specific and monitorable. Information on the current status of the indicators was available for only three of them. Using this data, a preliminary assessment indicates that the indicator for average annual highway traffic rate has already been achieved. In contrast, the indicator for traffic fatalities was still very far from its 2010 target value and is unlikely to be met. Likewise, the indicator for share of railway in good condition is currently 0% and will not meet its target of 100% by 2010. The achievement of the other indicators is uncertain because they either lack recent data or are unclearly specified, or, as in one case, the indicator is no longer relevant. From the preceding analysis, it is apparent that the transport sector road maps had two main drawbacks: (i) some of the chosen indicators were not sufficiently specific, and (ii) most of the indicators were not monitorable using the data sources available in Cambodia. Given these drawbacks, it is difficult to gauge the exact extent of progress in meeting the expected sector outcomes and outputs.

**Table 4: Achievement of Transport Sector Road Map Indicators for 2010**

Indicator	Road Map			Current Status	Achievement of Indicators
	2005	2006	2008		
<b>A. Sector Outcomes</b>					
Highway traffic average annual rate (%)	7.3	7.3	—	10 <sup>a</sup>	Achieved
Reduction in transport cost (index road freight, 2005 = 100)	90	90	—	NA	NA
Reduction in traffic fatalities (fatalities per 10,000 vehicles)	7	10	7	15.1	Unlikely
Rail traffic (million tons)	1.0	1.0	—	NA <sup>b</sup>	NA
Reduction in transport fares (%)	—	—	10	NS <sup>c</sup>	NA
<b>B. Sector Outputs</b>					
Share of MPWT road network in fair or good condition (%)	41	41	40	NA	NA
Road maintenance financed from subsector revenue (%)	75	85	—	NA <sup>d</sup>	NA
Share of railway network in good condition (%)	100	100	—	0 <sup>e</sup>	Unlikely
Share of rural roads in good condition (%)	—	—	25	NA	NA
Subdecrees, regulations, and guidelines related to resettlement	—	—	—	NS <sup>f</sup>	NA

MPWT = Ministry of Public Works and Transport, NA = not available, NS = not specific, RRP = report and recommendation of the President to the Board of Directors.

<sup>a</sup> In the absence of comprehensive traffic counts, the precise magnitude of traffic growth cannot be determined. The RRP for the Road Asset Management Project estimated that traffic had probably grown at an average of about 10% per annum in the years leading up to 2008.

<sup>b</sup> Although hard data is not available, current rail traffic is estimated to be well below 2010 indicator level. Indications are that this will not increase before 2013, when the railway rehabilitation currently ongoing will be completed.

<sup>c</sup> The indicator is not specific enough in that it does not state which type of transport mode is covered (e.g., bus, taxi, train).

<sup>d</sup> Indicator is no longer relevant, since all road maintenance is now financed from the general budget.

<sup>e</sup> Railway rehabilitation is currently ongoing and will not be completed before 2013.

<sup>f</sup> The indicator is not specific enough in that it is not quantified. (e.g., number of subdecrees, regulations, guidelines).

Sources: ADB. 2005. *Country Strategy and Program: Kingdom of Cambodia 2005-2009*. Manila; ADB. 2006. *Cambodia: Country Operations Business Plan 2008-2010*. Manila; ADB. 2008. *Cambodia: Country Operations Business Plan 2008-2010*. Manila; ADB. 2008. *Report and Recommendation of the President to the Board of Directors for a Proposed Loan and Administration of Grant from the Government of Australia to the Kingdom of Cambodia for the Road Asset Management Project*. Manila; Ministry of Interior, Ministry of Health, Ministry of Public Works and Transport. Handicap International of Belgium. 2009. *Cambodia Road Traffic Accident and Victim Information System: Annual Report 2008*. Phnom Penh, Cambodia.

61. The transport activities contributed to introducing or improving sector reform and initiatives for institutional strengthening. In terms of sector reforms, it should be noted that transition economies like Cambodia offer ample opportunities for value addition, considering that institutions, policies, and procedures need to be adapted to market-based systems. However, such reforms usually take a long time to take root so that value addition is often not immediately discernible. The SAPE has rated value addition according to three criteria: (i) a one-star rating denotes that ADB interventions have sowed the seeds for reforms and innovations, without the immediate prospect that the seeds would flower; (ii) a two-star rating signifies innovations that showed evidence of taking root before long; and (iii) a three-star rating was assigned to innovations that have taken root. Table 5 shows the value added of ADB's sector reforms and their respective ratings.

**Table 5: Value Addition in ADB's Transport Sector Operations**

Area of Innovation	Comments	Ratings
<b>A. Strategic Policy Value Addition</b>		
ADB pioneered the restoration and recovery process (1992/93). Related projects were TAs for the Transport Rehabilitation Study and Airports Improvement	ADB's value addition lies in the timeliness of its initiative to resume operations. ADB's resumption of operations in 1992 was criticized by other development partners as premature and risky. ADB's staying the course helped restore essential transport infrastructure swiftly and facilitated subsequent peace-keeping operations of the United Nations and the repatriation of refugees. Due to its early initiative, ADB played a crucial role in the International Committee on the Reconstruction of Cambodia.	***
Airport Development (1996)	The loan was the first to the civil aviation sector in Cambodia. While the project may have been a candidate for a public-private partnership, ADB added value at a time when the private sector was still reluctant to get involved in Cambodia. Another element of value addition was the introduction of competition that was facilitated by the ADB project.	***
Transport Sector Strategy and Policy Formulation (2001)	After the conclusion of the restoration and recovery phases, structural and policy issues had to be addressed. The TA added value in several ways: (i) it provided the first transport sector strategy, (ii) it facilitated transport policy formulation, and (iii) it triggered reforms in the railway subsector. Legislation on a transport policy is pending.	*
Road Traffic Safety	Traffic safety is a serious issue in Cambodia. Its scale would have required an individual TA operation, rather than just a small component under an umbrella TA and activities under the Road Asset Management Project.	*
Railway Subsector Reforms (2005)	ADB, through its Railway Rehabilitation and Restructuring Project, is attempting to tackle the complex issues of railway reforms in a comprehensive manner. The Project envisages public-private partnership for freight operations, the introduction of a public service obligation for passenger operations, a staff redundancy program and divestiture of non-railway-related real estate assets. The railway subsector has the most severe distortions of all the transport subsectors in terms of resource allocations, operational efficiency, and governance. While access to bilateral funding is relatively easy, aid agencies are more interested in supplying rolling stock rather than addressing the key institutional constraints. ADB added value by developing a comprehensive reform agenda. Value addition lies in the fact that the work has raised the Government's awareness of the need for reforms and has triggered the reform process. Without the proposed reforms, the railway subsector would continue to incur substantial financial losses. The value addition also rests on the prospect of a more cost-efficient freight transport and improved quality of service.	**
<b>B. Operational Value Addition</b>		
Contract Management in Civil Works (1996/99)	Two TAs added value in the transfer of knowledge on modern contract management practices.	***
Road Maintenance Planning and Management Capabilities of MPWT (1999)	As recommended by the 2004 CAPE, ADB attempted to introduce systematic maintenance management and supported the creation of a road fund for that purpose, but the concept of a road fund was not accepted by the Ministry of Economy and Finance (MEF). ADB has been instrumental in reaching a solution that will help improve the road maintenance regime.	*
Road Asset Management (2007)	The issue of adequate road maintenance management has taken several turns over the years. The Project provides a sensible solution between systematic road maintenance and the assured provision of funds on the one hand, and retention of MEF's fiscal authority and flexibility on the other hand. Although it has taken almost 10 years to bring the efforts to fruition, this is an area where ADB has shown notable perseverance. The value addition rests on	**

	the fact that the Project is instrumental in showing a practical way out of the previous impasse.	
<b>C. Capacity Building, Institutional Strengthening and Safeguards Value Addition</b>		
Developing a Planning Capability in the Ministry of Public Works and Transport (1995)	The TA was a major contribution to introducing modern planning concepts into the transport administration. It added value in that it advanced the process of transition by accelerating the adoption of market-based planning concepts in the transport sector. On hindsight, the weak capacities of MPWT and the sense of urgency in the need to enhance such capacities may have led to the TA's overly ambitious scope, covering institutional, technical, management, and legal aspects, and a consequent lack of clear focus.	**
Institutional Strengthening of the State Secretariat of Civil Aviation (1996)	The TA made a major contribution to the creation of a regulatory authority and the setting of safety regulations in accordance with international standards. It added value in that it hastened the process of transition by accelerating the adoption of market-based planning and regulatory concepts in the transport sector.	***
Safeguard Policies	The resettlement practice in the past was limited to development partner-funded projects only and implemented on an ad hoc basis. ADB assistance has been effective in reinforcing the awareness of Government agencies about the importance of setting up a sound legal and institutional framework, the importance of good resettlement standards and the risks of not doing the process well. A draft national policy on resettlement was prepared to address the inadequacy of the existing legal provisions and to ensure that all infrastructure projects serve the needs of the country.	**
Anticorruption Policies	Over time, the designs of ADB's transport projects have gradually included more stringent anticorruption measures. Whereas the first three transport projects did not include specific measures, the 2006 GMS Phnom Penh to Ho Chi Minh Highway Project mentioned anticorruption measures in its procurement arrangements and the three subsequent loans included detailed anticorruption sections in their implementation arrangements. In the preparation of the recently approved Road Asset Management Project, the Cambodian Government has undertaken to implement additional measures to deter corruption and increase transparency, including the signing of a good governance framework for the project.	**

ADB = Asian Development Bank, MEF = Ministry of Economy and Finance, MPWT = Ministry of Public Works and Transport, TA = technical assistance.

Source: SAPE Mission.

### C. ADB Performance

62. ADB performance is rated "substantial." It was assessed on the basis of four criteria: (i) quality of assistance, (ii) responsiveness to client needs, (iii) appropriateness of funding instruments, and (iv) portfolio management. ADB's assistance to the Cambodia transport sector comprised 7 loans, 4 grant projects, and 18 TA projects. Most of the activities have been focused on the roads, railway, and civil aviation subsectors. To date, 3 loans, 2 grant projects, and 15 TA projects have been completed. The completion reports for the completed operations indicate that they have on the whole been successful, with one project rated "highly successful," five projects rated "successful," and two projects rated "partly successful." The SAPE mission's evaluation of these operations is presented in Section IV and generally confirms these findings.

63. ADB has responded adequately, flexibly, and in a timely manner to changing needs and government requests for assistance. Cambodia is a road-dependent country and ADB's focus on roads has been responsive, but only modestly well-positioned (paras. 51–56). In addition, ADB has addressed the economic inefficiencies and resource wastages in the railway sector

and has made headway in pushing through reforms. On hindsight, given the complexities inherent in railway reforms a more realistic time schedule for achieving the desired reforms should have been adopted (para. 71). ADB has played an effective role as catalyst and coordinator, creating platforms for coordination and cofinancing, mobilizing resources, and bringing together different stakeholders to achieve a consensus on policies and programs. As discussed in para. 57, coordination among the development partners has also been good. The Cambodia Resident Mission has played a vital role toward this end.

64. ADB policies, systems, and assistance modalities were suitable for Cambodia. ADB's policies regarding project management, financial management, procurement, program monitoring, and program implementation were highly suitable and relevant to Cambodia's stage of development. ADB's lending and nonlending assistance modalities were also found appropriate. In particular, ADB was able to mobilize a large amount of grant cofinancing from other development partners (para. 43 and Table 2).

65. Portfolio management has been a relatively weak area. Of the ongoing loan projects, none was rated "at risk" by the Project Performance Report (PPR), but delays in project implementation have been common in almost all loan-financed projects. It should be noted, however, that implementation delays constitute an ADB-wide problem and that projects in Cambodia are not performing below the ADB average.<sup>42</sup> Due in part to the delays, some projects suffered from cost overruns and their scope had to be reduced. This applies also to the Primary Roads Restoration Project, as its implementation was affected by a flood disaster in 2000 that prompted ADB to provide emergency assistance. Other factors causing implementation delays are (i) lengthy tendering and procurement procedures; (ii) land acquisition issues; (iii) cases of unsatisfactory performance of contractors; and (iv) unsatisfactory engineering, lack of preparedness, and preconstruction processes causing delay in calling tenders.

#### **IV. BOTTOM-UP ASSESSMENT OF THE SECTOR PROGRAM**

66. The bottom-up assessment of ADB assistance to the Cambodia transport sector employs the five evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact for each of the projects and aggregates the ratings. The assessment covers 29 projects (7 loans, 4 grant-financed projects, and 18 TA projects). The matrices showing the ratings for these projects are in Supplementary Appendix A. For completed projects, the evaluation is based on available post-completion reports,<sup>43</sup> supplemented by additional information collected during the SAPE mission. Evaluation of ongoing projects is based on reports and recommendations of the President, back-to-office reports, and available project administration indicators, and is thus tentative. Performance assessment summaries are in Section V.

##### **A. Relevance**

67. ADB's assistance to the transport sector in Cambodia is assessed as "relevant." Relevance is assessed on the basis of (i) consistency with Cambodia's development needs, priorities, and capacities; (ii) consistency with ADB's priorities, country assistance programs,

<sup>42</sup> ADB. 2009. *Annual Report on 2008 Portfolio Performance*. Manila. The report indicates that delay for Cambodian projects during 2004–2008 was 1.26 years, compared with an ADB-wide average of 1.99 years.

<sup>43</sup> To date there have been 11 postcompletion reports, including 1 SAPE of the GMS transport sector, 3 project (loan) completion reports, 4 TA completion reports, 2 project performance evaluation reports, and 1 TA performance audit report.

regional cooperation programs; and (iii) appropriateness of project design to achieve the intended outcomes.

68. The loans and TA projects are wholly consistent with Cambodia's development needs, priorities, and capacities. Restoring, reconstructing, and modernizing the country's transport infrastructure have been the main strategy of the Cambodian Government since the early 1990s (para. 15). ADB's assistance program supported economic growth and promoted external trade by establishing international connectivity in the civil aviation subsector, rehabilitating the network of national roads, improving transport efficiency in the railway sector, and introducing policy changes to improve the investment climate in the country. Projects and TAs have generally responded to critical sector needs and have addressed physical, institutional, and policy constraints. To take two examples in the road subsector, ADB assistance to develop the national roads network, including rehabilitating NR 1, NR 5, NR 6, and NR 7, addressed critical road bottlenecks. More recently, assistance for road maintenance addressed a crucial policy-related issue in the subsector (para. 21).

69. ADB's assistance program has been consistent with ADB priorities, country assistance programs, and regional cooperation programs. The assistance program has been in line with ADB high-level strategies and priorities (paras. 33–35), including Strategy 2020, which emphasized attracting investment in infrastructure to enable more and better job creation and new products and services by increasing transport connectivity with and between cities, towns, and villages, and between neighboring countries. The program has also been fully in line with the various country assistance programs (paras. 36–40). Finally, the program has been in line with regional strategies, such as the GMS Transport Strategy, as well as with regional cooperation programs, including the GMS Southern Corridor and the GMS Southern Coastal Corridor, two of the key economic corridors flagship projects of the GMS.

70. Most of the loans have been well-designed and based on sound analysis. In general, the nine project preparatory TAs appear to have produced good quality outputs, which constituted adequate basis for project appraisal. As an example, the design of the Road Asset Management Project, cofinanced with the World Bank and AusAID, appears to be well-suited to achieve its expected impact of contributing to achieving the long-term sustainability of the road network and its expected outcome of achieving a more sustainable road sector based on a sound road network and effective road asset management. In particular, the project appears to have taken into careful consideration the lessons from previous road projects.

71. The design of two projects could have been better. The Siem Reap Airport Project<sup>44</sup> and its associated TAs appear to have been prepared without the benefit of a thorough institutional analysis of the civil aviation sector agencies and their evolving roles in the sector. A more thorough analysis could have forestalled some of the disruption to project implementation that took place when the Airport Development Authority was dissolved in 1998 because its duties overlapped with those of other ministries. Similarly, the project design of the GMS Rehabilitation of the Railway in Cambodia Project appears to have allowed insufficient time to undertake the complex reform agenda needed in the subsector.

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<sup>44</sup> Details of approvals of loans, grants and TA projects can be found in Appendix 4. Therefore, approval documents are not footnoted in the text.

## B. Effectiveness

72. ADB's program is assessed as "effective." Effectiveness is assessed on the basis of (i) achievement of project-level outcomes envisaged in the design and monitoring frameworks of the individual loans and TA projects, and (ii) achievement of intended sector-level outputs and outcomes envisaged in the 2005 CSP and subsequent COBPs.

73. It is only possible to offer a full conclusion on project effectiveness for the three completed transport sector loans. The Siem Reap Airport Project clearly fulfilled its intended project outcome of providing infrastructure and improving the operational capacity of Siem Reap Airport to cater to the expected increase in tourists visiting the Angkor Wat historical sites. As pointed out in the project completion report (PCR),<sup>45</sup> the number of passenger arrivals and departures roughly quadrupled from 1995 to 2003. Intended project outputs were also achieved, with the main airport facilities (runway, buildings and equipment) upgraded and airport safety improved to comply with International Civil Aviation Organization standards. The third intended project output of strengthening the institutional capacity of the airport operations was transferred to the Mekong Tourism Development Project (Loan 1969-CAM)<sup>46</sup> and will be achieved under that project. Overall, the project is considered generally effective.

74. The GMS Phnom Penh to Ho Chi Minh Highway Project substantially achieved its intended outcome of encouraging traffic and trade flows between Cambodia and Viet Nam by improving the NR 1 between the two cities, improving facilities at the border crossing, and facilitating Government efforts to reduce bureaucratic and procedural constraints to cross-border trade. The project has been postevaluated through both a PCR<sup>47</sup> and a project performance evaluation report (PPER),<sup>48</sup> both of which found the project to be effective. Data from the postevaluation reports indicates that the total value of trade through the Bavet/Moc Bai border post increased by about 41% per annum between 2003 and 2006, while the number of people and vehicles crossing the border also posted average annual increases of over 35% during the same period. Average travel time on the NR 1 has been reduced by half and average vehicle speed has increased from 22 km/hour before road improvement to 48 km/hour in 2008. Despite the generally positive project outcomes, the Cambodian component of the project road is not operating fully as an efficient and effective regional corridor due to the lack of a bridge over the Mekong River at Noek Loeung.<sup>49</sup>

75. The Primary Roads Restoration Project achieved its intended project outcome of assisting the Government in restoring and improving damaged sections of the national road network. Two out of the three project components achieved their intended outputs, while a third component only partially achieved its intended outputs. The national road component rehabilitated 405 km of NRs 5, 6, and 7 and the roads are operating well in terms of roughness and ability to carry traffic, allowing traffic to travel at higher speeds and in more comfort than on the preexisting

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<sup>45</sup> ADB. 2004. Project Completion Report on the Siem Reap Airport Project (Loan 1503-CAM[SF]) to the Kingdom of Cambodia. Manila.

<sup>46</sup> ADB. 2002. *Report and Recommendation of the President to the Board of Directors on Proposed Loans to the Kingdom of Cambodia, Lao People's Democratic Republic, and Socialist Republic of Viet Nam for the Greater Mekong Subregion: Mekong Tourism Development Project*. Manila.

<sup>47</sup> ADB. 2007. *Project Completion Report on the Kingdom of Cambodia and Socialist Republic of Viet Nam: Greater Mekong Subregion: Phnom Penh to Ho Chi Minh City Highway Project*. Manila.

<sup>48</sup> ADB. 2008. *Project Performance Evaluation Report on Kingdom of Cambodia and Socialist Republic of Viet Nam: Greater Mekong Subregion Phnom Penh to Ho Chi Minh City Highway Project*. Manila.

<sup>49</sup> A bridge is being designed and financed by the Japan Bank for International Cooperation.

road.<sup>50</sup> Under the bridges component, 111 bridges were built or rehabilitated, which greatly contributed to relieving bottlenecks on the highways and exceeded the number originally envisaged at appraisal. The institutional strengthening and equipment supply components were not fully achieved due to the deletion of the envisaged weigh bridges and vehicle monitoring equipment. However, five of the intended weigh bridges were eventually constructed under a subsequent road project,<sup>51</sup> so it can be concluded that overall the sector outcomes were partially achieved.<sup>52</sup> The Project only partially achieved the envisaged outcome of improved road safety mainly because speed limits are not enforced. Accident data are not fully reliable in Cambodia, but provisional data indicates that, although accident rates have improved slightly, death rates on the three upgraded roads as a whole have increased.

76. Four loans are still ongoing, but only two are well advanced enough to offer a provisional assessment of likely effectiveness. When completed, the GMS Cambodia Road Improvement Project will have rehabilitated 150 km of road and about 95 bridges on two national roads and two provincial roads connecting three major towns. Assuming the implementation of the CBTA is not further delayed, it is likely to achieve its first intended outcome of promoting economic activities and facilitating trade among Cambodia, Thailand, and Viet Nam. Less clear is to what extent it will achieve its second intended outcome of improving the prospects for reducing poverty along the Southern Economic Corridor. When completed, the GMS Rehabilitation of the Railway in Cambodia Project will rehabilitate about 600 km of railway infrastructure, including rail tracks and damaged bridges, on the Southern and Northern lines. However, up until recently, the slow implementation progress on pending reform issues has held up the planned physical track rehabilitation. The signing of a concession agreement in June 2009 is a major step forward in achieving the project's intended outcome of securing the long-term sustainability of the railway subsector through improved productivity and efficiency.<sup>53</sup> Both the GMS Southern Coastal Corridor Project and the Road Asset Management Project began recently, and it is still too early to determine their effectiveness.

77. The effectiveness of the TA program has been mixed. Both the TCR<sup>54</sup> and the TA Performance Audit Report<sup>55</sup> covering the Transport Rehabilitation Study TA indicated that it fully achieved its main objective, which was to address the most urgent transport rehabilitation needs. The main output of the study, a list of screened and ranked rehabilitation projects, has been used as a blueprint for several subsequent aid projects including two funded by ADB and several others funded by JBIC and the World Bank. In contrast, the technical assistance completion report (TCR)<sup>56</sup> for the Transport Sector Strategy TA indicated that, although it achieved its main objective of formulating a comprehensive and integrated transport sector

<sup>50</sup> The original project scope envisaged 577 km, but segments comprising 172 km were transferred to the Emergency Flood Rehabilitation Project in the wake of the floods in 2000. According to the project PCR, the transferred road segments were all completed satisfactorily.

<sup>51</sup> The GMS Roads Improvement Project financed 3 weigh stations on NR 5, and one each on NR 6 and NR 7. According to latest project progress report dated 31 March 2009 these were completed satisfactorily.

<sup>52</sup> The Project Performance Evaluation Report for the Primary Roads Restoration Project provides additional discussion on the derivation of the project rating.

<sup>53</sup> A supplementary loan in the amount of \$48 million is currently being processed for approval in late 2009. It would expand the scope of the original project. The expected outcome of the supplementary loan would be to enable "early take-off of a fully integrated railway-based multimodal transport system in the Southern GMS." The supplementary loan will facilitate the achievement of the original project's expected outcome.

<sup>54</sup> ADB. 1996. *Technical Assistance Completion Report for the Transport Rehabilitation Study (Cambodia)* (TA No. 1866-CAM). Manila.

<sup>55</sup> ADB. 2001. *Technical Assistance Performance Audit Report: Advisory Technical Assistance for Institutional Strengthening in Transport Planning and Administration in Cambodia and Viet Nam*. Manila.

<sup>56</sup> ADB. 2004. *Technical Assistance Completion Report for the Transport Sector Strategy (Cambodia)* (TA 3651-CAM). Manila.

strategy, it did not succeed in having this adopted as a formal strategy and policy by the Government, which was an explicit outcome indicator. On hindsight the limited capacities of MPWT and the sense of urgency of the need to enhance such capacities within a short time have led at times to ambitious and unfocused scopes of some of the road subsector TAs, covering institutional, technical, management, and legal aspects.

78. The following are the key physical outputs of ADB's transport sector assistance to date.
- (i) Rehabilitation of the Siem Reap Airport, including civil works for the administration building, the control tower facility, the passenger terminal building, and related equipment
  - (ii) Rehabilitation of 660 km of road and 166 bridges along four national highways (NR 1, NR 5, NR 6, and NR 7)
  - (iii) Rehabilitation of 97 km of road and 50 bridges along three provincial road (secondary roads 11, 56 and 68)
  - (iv) Construction of border facilities at Bavet on the Viet Nam border.

79. The 2008 COBP's transport sector road map targets four strategic outcomes (para. 40).<sup>57</sup> Most of them straddle the various strategy periods and it would therefore be legitimate to assess the effectiveness of ADB programs against the proposed outputs and outcomes.

- (i) **Increased Transport Efficiency.** Progress has been made in addressing this outcome. Completed projects in the roads subsector have been successful in raising the general efficiency of the transport sector through reduced vehicle operating costs, shorter travel times, and achievement of robust economic rates of return (EIRRs) ranging between 12% and 26% (Table 6). Aside from loans, advisory TA projects have contributed to improved transport planning and policy-making directly aimed at improving efficiency and resource allocations.
- (ii) **Improved Sustainability of the Transport Sector.** This outcome relates to efforts being undertaken to introduce a sustainable road asset management system. ADB has persevered in addressing this outcome and while progress has been made on the institutional front, the outcome is still evolving and will hinge on the successful implementation of the system.
- (iii) **Improved Rural Access.** Improving rural access by upgrading the provincial road network has been a strategic objective since the 2005 CSP. ADB has made some modest progress in improving accessibility in four provinces in northwestern Cambodia through the Cambodia Road Improvement Project, which upgraded 50 bridges along two provincial roads,<sup>58</sup> and in one province in southeastern Cambodia through the rehabilitation of nearly 100 km of provincial roads.
- (iv) **Improved Traffic Safety.** Modest progress has been made in addressing this outcome through various efforts. One advisory TA initiated improvements in the regulatory and legislative environment for road safety. Road loans have also included design elements and measures to minimize road traffic accidents on the respective project roads. The recently-approved Road Asset Management Project will also finance parts of the Government's national road safety action

<sup>57</sup> Five outcomes were proposed, but one of them (adequate safeguards) is actually a project input, not an outcome and, hence, was left out.

<sup>58</sup> Secondary road network improvement is also being addressed in six provinces through ADB's Northwestern Rural Development Project. For the assessment of this and other rural development projects, please refer to the *Cambodia Agriculture and Rural Development SAPE*.

plan. However, little attention has been given to an important contributing factor: the inadequate enforcement of existing rules.

### C. Efficiency

80. ADB's program is assessed as "efficient." Efficiency is a measure of how well the resources have been used to achieve the outcomes. This assessment is based on two considerations: (i) high economic rates of return at project level, and (ii) timeliness of program implementation.

81. A key indicator of project efficiency is the EIRR of the projects. In the road subsector, four of the five loans were to rehabilitate existing roads, rather than to construct new ones. Road rehabilitation loans are known to be robust in terms of their economic viability. Table 6 shows the EIRRs at appraisal, project completion, and evaluation stages for the road rehabilitation loans. With one exception, the road rehabilitation loans financed by ADB had expected EIRRs of about 20-30% at appraisal. In the case of the Primary Roads Restoration Project, the envisaged robust economic viability was confirmed at both the completion and evaluation stages. However, in the case of the Phnom Penh to Ho Chi Minh Highway Project, the project evaluation comes out as borderline viable and lower than expected at appraisal and completion mainly because the growth in traffic, particularly subregional traffic, has been much lower than envisaged. The reduced traffic growth is due to the delay in constructing the JICA-financed bridge over the Mekong River at Neak Loeng.

**Table 6: Economic Internal Rates of Return of Road Rehabilitation Projects**

<b>Project</b>	<b>Appraisal</b>	<b>Completion</b>	<b>Evaluation</b>
GMS: Phnom Penh to Ho Chi Minh City Highway	22.0	24.1	12.0
Primary Roads Restoration	28.0	25.6	24.1
GMS: Cambodia Road Improvement	30.7	-	-
GMS: Southern Coastal Corridor	14.0	-	-

GMS = Greater Mekong Subregion.

Sources: RRP, PCR, PPERs.

82. The only other completed project that has been reevaluated is the Siem Reap Airport Project. The PCR estimated the EIRR as 24%, an improvement on the appraisal estimate of 21.6%. The main reason for the increase in the EIRR was the rapid passenger growth at Siem Reap Airport with the influx of international flights after the Government announced the Open Sky Policy in December 1999.

83. Delays in project implementation have been common in all the loan-financed projects, and have detracted from the overall efficiency of ADB's transport program. Both the Siem Reap Airport Project and the GMS Phnom Penh to Ho Chi Minh City Highway Project were closed with 3-year delays vis-à-vis their original appraisal schedules, while the Primary Roads Restoration Project experienced a 2.5-year delay. Physical progress of ongoing projects is also very slow. The Cambodia Road Improvement Project is estimated at 98% progress against an average elapsed implementation period of 147%. The GMS Rehabilitation of the Railway Project is also experiencing considerable delays, with 3% project progress against an average elapsed implementation period of 77%. Similarly, the GMS Southern Coastal Corridor Project shows negligible project progress against an average elapsed implementation period of 35%. Project implementation delays are an ADB-wide problem and projects in Cambodia are not performing below the ADB average.

84. The TA projects have generally been carried out efficiently. However, the efficiency of the TA to support the Development of a Planning Capacity in MPWT is assessed as less efficient by the technical assistance performance audit report (TPAR) because the primary output was the training of the six target recipients at an estimated cost of about \$0.5 million, which indicates very low cost-effectiveness. Similarly, the technical assistance completion report (TCR) for the Transport Sector Strategy TA indicated that the outputs had been achieved with considerable delay vis-à-vis the project schedule.

#### **D. Sustainability**

85. ADB's program is assessed as "likely to be sustainable." Sustainability is assessed from the outcomes from a longer term perspective and refers to the likelihood of sustaining the planned outputs and whether the policies and sector interventions are likely to contribute to durable development gains. It implies financial, technical, and institutional sustainability.

86. The only project that has been financially reevaluated is the Siem Reap Airport Project. The PCR reestimated the financial internal rate of return (FIRR) as 14.9%, an improvement on the appraisal estimate of 13.8%. As with the increase in the EIRR (para. 83), the main reason for the increase in the FIRR was the rapid passenger growth at Siem Reap Airport, as well as an increase in passenger charges after the operation of Siem Reap Airport was turned over to the private sector entity responsible for managing and operating the airport. This SAPE concurs with the PCR rating of the project's sustainability as "most likely."

87. In the roads subsector, both the Primary Roads Restoration Project and the Phnom Penh to Ho Chi Minh City Highway Project were rated "less likely to be sustainable" by their respective PCRs. In addition, the Phnom Penh to Ho Chi Minh City Highway Project was rated "less likely to be sustainable" by its PPER mainly because expenditure on road maintenance in Cambodia has historically been well below that required to maintain the road assets. However, as noted earlier, there has been a notable improvement in the allocation for road maintenance funds. In 2008, the total budget for road maintenance amounted to about \$33 million, nearly triple the allocation provided 2 years earlier. The recently approved Road Asset Management Project cofinanced with the World Bank and AusAID is aimed at enhancing the sustainability of existing primary road infrastructure by introducing new arrangements for managing and financing road maintenance. This new approach is likely to generate more lasting results in that it is aimed at installing a system that would lead to a more timely predictable provision of maintenance financing in step with pavement deterioration. Future assistance is planned for extending the coverage of the system to the secondary and tertiary road networks.<sup>59</sup> Vehicle overloading is a serious source of premature pavement failure and can only be mitigated by stricter enforcement activities. The construction of seven new weigh stations on four national roads under the GMS Roads Improvement Project is expected to assist in this regard by helping ensure that axle loads do not exceed their prescribed limits. Given the improvement in road maintenance financing and installation of vehicle monitoring equipment, the SAPE has rated both projects as "likely sustainable."

88. As noted in the effectiveness section (para. 77), the experience with transport sector TA has been mixed, but generally better than the experience with loan projects. Sustainability-

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<sup>59</sup> ADB. 2009. *Country Operations Business Plan: Cambodia 2009–2012*. Manila. Draft dated July 2009 indicated the following loans: (i) Rural Roads Asset Management Project (Cluster) for \$35 million in 2010, (ii) Provincial Roads Asset Management (Cluster) for \$15 million in 2011, and (iii) Rural Roads Asset Management (Cluster 2) for \$35 million in 2012.

related issues identified in the Transport Planning TPAR for ADB's first capacity-building TAs to MPWT indicated that (i) TAs should have a sharper and narrower focus in line with the long-term nature of capacity building, (ii) TA sequencing and duration should be harmonized with the needs for change, a realistic length of reform processes, and follow-up actions if a one-off intervention fails to generate the desired outcome, and (iii) TAs would have more lasting effects if they are more focused and sequenced with longer implementation schedules.

## E. Impact

89. The impact of ADB's program is assessed as "substantial," but on the low side. The impact of ADB's assistance to the Cambodian transport sector is assessed on the basis of (i) expected impacts identified at the time of each project's appraisal; and (ii) other impacts, including socioeconomic, regional/subregional, road safety, private sector, social safeguard (especially resettlement), and institutional impacts that have been achieved.

90. ADB's transport projects have achieved several of the intended impacts identified at project appraisal. For example, ADB's two completed road rehabilitation loans<sup>60</sup> generally achieved their intended impacts of improving Cambodia's transport connectivity both nationally and internationally. The Siem Reap Airport Project also achieved its intended impact of increasing the country's foreign exchange earnings and facilitating income-generating activities in the Siem Reap area. It is still too early to assess the impact of the ongoing GMS Railway Rehabilitation Project and Road Asset Management Project. The technical assistance to the MPWT has also had a significant and intended impact through institutional strengthening and capacity building. Without the ADB-financed projects, the level of transport connectivity in Cambodia would be lower, and the overall performance of the sector would be weaker.

91. **Socioeconomic Impact.** Cambodia has been experiencing sustained economic growth averaging 10% per year over the last 4 years and comparatively high growth rates throughout the 15-year postconflict period. It is safe to assume that the transport sector has made a positive contribution because transport services are intermediate goods, enabling other productive activities to take place which, in turn, increase productivity and enhance the welfare of people. Thus, transport infrastructure of good quality as provided under ADB projects stimulates economic growth and is a prerequisite for economic and social development. The quality of infrastructure and the service it provides are also important in attracting foreign direct investment. They have the potential to generate new employment opportunities, and thus reduce poverty and raise living standards.

92. Empirical studies on the nexus between transport infrastructure and poverty provide evidence that roads may be the single most important sector investment in pursuing rural poverty reduction.<sup>61</sup> Transport projects meet poverty reduction goals by providing access and improving mobility. A tangible outcome is the generation of employment opportunities resulting from road construction and maintenance activities, or enhanced business opportunities resulting from increased economic activity. Other important outcomes are social welfare improvements resulting from increased access to basic social services, such as health and education facilities, and financial services such as credit. In a census conducted after a road project was completed

<sup>60</sup> The GMS Phnom Penh to Ho Chi Minh City Highway Project and the Primary Roads Restoration Project.

<sup>61</sup> ADB. 2001. *Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction*. Final Report. Manila (RETA 5947).

in Cambodia, 49% of the respondents indicated that their lives improved over the previous 3 years due to easier access to social services and improved road access.<sup>62</sup>

93. **Regional Integration.** ADB's transport sector work has had a strong regional/subregional focus. Four of the seven transport loan projects have been designated as GMS regional projects. The GMS Phnom Penh to Ho Chi Minh City Highway Project and the GMS Southern Coastal Corridor Project are both multicountry projects that financed highway infrastructure and border crossings between Cambodia and Viet Nam. The GMS Cambodia Road Improvement Project and the Primary Roads Restoration Project financed road infrastructure along NR 5 and NR 6, which are the two main transport corridors between Cambodia and Thailand. The GMS Transport SAPE rated the impact of ADB's assistance as "substantial" based on positive economic impacts at the project level, corridor level and national level. At the project level, ADB assistance has led to increased economic activity, with new industries and special economic zones being planned along the roads. At the corridor level, prices of commodities have benefited from transport cost reductions, including decreases in bus fare on the national roads, attributable to ADB assistance. At the national level, the impact on Cambodia has been substantial, since a large proportion of its trade uses the border points on the Southern Corridor. However, there is still need for further improvement through the implementation of the GMS CBTA.

94. **Road Maintenance.** The impact of ADB interventions is still evolving although improved maintenance management and funding have been pursued as strategic goals since the early 2000s. As discussed in para. 87, the ongoing Road Asset Management Project is likely to have a more lasting impact in that it is aimed at installing a system that would lead to a more timely and predictable provision of maintenance financing. The Primary Road Project, under which 405 km of national roads were improved and rehabilitated, was inspected by the SAPE mission. The mission found the pavement in good condition, reflecting regular maintenance activities.

95. **Traffic Safety.** The issue of road safety is a focus area of the Government's transport strategy and a targeted outcome of the 2008 COBP. ADB TA has contributed to the creation of an enabling legislative environment, but at the same time better roads have also given rise to increased vehicle speeds and dangerous driving. The weigh bridges and vehicle monitoring equipment outputs under the Primary Roads Restoration Project were cancelled and then subsequently included under a follow-on project. The cancellation has hampered control of vehicle overloading on the three project highways since the project was completed in December 2005. Better road traffic safety is an expected outcome of the ongoing Road Asset Management Project, but it will depend on the effectiveness of future road safety traffic programs. Overall, the impact of ADB operations on road safety was limited.

96. **Social Safeguard Issues.** The designs of ADB's transport projects included appropriate social safeguard measures, with resettlement measures being set out in full resettlement plans (RP) in four of the transport projects. The RP process included extensive public consultations with stakeholders from the local communities. The two completed road rehabilitation projects have had problems with resettlement safeguards. The PPER for the GMS Phnom Penh to Ho Chi Minh City Highway Project indicated that more than 100 affected persons in two communities along NR 1 reported that they were not appropriately compensated by the Government. Thus, a full resettlement audit was made to resolve the matter. Similarly, the PPER for the Primary Roads Restoration Project noted that about 300 affected households along NR 5, NR 6, and NR 7 had not been compensated in accordance with the resettlement action plan. Resettlement

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<sup>62</sup> ADB. 2006. *Project Completion Report Primary Roads Restoration Project (Cambodia)*. Manila (Loan 1697-CAM[SF]).

audits have been undertaken to investigate the allegations. At the policy level, ADB's assistance and practice of project processing have to some extent closed the gap between ADB's safeguard policies and Government legislation. However, the Government is still not fully engaged with development partners and civil society on issues related to resettlement and expropriation legislation.<sup>63</sup> ADB has also incorporated social risk mitigation measures in the design of all its regional road projects. The impact of such measures is difficult to establish as HIV/AIDS has not been contained and it is unclear to what extent ADB efforts have had a mitigating impact.

97. **Environmental Issues.** With respect to environment measures, only one transport loan, the Siem Reap Airport Project, was assessed as falling into ADB's environmental category A, and thus required a full environmental impact assessment (EIA) specifying detailed mitigation measures, environmental monitoring requirements, and environmental management plans. The PCR indicated that there were no significant adverse environmental impacts, with the operational restrictions on landing and taking off of aircrafts sufficient to protect the Angkor Wat ruins in the vicinity of the airport. The other transport loans were classified as category B and initial environmental examinations (IEE) were undertaken. In the case of the GMS: Phnom Penh to Ho Chi Minh City Highway Project, full compliance with environmental mitigation measures was delayed, but the measures were eventually carried out. On the other hand, contractors did not comply fully with the IEE requirements for mitigating measures under the Primary Roads Restoration Project. In particular, the contractors failed to comply with (i) community consultation, management, control, and reinstatement of borrow pits and quarries, in accordance with the community requirements; (ii) traffic control measures to minimize accidents during construction; and (iii) air quality and dust minimization. However, after several warnings from the Government and ADB, the contractors appear to have implemented the environmental mitigation measures appropriately. The EIA/IEE process included extensive public consultations with stakeholders from the local communities. With regard to environmental sustainability, Cambodia has one of the highest share of transport emissions to total national emissions of countries in Asia. Although the vehicle fleet in Cambodia is relatively small, the level of emissions is an area of potential future concern, particularly in urban areas.

98. **Institutional Development within MPWT.** The impact of advisory TAs on institutions is difficult to discern. Significant staff mobility and turnover have affected the impact of the first TAs. The most significant impact is a change in the institutional and policy environment, which is most notably manifest in the creation of an improved road maintenance regime that can offer a solution for the chronic problem of maintenance financing. This achievement is not attributable to ADB alone and came only after an almost 10-year-long dialogue. Another impact involves the preparation of a draft Transport Policy that Parliament is deliberating on. ADB has been involved in the drafting of the Policy though the 2001 Transport Sector Strategy TA and should continue supporting the issuance of the Policy.

99. **Private Sector Participation.** Cambodia has acquired familiarity with the PPP approach within a short time. Successful examples are found in most transport subsectors and range from major national projects involving foreign investors to local entrepreneurs active in developing small-scale projects in rural areas. In line with the recommendations of the 2004 CAPE (para. 5), ADB has extended TA support for developing the PPP modality in the Cambodian transport sector and also for restructuring the Cambodian railway and establishing a PPP in railway

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<sup>63</sup> The Government is currently processing an expropriation law, with little development partner or civil society involvement. Likewise, they have refused to publicly disclose the final draft of the ADB TA-supported resettlement subdecree.

freight operation. In addition, the Road Asset Management Project will use private contractors for all civil works.

## V. OVERALL ASSESSMENT

100. **Cambodia Transport Sector Strategy.** The top-down assessment of the transport sector strategy is based on separate assessments of strategic aspects, contribution to development results, and ADB performance. Overall, the performance of the Cambodia transport sector strategy is rated “successful.” Table 7 summarizes the ratings.

**Table 7: Overall Top-Down Rating of Cambodia Transport Sector Strategy**

Criterion	Rating Scale	Overall Rating	Description
Strategic assessment	0–8	5	Substantial (low)
Contribution to development result	0–8	6	Substantial
ADB performance	0–8	6	Substantial
<b>Overall</b>	<b>24</b>	<b>17</b>	<b>Successful</b>

ADB = Asian Development Bank.

Note: Aggregate top-down rating (TR) is highly successful if the TR  $\geq 20$ ; successful if  $16 \leq TR \leq 19$ ; partly successful if  $11 \leq TR \leq 15$ ; and unsuccessful if  $TR \leq 10$ .

Source: SAPE Mission.

101. **Cambodia Transport Sector Program.** The bottom-up assessment of the transport sector program is based on separate assessments of relevance, effectiveness, efficiency, sustainability, and impact. The overall rating is derived from the average of the 29 evaluated projects (7 loans, 4 grant-financed projects, and 18 TA projects) across the five criteria. The overall score is 15, which means that ADB's lending and nonlending assistance for the transport sector is “partly successful,” but at the higher end. Table 8 summarizes the ratings (see Supplementary Appendix A for additional details).

**Table 8: Overall Bottom-Up Rating of Cambodia Transport Sector Program**

Criterion	Rating Scale	Overall Rating	Description
Relevance	0–3	2	Relevant
Effectiveness	0–6	4	Effective
Efficiency	0–3	2	Efficient
Sustainability	0–6	4	Likely
Impact	0–6	3	Substantial (low)
<b>Overall</b>	<b>24</b>	<b>15</b>	<b>Partly Successful (high)</b>

Note: Aggregate bottom-up rating (BR) is highly successful if the BR  $\geq 20$ ; successful if  $16 \leq BR \leq 19$ ; partly successful if  $11 \leq BR \leq 15$ ; and unsuccessful if  $BR \leq 10$ .

Source: SAPE Mission.

102. **Overall Assessment.** Combining the strategy and program assessments, the overall performance of the transport sector is rated as “successful.” Table 9 gives a summary of the overall assessment.

**Table 9: Overall Rating of Performance Assessment at the Sector Level**

Item	Rating Scale	Score	Rating
Cambodia transport strategy	0–24	17	Successful
Cambodia transport program	0–24	15	Partly Successful (high)
<b>Total Score</b>	<b>0–48</b>	<b>32</b>	<b>Successful</b>

Note: An overall assessment of the performance of the sector assistance program is derived as a combination of the bottom-up and top-down assessment of performance. The overall sector assistance program evaluation performance rating (R) is derived by adding the bottom-up and top-down ratings. This is highly successful if the R  $\geq 40$ ; successful if  $30 \leq R \leq 39$ ; partly successful if  $20 \leq R \leq 29$ ; and unsuccessful if  $R \leq 19$ .

Source: SAPE Mission.

## VI. CONCLUSIONS AND WAY FORWARD

### A. Conclusions and Key Issues

103. ADB's assistance to Cambodia's transport sector has been broadly successful in substantially improving the sector. Physical infrastructure development and policy/institutional aspects have progressed well since the late 1990s. ADB's sector strategy was assessed as "successful," whereas the SAPE found the sector program as only "partly successful," but on the high side.

104. **The Subsectoral Focus of ADB's Transport Sector Strategies and Programs Needs to Be Sharpened.** As discussed in para. 53, there is a good reason to believe that ADB's transport operations would benefit from a sharper subsector focus, but this should first be underpinned by thorough analysis of the transport sector, including a rigorous problem diagnostic on emerging sector issues and binding constraints. Without preempting the suggested analyses, possible options include (i) shifting the focus on the roads subsector to rehabilitating the secondary roads network; (ii) reviewing future strategy in the railway subsector and considering private sector involvement; and (iii) considering shifting the focus toward transport areas where ADB could have a high impact, such as road traffic safety, urban transport, and transport service delivery (paras. 54–56).

105. **The Sector Road Map Needs Improvement.** As discussed in paras. 59–60 and Table 4, the transport sector road maps had two main drawbacks: (i) some of the indicators chosen were not sufficiently specific, and (ii) most of the chosen indicators were not monitorable with the use of data sources available in Cambodia. To address the first issue, ADB's next strategy should formulate a comprehensive transport sector road map with more specific indicators. To address the monitoring issues, support for sector data collection should be considered. Options could include extending assistance to the Government for generating, collecting, and collating relevant sector statistical data, and/or introducing selective postproject monitoring of sector outcome and output indicators of ADB transport projects.

106. **Resettlement Management Has Been an Issue.** Serious resettlement problems in the two completed road rehabilitation have led to implementation delays (para. 96). Both projects have undergone resettlement audits to investigate the complaints received. Despite these project-level difficulties, on a policy level ADB's assistance and practice of project processing have to some extent closed the gap between ADB's safeguard policies and Government legislation. Coordination is improving between the Interministerial Resettlement Committee and MPWT, which bodes well for timely completion of future projects. In light of ADB's significant ongoing and future transport sector investments, the resident mission's capacity to supervise resettlement implementation should be reinforced.

### B. Lessons Identified

107. **Cambodia's Participation in GMS Initiatives Has Had a Beneficial Impact.** A main feature of ADB's program of assistance in the transport sector has been its strong focus on regional/subregional initiatives, with four of the seven loan projects being designated GMS projects and two other projects having strong regional dimensions. The GMS Transport and Trade Facilitation SAPE rated the impact of ADB's assistance as "substantial", indicating that there have been positive economic impacts at the project level, corridor level and national level. In the medium to long term, once the GMS CBTA is fully operational, traffic mobility and international trade will be further enhanced. As noted in para. 94, this is an important impact and

a positive lesson of ADB's assistance. However, in the future more synergies between the GMS Program and the national program need to be emphasized to multiply the benefits.

**108. Country Ownership and Political Will Are Prerequisites for Progress in the Railway Subsector Reform Agenda.** ADB's project-cum-policy dialogue approach for the GMS Railway Rehabilitation Project has only recently achieved a breakthrough after 2.5 years of implementation in terms of improved effectiveness with the support of private sector (para. 76). In general, policy and institutional reforms require strong political will and country ownership, and externally-driven initiatives are unlikely to succeed on their own. Advancing policy and institutional changes in the country requires champions and coherent support, as well as a realistic time schedule for achieving the desired reform.

**109. Improved Law Enforcement Will Lead to Better Road Safety and Better Road Maintenance.** The effectiveness of ADB assistance can be enhanced if it can build on a vigorous regime of law enforcement. The traffic safety situation in Cambodia demonstrates that ADB efforts remain isolated and less effective without proper law enforcement activities by the authorities. Lax enforcement of vehicle overloading rules is likewise an impediment to endeavors to improve road maintenance. Enforcement can be improved with support for vehicle monitoring, use of weigh bridges, and levying of fines.

### **C. Recommendations**

**110. ADB Should Engage in Further Policy Dialogue with the Government to Expedite the Issuance of the Transport Policy.** The challenges posed by the transition from a command economy to a market-based system have provided opportunities for institutional restructuring and for the review of mandates, roles and functions of existing institutions. The issuance of the long-awaited Transport Policy is important both because it would contribute to efficiency gains in sector institutions and also foster more consistent policies that keep overall economic and social concerns in view. As mentioned in para. 98, ADB has been involved in the drafting of the Policy via the 2001 Transport Sector Strategy TA and should continue supporting the issuance of the Policy and other areas of government concern, such as cost recovery.

**111. ADB Should Continue to Pursue Private Sector Involvement in Future Transport Infrastructure Investments.** The investment requirements for transport are large, and the public sector has limited capacity to finance these investments on its own. Private sector options for financing and maintaining future infrastructure investments need to be expanded. In line with the 2004 CAPE's recommendation that ADB should consider PPPs, to date ADB assistance has included two TA grants and assistance for restructuring the Cambodian railway and establishing a PPP in railway freight operation. (para. 99). Future options to consider in addressing this issue would include (i) ADB support for promoting PPP in areas of future strategic focus; (ii) ADB support for private sector involvement in areas where ADB does not have a strategic focus, and (iii) increased local input in ADB future road projects to support the development of domestic contractors to construct infrastructure and provide maintenance services.

**112. TAs for Capacity Development and Institutional Strengthening Should Focus on a Clear Capacity Development Framework and a Long-Term Perspective.** As discussed in para. 48, the requirements for institutional preparedness for change, management of change, and the time needed to generate outcomes in the transport sector appear to have been somewhat underestimated in the context of Cambodia's political economy. To cope with the challenges ahead, the transport sector requires increased institutional capacities on a sustainable basis. Four things need to be recognized: (i) the long-term nature of capacity

development needs assessment; (ii) TA sequencing is important; (iii) ADB involvement should continue long after the TA is completed to ensure that knowledge is not lost, and appropriate follow-up actions are undertaken and harmonized with subsequent initiatives; and (iv) institutional procedures and incentive systems need to be in place to retain qualified staff over longer periods.

## TRANSPORT SECTOR DEVELOPMENTS

### A. General

1. Cambodia's transport modes comprise roads and railways, ports and harbors, inland waterways, and civil aviation. Road transport is the dominant mode. Its share in total transport output is frequently stated as 65% for passengers and 70% for freight.<sup>1</sup> However, these figures seem to be understated and date back to a time when both inland waterways and the Royal Railway of Cambodia (RRC) played a greater role in moving passengers and freight. Over the last two decades, both modes have lost significance, with both passenger and freight traffic on a steady decline. Domestic civil aviation is important for the growing tourism industry, but its contribution to overall transport output is minimal. While there are no official statistical sources, it is highly likely that the share of road transport in both passengers and freight is currently about 95%.

2. The Ministry of Public Works and Transport (MPWT) is responsible for planning, developing and, to some extent, managing the transport sector. It has oversight functions for national roads, road transport, railways, ports, inland water transport, coastal and international shipping and airport construction. The Department of Transport (DOT) within MPWT is responsible for vehicle registration, inspection and road safety. The Ministry of Rural Development (MRD) is in charge of the development and maintenance of rural roads.<sup>2</sup> The Department of Rural Roads (DRR) is a line agency under the MRD and is responsible for managing all of MRD's tertiary roads.

3. Private sector participation in providing transport services and operating and managing infrastructure has increased over the SAPE period. In particular, the Government has adopted PPP approaches for the operation and maintenance of NR 4 (Phnom Penh to Sihanoukville) and the operation of the three international airports of Phnom Penh, Siem Reap, and Sihanoukville. The Government recently signed a concession agreement with a private sector operator for operation and maintenance of the railway network under a long-term agreement. Road projects have so far had limited impact on the development of a domestic contracting industry.

### Road Transport

4. Roads form the backbone of Cambodia's transport system. The network measures 39,495 kilometers (km), consisting of 4,802 km of national roads, 6,692 km of provincial roads and of about 28,000 km of rural roads.<sup>3</sup> With about 2 km of roads per 10 km<sup>2</sup>, the density of the network is average by regional standards.<sup>4</sup> Motorized traffic and ownership of motorized road vehicles have increased rapidly over the past decade. In 2008, there were about 700,000 registered motor vehicles, of which an estimated 70% were motorcycles.

5. While most of the national road network has been rehabilitated and is in a good condition, provincial and rural roads are mostly in disrepair due to many years of limited investment and neglected maintenance of rehabilitated roads. Almost all national roads are

<sup>1</sup> JICA. 2007. *The Evaluation Study on Japan's Assistance to Transport Sector in Cambodia*. Tokyo. See also: ADB. 2002. *Greater Mekong Subregion: Cambodia Road Improvement*. Manila (Loan No. 1945).

<sup>2</sup> Rural roads are defined as roads carrying fewer than 50 vehicles per day.

<sup>3</sup> Infrastructure and Regional Integration Technical Working Group (IRITWG). 2008. *Overview on Transport Sectors in the Kingdom of Cambodia*. Phnom Penh.

<sup>4</sup> Comparative figures are about 1 km/10 km<sup>2</sup> for Lao People's Democratic Republic, about 1 km/10 km<sup>2</sup> for Thailand, about 7km/10 km<sup>2</sup> for Viet Nam, and about 5 km/10 km<sup>2</sup> for Yunnan province, People's Republic of China.

paved, whereas about 50% of the provincial roads have either gravel or an earthen surface. The majority of rural roads are unpaved. The national and provincial roads are under the responsibility of MPWT, while MRD is responsible for the rural roads.

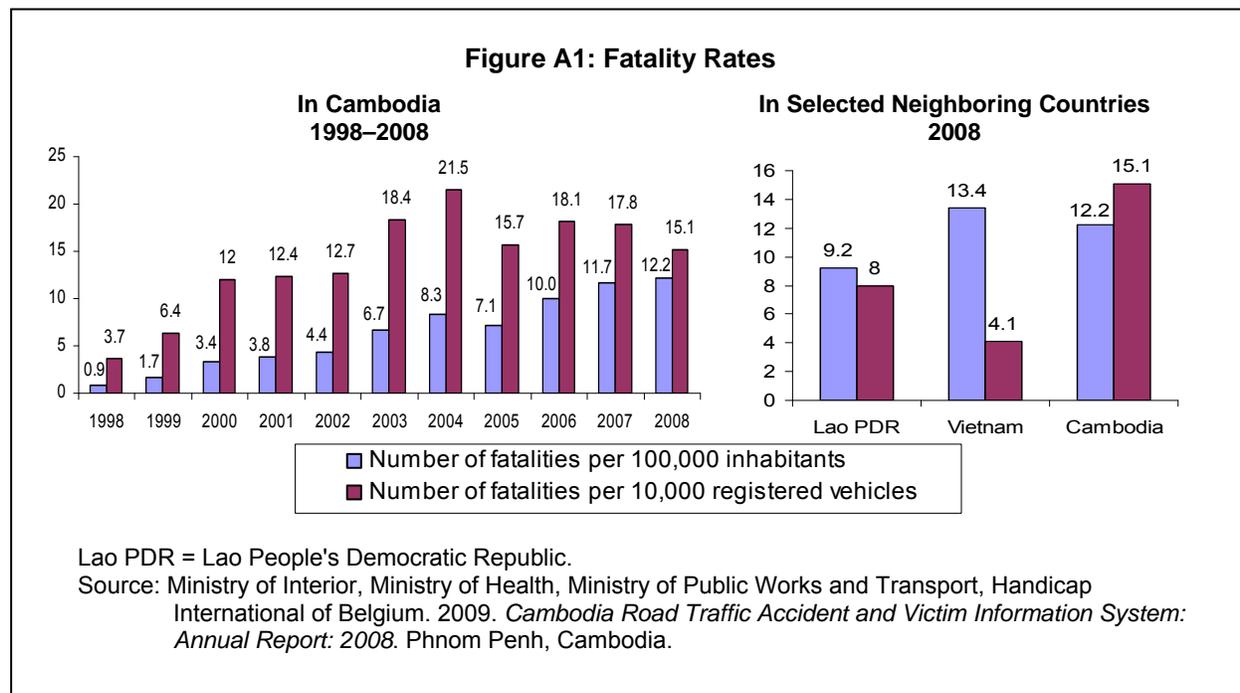
6. Most road reconstruction and rehabilitation works on the primary and secondary networks are carried out by contractors on the basis of international competitive bidding, particularly when the works are financed with foreign assistance. However, some road works are carried out by force account under MPWT's Road Infrastructure Department or the Military Corps of Engineers (MCE) using MPWT's capital budget. Work on provincial roads is undertaken by the provincial departments of public works and transport (PDPWTs) directly or by private contractors, with funds allocated to the provinces by the Ministry of Economy and Finance (MEF). MPWT delegates the responsibility for routine maintenance of its primary and secondary network to the PDPWTs, which are located in each of the provinces and municipalities.

7. Transport infrastructure projects have had very little impact in terms of facilitating the emergence of domestic contractors, consulting engineers, and other service providers. The Road Asset Management Project that will have a focus on road overlays and other periodic maintenance works will use only private contractors, rather than the Government's road maintenance units. The project is expected to create a demand for private sector contractors.

8. Attempts have been made over time to ensure the availability of funds for road maintenance. While a road maintenance fund was established in 2000 with the help of the Asian Development Bank (ADB), the fund remained part of the general budget and the concept of a road fund with an assured stable inflow of funds has so far not been implemented. MEF has been unwilling to compromise its fiscal authority and flexibility by earmarking a regular budget amount for road maintenance. To address the issue of chronic shortage of maintenance funds, two promising measures were recently adopted. The Government has levied a surcharge of \$0.02 per liter of diesel and \$0.04 per liter of gasoline and is committed to raise the maintenance budget by 5.5% per year. While the proceeds will go to the general budget, an interministerial committee consisting of representatives from MEF, MPWT, and the private sector was created in 2005 to determine the annual maintenance allocations. As a result, road maintenance funding has increased from about \$2–\$3 million in fiscal year 2002/03 to about \$26 million in 2007, about \$33 million in 2008, and about \$32 million in 2009. In addition to the issue of maintenance funding, vehicle overloading has been a persistent problem to the detriment of road conditions. MPWT has made efforts to improve its monitoring and control of axle loads. Eight automated “weigh in motion” sites were installed in September 2006 and seven more permanent weigh stations were installed in 2008.

9. In Cambodia, road traffic safety is a growing problem. Accidents, casualties and fatalities have increased faster than the growth in population and road traffic. From 2003 to 2008, the number of crashes increased by 135% and the number of fatalities almost doubled.<sup>5</sup> At the same time, the population increased by 6% and the number of registered vehicles increased by 123%. In 2008, 25,796 traffic casualties were reported from 10,015 crashes. Among these casualties, 1,638 were fatalities. Figure A1 shows, the fatality rates in 2008 to be 12.2 per 100,000 inhabitants and 15.1 per 10,000 registered vehicles. The fatality rate per 100,000 inhabitants has increased since 2005. The fatality rate per 10,000 registered vehicles has dipped over the last 2 years, but is still four times its 1998 level and double the Government's target of 7 per 10,000 registered vehicles for 2010.

<sup>5</sup> Ministry of Interior, Ministry of Health, Ministry of Public Works and Transport, Handicap International of Belgium. 2009. *Cambodia Road Traffic Accident and Victim Information System: Annual Report 2008*. Phnom Penh, Cambodia.



10. Figure A1 also compares fatality rates with two neighboring countries, the Lao People's Democratic Republic and Viet Nam. In 2008 Cambodia had the highest fatality rate per 10,000 registered vehicles; although, its fatality rate per 100,000 inhabitants was a bit lower than that of Viet Nam.

11. MPWT has assessed the causes of road accidents and has ranked them in accordance with their relative significance. Most road accidents (92%) have been caused by road users violating traffic rules, notably through speeding and drunk driving. The second most frequent cause of accidents is "blackspots," or locations and sections of roads prone to accidents because the infrastructure was either not designed to appropriate safety standards or is poorly maintained, or both. Lack of adequate vehicle inspection and insufficient roadworthiness of poorly maintained vehicles form the third most important cause of road accidents. The Ministry of Interior jointly with MPWT is implementing a National Road Safety Action Plan, which covers major areas such as a road accident data systems, road safety audits, road safety education for children, law enforcement, vehicle inspections, and drivers training. Recent measures instituted by MPWT include the enforcement of the mandatory helmet law in cities.

### C. Rail

12. Cambodia's railway system consists of two single-track main lines of meter gauge of about 640 km long. The railway is operated by RRC, a state-owned enterprise reporting to MPWT. The line links Poipet on the Thai border in the north with the port city of Sihanoukville in the south and is divided into the Northern Line (from Poipet to Phnom Penh) and the Southern Line (from Phnom Penh to Sihanoukville). If the 48 km section on the Northern Line from Sisophon to Poipet, had not been destroyed during the war, there would have been a direct rail connection between Bangkok and Phnom Penh.<sup>6</sup>

<sup>6</sup> The Northern Line was originally to be part of a route linking Bangkok with Saigon. However, the Cambodia part of

13. Owing to years of neglect, wartime damage, limited replacement of rolling stock, and inadequate maintenance, the railway is dilapidated. As a result, railway traffic has declined steadily. Because of frequent accidents, passenger services on the Southern Line have been suspended indefinitely. Rail transit time between Phnom Penh and Sihanoukville is 18–20 hours compared with 4–5 hours by truck. The main commodities carried by rail are petroleum products, cement, and sugar. It is estimated that a fleet of around 70 road trucks would be sufficient to carry the entire railway freight in a more timely fashion and at a lower cost.<sup>7</sup> Apart from bulk fuel products from Sihanoukville to depots in Phnom Penh and Battambang, RRC carries low-revenue cargo for which expeditious delivery is not essential.

14. The Government is responsible for railway development and tariff setting, and it funds railways losses from the budget. The subsidy is open-ended as the general budget covers whatever loss emerges at the end of an accounting period. The current level of the subsidy is not known, as RRC does not publish financial statements. It is clear, however, that with declining traffic and revenue, financial losses are mounting. If financial accounting was based on full cost and included depreciation on a replacement cost basis, it is highly unlikely that RRC would be a viable operation.

15. The Government made a major step forward in June 2009 when it signed a concession agreement with a private sector operator for the operation and maintenance of the railway network for 33 years. Going forward, the key challenge will be to define a core market for the railway and to restructure its organization with a view to making it more responsive to the demands of a competitive transport market.

#### **D. Ports**

16. Cambodia has two major international ports, Sihanoukville and Phnom Penh. Sihanoukville, situated on the Gulf of Thailand, is Cambodia's only major deep sea port. Because of its draft restrictions and the relatively low cargo volume, Sihanoukville caters to feeder ships from Singapore as the regional shipping hub. The existing draft limitations that prevent Panamax and larger container ships from calling at Sihanoukville do not appear to be a serious cost disadvantage at the moment as the port will not in the foreseeable future attract enough traffic that would allow economic operation of such ships.<sup>8</sup> Sihanoukville also handles oil tankers and other general cargo vessels from Thailand, Malaysia, and around the region. Its biggest traffic types by tonnage are containers (45%), cement (32%), and oil products (18%). Total container throughput in 2008 was 270,000 twenty-foot equivalent units (TEU) (import and export), of which about 32% were empty containers. Sihanoukville's total throughput in 2008 was about 2 million tons.<sup>9</sup>

17. Phnom Penh is Cambodia's major river port, located on the Tonle Sap River. The throughput of Phnom Penh is currently about 1 million tons, of which about 64% is accounted for by fuel imports and about 30% by containerized general cargo. The container service is operated by a Taiwanese shipping line out of Ho Chi Minh City under an exclusive 3-year

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the Phnom Penh-Saigon section was never built. Since 1961, there has been a 15-km gap between the Poipet station on the Cambodian side and the Thai station of Aranyaprathet.

<sup>7</sup> World Bank. 2004. *Draft Cambodia Transport Sector Review*. Washington DC.

<sup>8</sup> Panamax and Post-Panamax vessels have a draft in excess of 11.5 meters and account for about 45% of the world fleet.

<sup>9</sup> Sihanoukville Autonomous Port. 2008. Cargo Statistics. Marketing Department. The throughput for 2008 was estimated based on the figure for the first 10 months.

agreement with the Phnom Penh Port Authority. Cambodia's third port is Koh Kong near the Thai border. The port is only used by smaller vessels.

18. Previously operated as government departments, the ports of Phnom Penh and Sihanoukville became autonomous port authorities in 2001. Their governing Boards report to the Council of Ministers through MPWT. The Minister has veto rights over port tariffs and other policy matters, but there is no other form of economic regulation. Cargo handling at Sihanoukville Port is carried out by the Port's own work force complemented by private labor contractors during periods of peak work load. At Phnom Penh, the Taiwanese concessionaire is responsible for container handling, although it uses the work force of Phnom Penh Port Authority.

## **E. Inland Waterways**

19. Cambodia's extensive inland waterways, the Mekong, the Tonle Sap, the Bassac, and their numerous tributaries, provide about 3,700 km of year-round navigable waterways for informal shipping. However, there are severe draft restrictions as only small craft having a draft of 0.6 meter would be able to operate in the river system. The capacity of vessels plying the Mekong is in the range of 20 to 150 tons depending on the river depth at various locations and the time of the year. Inland waterway transportation has been a traditional means of moving goods and people in Cambodia, especially during the rainy season. This mode of transportation has so far received limited support and faces severe constraints in terms of draught restrictions, poor navigation aids, and the absence of wharf infrastructures for important river crossings. Nonetheless, there are still communities that depend on waterways in the absence of roads.

## **F. Air Transport**

20. Cambodia has 10 airports. Phnom Penh International Airport and Siem Reap International Airport are the major ones, each handling about 1.4 million passengers per year. Sihanoukville International Airport is Cambodia's third international airport. The airport was reopened in 2007. Its runway is being extended to 2,200 meters, which will allow operations of medium-sized aircrafts, such as the Boeing 737. Domestic freight traffic is insignificant.

21. The State Secretariat for Civil Aviation is responsible for the control, regulation, and orderly development of the civil aviation sector in Cambodia as well as the operation of airports, except those in Phnom Penh, Siem Reap, and Sihanoukville. The civil aviation sector of Cambodia has undergone major changes in the last few years to improve its compliance with the safety and security of international air transport and to encourage private sector participation in the operation of terminals. To this end, concessions have been awarded to operate the main airports of the country.<sup>10</sup> Upon the financial collapse of Royale Air Cambodge, the Government introduced the open-sky policy, allowing foreign carriers to operate in Cambodia.

## **G. Urban Transport**

22. Urban traffic has assumed critical dimensions, most notably in the country's capital, Phnom Penh. The city's population, which had doubled between 1991 and 2000, was 1.3 million in 2008. Annual population growth in the city is 2.8%.

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<sup>10</sup> The Société Concessionnaire de l'Aéroport (SCA) holds a 25-year concession to manage and operate the Pochentong and Siem Reap airports.

23. Lack of road user discipline, inadequate regulations, traffic engineering, and management, and weak enforcement of existing rules are major problems in all urban areas. As a result, the capacity of the roads is not efficiently used and the safety of road users is seriously jeopardized. There is no public mass transport system, and the urban population overwhelmingly rely on motorcycles.

24. Responsibility for managing transport infrastructure and services in urban areas is fragmented and spread over several government departments. Policy making, planning, and management of urban transportation, as well as control of vehicle registration and driver licensing and registration, are weak and divided among national, provincial, and local authorities. Investments in urban transport are fragmented and not well-coordinated.

## **H. Transport Logistics**

25. Cambodia has three international transport corridors: (i) Phnom Penh-Sihanoukville-International; (ii) Phnom Penh-Poipet-Thailand; and (iii) Phnom Penh-Viet Nam-International. Cambodia is a relatively small international freight market with no major bulk commodity flows. The low density of freight flows and the country's geography mean that Cambodia will in the foreseeable future be a "feeder", rather than a hub, origin/destination (whether by sea or air). If growth in containerized traffic continues, the transfer of containers from and to Sihanoukville will likely put a strain on the capacity of National Road 4 linking the port city with Phnom Penh. This outlook is among the justifications for investing in the rehabilitation of the railway system.

26. Freight logistics benefits from competition among transport providers and also from the competition that exists between different transport alternatives. The mainly private Cambodian road trucking industry is entrepreneurial, competitive, and growing; internal competition within road trucking means that pure road freight tariffs (net of tolls and informal charges) are market-driven. Rail has little regulatory protection although operations can only be sustained with the support of substantial subsidies. However, rail transport has to compete with roads—a competition it is likely to lose despite its much lower tariffs. International shipping is also competitive: Three or four different feeder lines compete for containers on the Singapore-Sihanoukville route and there is also strong competition between regional shipping lines for petroleum products and general cargo delivered to Sihanoukville.

27. The main constraints to efficient and competitive trade logistics emanate from operational, procedural, and organizational causes. Customs procedures are slow, reflected in average container dwell times of about 5 days. The combined costs for transport and imports through customs in Cambodia are higher than in other Asian countries. The transport and export clearance times are also uncompetitive. There are reports of bribery and corruption, which, if factual, add to the cost of transport logistics.

28. As to port management and administration, both ports still follow an outdated model that most ports in the world have abandoned because of its inherent inefficiencies. As noted earlier, port tariffs are high and productivity is low. While this may not have an impact on the financial position of the port authority, the extra cost will be reflected in the price of the traded goods in their final markets and will therefore affect Cambodia's trade competitiveness at large.

## GOVERNMENT POLICIES, STRATEGIES AND PLANS FOR THE TRANSPORT SECTOR

Government Policy Objectives	Details of Strategies and Plans
<p><b>A. General Transport Policy</b></p> <p>For the transport sector, the Royal Government of Cambodia (RGC) aims to:</p> <ul style="list-style-type: none"> <li>(i) construct new transport infrastructure to link regional centers to the national network</li> <li>(ii) strengthen transport management</li> <li>(iii) improve availability of year round affordable transport services for individual and commercial users</li> <li>(iv) improve transport services' safety and security</li> <li>(v) increase access to transport facilities for the poor and provide more work opportunities in the regions</li> <li>(vi) rationalize transport institutions and develop human resources to provide better quality transport services</li> <li>(vii) encourage participation of the private sector for the development of all means of transport</li> <li>(viii) provide the people with more information about transport</li> </ul>	<p>Key strategies:</p> <ul style="list-style-type: none"> <li>(i) Construction of new transport infrastructure <ul style="list-style-type: none"> <li>• Continue road rehabilitation and construction of new bridges on the secondary road network</li> <li>• Expand existing port facilities</li> <li>• Rehabilitate existing railroads</li> <li>• Consider opportunities for new transport infrastructure projects</li> </ul> </li> <li>(ii) Better transport management <ul style="list-style-type: none"> <li>• Improve planning and management activities</li> <li>• Strengthen planning methods to harmonize the development of transport infrastructures and increase projects' socio-economic benefits</li> <li>• Introduce measures to enhance efficiency of compliance inspections and of maintenance activities</li> <li>• Increase resources allocated to infrastructure maintenance</li> </ul> </li> <li>(iii) Availability of affordable transport services <ul style="list-style-type: none"> <li>• Encourage private services where the demand is high and there is sufficient profits</li> <li>• Use subsidized services in remote areas where demand is too low to be profitable</li> </ul> </li> <li>(iv) Safety and security <ul style="list-style-type: none"> <li>• Continue to develop better regulatory environment through new laws and regulations and strengthened enforcement mechanisms</li> </ul> </li> <li>(v) Access for the poor and more work in the regions <ul style="list-style-type: none"> <li>• Continue decentralization of transport services and of small infrastructure maintenance activities</li> <li>• Increase the number of all-weather roads and of small wharf facilities in all provinces</li> </ul> </li> <li>(vi) Rationalization of institutions and development of human resources <ul style="list-style-type: none"> <li>• Rationalize through re-organization and reforms</li> <li>• Improve human resources through new recruitment procedures, personnel databases, motivation programs, performance-based work programs and procedures, comprehensive training programs</li> </ul> </li> <li>(vii) Private sector <ul style="list-style-type: none"> <li>• Develop adequate regulatory and monitoring framework to ensure that private services follow national standards and interests</li> <li>• Adopt competitive and transparent procurement procedures for all major concessions</li> <li>• Where there are new private services, the Government will terminate equivalent public services</li> </ul> </li> <li>(viii) Dissemination of information <ul style="list-style-type: none"> <li>• Disseminate information about transport regulations and development and reform activities</li> <li>• Invite population to participate in preparing all major infrastructure projects through a local consultation process</li> <li>• Make available at the relevant ministries and on the internet, information about regulations, projects and reforms</li> </ul> </li> </ul>

Government Policy Objectives	Details of Strategies and Plans
<p><b>B. Road Transport Policy</b></p> <p>RGC's road transport policy aims to:</p> <ul style="list-style-type: none"> <li>(i) Implement selective and prioritized rehabilitation of road networks to enhance both national economic development and regional development</li> <li>(ii) strengthen road planning institutional arrangements and mechanisms, and implement the road master plan by elaborating 5-year investment plans for road development, maintenance and management</li> <li>(iii) increase expenditures allocated to road maintenance by improving existing road maintenance management and funding mechanisms</li> <li>(iv) implement the National Road Safety Action Plan, aiming to reduce traffic accidents by 20% within 5 years</li> <li>(v) encourage participation of private sector in road construction, operation and maintenance, and improve the regulatory framework for toll-road concessions</li> <li>(vi) introduce new technologies developed in the country, as well as technologies imported from foreign countries, to be able to improve quality of works, reduce construction period and life-cycle cost, and mitigate negative social and environmental impacts</li> <li>(vii) develop human resources required for the road sector in government agencies, and domestic consultants and contractors, and foster elites leading the road sector in Cambodia</li> </ul>	<p>RGC's road transport strategies:</p> <ul style="list-style-type: none"> <li>(i) Focus of road rehabilitation <ul style="list-style-type: none"> <li>• Promote rehabilitation of secondary national roads giving priority to access roads connecting provincial capitals and international border with neighboring countries to the primary national roads</li> <li>• Repair broken bridges and improve flood-prone areas</li> <li>• Promote rehabilitation of roads connecting to the tourism, agricultural, and industrial areas to enhance economic development and reduce poverty in the remote areas</li> <li>• Consider increasing the national budget allocation for these road rehabilitation works and utilize funds from external financing organizations</li> </ul> </li> <li>(ii) Road planning <ul style="list-style-type: none"> <li>• Implement externally-assisted road plans and update them</li> <li>• Plan road construction and maintenance</li> <li>• Expand planning units of road administrators and strengthen coordination between them</li> </ul> </li> <li>(iii) Strengthening of road maintenance <ul style="list-style-type: none"> <li>• Promote private sector participation in road maintenance works to lower Government's costs</li> <li>• Ensure road maintenance budgets are allocated in a timely manner in accordance with the annual maintenance plans</li> <li>• Enhance transparency in all procurement processes</li> <li>• Establish standard road maintenance management system and related operating procedures</li> </ul> </li> <li>(iv) Road safety improvement <ul style="list-style-type: none"> <li>• Implement the policy, strategy and action plans of the National Road Safety Committee in close coordination with the relevant ministries and the private sector</li> <li>• Enforce the new Land Traffic Law which increases punishment and financial penalty on violations of road use to reduce the number of traffic accidents, fatalities and injuries by 20% within 5 years</li> </ul> </li> <li>(v) New framework for toll road concessions <ul style="list-style-type: none"> <li>• Pursue initiatives to outsource new road tolling operations and develop an associated regulatory and monitoring framework</li> <li>• Continue to encourage further private-sector funding of road rehabilitation and improvement works</li> <li>• Apply competitive and transparent procurement procedures</li> <li>• Improve arrangements for monitoring maintenance standards</li> </ul> </li> <li>(vi) Introduce new technologies to improve quality of works, reduce construction period and life-cycle cost, and mitigate negative social and environmental impacts</li> <li>(vii) Human resource development <ul style="list-style-type: none"> <li>• Develop human resources of government agencies and domestic consultants and contractors in the fields of law and regulations, project administration, procurement and contract, engineering, economic assessment, financial management, social and environmental assessment</li> <li>• Foster elites to lead the road sector in Cambodia</li> </ul> </li> </ul>

Government Policy Objectives	Details of Strategies and Plans
<b>C. Air Transport (Civil Aviation) Policy</b>	
<p>Air transport policy aims to:</p> <ul style="list-style-type: none"> <li>(i) formulate a national vision and strategy for the development of international and local airports</li> <li>(ii) develop a comprehensive legal framework in respect of international standards, conventions, protocols and treaties</li> <li>(iii) promote an open skies policy to provide high quality and cost-effective civil aviation services</li> <li>(iv) improve enforcement of aviation safety, security and efficiency regulations, and environmental protection measures</li> <li>(v) rationalize government institutions</li> <li>(vi) clarify role and responsibilities of the private sector in Cambodia civil aviation and its relationship with the regulatory bodies</li> <li>(vii) update technical systems to enhance operations, safety, and security</li> <li>(viii) strengthen staff skills through capacity building</li> </ul>	<p>Strategies supporting air transport policy:</p> <ul style="list-style-type: none"> <li>(i) Regulatory framework <ul style="list-style-type: none"> <li>• Set up a legal framework that reflects the sector's international obligations and requirements for aviation industry</li> <li>• Adopt the Civil Aviation Code as well as the set of aviation rules and regulations prepared to complement the law</li> </ul> </li> <li>(ii) Promulgate an Open Skies policy to ensure that the sector is stimulated by competition in a liberalized environment</li> <li>(iii) Safety, security, efficiency and environmental protection <ul style="list-style-type: none"> <li>• Improve the enforcement of regulations and environmental protection measures in civil aviation</li> <li>• Update and review all civil aviation operational rules and regulations</li> </ul> </li> <li>(iv) Rationalization of institutions <ul style="list-style-type: none"> <li>• Establish new institutional arrangements that will rationalize the sector into well-coordinated and efficient organizations, linked by the effective coordination and reporting mechanisms</li> <li>• Promote the re-engineering of civil aviation from a single centrally-controlled government agency into decentralized and diversified civil aviation bodies</li> <li>• Separate responsibilities of (i) policy, planning, and infrastructure development, (ii) regulating, monitoring safety oversight audit and certification, and (iii) service providers and operators</li> </ul> </li> <li>(v) Private sector role <ul style="list-style-type: none"> <li>• Clarify the role and responsibilities of the private sector in civil aviation, and its relationship with regulatory bodies</li> <li>• Encourage transparency for the participation of the private sector in civil aviation project investments and concessions</li> </ul> </li> <li>(vi) Technical systems development <ul style="list-style-type: none"> <li>• Develop up-to-date mechanisms and apply the latest developments in civil aviation for both compliance and safety in line with international requirements</li> <li>• Introduce new CNS/ATM systems, Civil Aviation Information Management System, and set up Safety Management Systems (SMS)</li> </ul> </li> <li>(vii) Update and expand the skills of staff employed in all technical, administration, and management fields in civil aviation.</li> </ul>
<b>D. Water Transport Policy (Maritime, Ports, Shipping and Inland Waterways)</b>	
<p>For the water transport, RGC aims to:</p> <ul style="list-style-type: none"> <li>(i) develop maritime transport and port laws and regulations following all relevant international conventions and rules</li> <li>(ii) consider opportunities for public-private sector partnerships or private sector participation in port operations</li> <li>(iii) promote the establishment of special economic zones at Sihanoukville and Phnom Penh ports</li> </ul>	<p>Strategies to implement water transport policy:</p> <ul style="list-style-type: none"> <li>(i) Maritime transport and ports legal framework <ul style="list-style-type: none"> <li>• Develop maritime transport and port laws and regulations as well as monitoring and enforcement mechanisms following international conventions and rules</li> <li>• Enact a maritime law and set in place mechanisms to ensure its implementation</li> <li>• Develop a legal framework for private ports operations</li> <li>• Review/update systems of ship registration</li> <li>• Improve maritime safety systems</li> </ul> </li> <li>(ii) Two entry port system, private sector participation and competitiveness</li> </ul>

Government Policy Objectives	Details of Strategies and Plans
<p>(iv) introduce more efficient customs clearance procedures and systems</p> <p>(v) support the enacting of the protocol reflecting the bilateral agreement reached with Viet Nam to facilitate river navigation</p> <p>(vi) develop new port infrastructures in Phnom Penh, Sihanoukville, Kampong Cham, and Chhong Kneas</p> <p>(vii) plan and develop new wharf infrastructure and accesses at important river crossings</p> <p>(viii) devise river dredging self-financed mechanisms using private sector participation and improving navigation aids</p> <p>(ix) update and amend waterways transport regulations to ensure safety, security, and environmental protection</p> <p>(x) implement organizational reforms and develop a capacity building program for all involved in water transport</p>	<ul style="list-style-type: none"> <li>• Maintain both Sihanoukville and Phnom Penh as the two major ports and support possible future expansion</li> <li>• Provide opportunities for future public-private sector partnerships or private sector participation in port operations</li> <li>• Develop opportunities for increased private sector participation, including shipyards, dry-docks, maritime search and rescue operations, maritime schools, shipbrokers, ship insurance, shipping agents and other related services.</li> </ul> <p>(iii) Promote and regulate the establishment of special economic zones for exports in Phnom Penh and Sihanoukville ports</p> <p>(iv) Introduce innovative customs clearance procedures and systems for port traffic to improve efficiency and throughput of freight</p> <p>(v) Enact the protocol reflecting the bilateral agreement reached with Viet Nam to facilitate river navigation between the two countries</p> <p>(vi) Plan new port infrastructures</p> <ul style="list-style-type: none"> <li>• Develop new port infrastructures in Phnom Penh, Sihanoukville, Kampong Cham and Chhong Kneas</li> <li>• Expand the port of Phnom Penh</li> <li>• Build a new seaport in Sihanoukville</li> <li>• Plan new port infrastructures in Chhong Kneas to support tourism growth and in Kampong Cham to provide container throughput and multimodal links to the North-South river corridor.</li> </ul> <p>(vii) New wharf infrastructure</p> <ul style="list-style-type: none"> <li>• Plan and develop new wharf infrastructure needed for important river crossings</li> <li>• Identify which key river crossings require basic infrastructure to permit safe loading/unloading of passengers and goods, and for storage, and define minimum standards for the facilities</li> <li>• Develop a strategy to support the construction of wharf facilities</li> </ul> <p>(viii) River dredging and navigation aids</p> <ul style="list-style-type: none"> <li>• Provide adequate river dredging and improved navigation facilities to reduce vessel draught limitations and improve operational safety</li> <li>• Seek mechanisms for private sector participation in dredging operations, with dredging costs being recovered through river tolling</li> <li>• Introduce more extensive navigation facilities to improve safe operations of waterways, particularly at night.</li> <li>• Promote joint action with the Government of Viet Nam for works on dredging downstream to Cambodian waterways</li> </ul> <p>(ix) Rules and regulations for waterways</p> <ul style="list-style-type: none"> <li>• Ensure that rules and regulations for waterway transport management and operation are reviewed, updated and augmented to reflect international best practices and standards and to ensure safety and security for all users as well as environmental protection.</li> <li>• Update laws and legal instruments pertaining to waterways to reflect international conventions and practices</li> <li>• Establish and implement transport regulations for safety, security, and environmental protection as well as enforcement procedures and responsibilities for</li> </ul>

Government Policy Objectives	Details of Strategies and Plans
	waterways management and operation (x) Organizational reforms and capacity-building <ul style="list-style-type: none"> <li>• Implement organizational reforms and capacity building programs to upgrade expertise and increase efficiency of personnel and services</li> <li>• Consider the creation of new institutions and administrative bodies such as a maritime institute, an environmental focal point for all water transport activities and a navigation coordination center</li> </ul>
<b>E. Urban Transport Policy</b>	
RGC's urban transport policy aims to: <ul style="list-style-type: none"> <li>(i) improve management of urban transport</li> <li>(ii) develop new urban transport infrastructures</li> <li>(iii) encourage the use of privately owned and managed public transport services and infrastructures</li> <li>(iv) introduce additional traffic management measures to ease congestion</li> <li>(v) develop new transport master plans in cities</li> <li>(vi) strengthen traffic law enforcement and improve road safety</li> </ul>	Strategies in support of urban transport policy: <ul style="list-style-type: none"> <li>(i) Management of urban transport                             <ul style="list-style-type: none"> <li>• Rationalize institutional responsibilities for urban and community transport and strengthen organizations to improve efficiency, effectiveness, transparency and accountability</li> <li>• Develop and introduce new technical standards to improve the safety of infrastructures and means of transport</li> <li>• Decentralize to the municipalities the planning, upgrading, and maintenance of urban transport infrastructure and regulation of services, and the preparation and disbursement of annual budget</li> </ul> </li> <li>(ii) Urban road infrastructure                             <ul style="list-style-type: none"> <li>• Develop and increase the number of paved roads and road drainage systems to limit the effects of flooding</li> <li>• Improve intersections in urban and community areas to clearly demarcate various road user priorities and provide adequate drainage facilities and surface conditions</li> <li>• Provide all-weather roads in community areas with adequate facilities for all road users</li> <li>• Construct ring roads for major urban centers to reduce city traffic congestion</li> </ul> </li> <li>(iii) Private participation in public transport services and infrastructures                             <ul style="list-style-type: none"> <li>• Develop incentives to encourage the introduction of safe and efficient, privately owned and operated public transport services and infrastructures</li> <li>• Encourage the introduction of privately operated public transport means in urban areas</li> <li>• Investigate opportunities for the use of privately owned urban transport infrastructure (e.g. private off-street parking facilities, toll bridges, toll roads, etc)</li> <li>• Study feasibility of offering micro-credit financial support or short term subsidies</li> </ul> </li> <li>(iv) Introduce new measures to ease congestion and wider use of traffic management measures</li> <li>(v) Develop new transport master plans for major cities and satellite cities</li> <li>(vi) Traffic law enforcement                             <ul style="list-style-type: none"> <li>• Provide training and equipment to the traffic police through the National Road Safety Program</li> <li>• Share vehicle control enforcement between the traffic police and the Ministry of Public Works and Transport</li> </ul> </li> </ul>

CNS/ATM Communications, Navigation, and Surveillance Air Traffic Management, ICAO=International Civil Aviation Organization, NPRS= National Poverty Reduction Strategy, RGC=Royal Government of Cambodia, SEDP II = Second Socioeconomic Development Plan, SME = small and medium-sized enterprise.

Sources: Reports available at various websites.

**ADB's COUNTRY STRATEGIES AND PRIORITIES: CAMBODIA, 1998 – 2008**

**A. Overall Country Strategy and Key Priority Areas**

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
<p><i>Strategic focus</i> - Steady reduction in poverty through enhanced GDP growth and programs/projects that aim to benefit the poor and disadvantaged groups, particularly those in rural areas</p> <p><i>Medium-term priorities:</i></p> <ul style="list-style-type: none"> <li>• capacity building               <ul style="list-style-type: none"> <li>○ policy analysis and formulation</li> <li>○ economic planning and investment programming, and</li> <li>○ project planning, implementation, and management for sector institutions</li> </ul> </li> <li>• supporting sustainable economic growth               <ul style="list-style-type: none"> <li>○ fostering the transition to a market economy</li> <li>○ assisting output expansion in the real sectors</li> <li>○ improving the policy/legislative environment</li> <li>○ mobilizing domestic savings</li> <li>○ reforming the banking/financial sector</li> <li>○ focusing on the quality of human resources</li> <li>○ improving physical infrastructure</li> </ul> </li> <li>• improving access of the</li> </ul>	<p><i>Strategic thrust</i> - Poverty reduction through interventions in three priority areas: (i) pro-poor sustainable economic growth through support of broad-based labor-intensive economic development in populous rural areas; (ii) basic human or social development to enhance economic growth by boosting labor productivity while improving the distributional effectiveness of economic growth; and (iii) promotion of private sector participation in development by addressing key institutional and infrastructural weaknesses that will improve the geographic balance of economic growth and strengthen the linkages between rural and urban areas.</p> <p><i>Priority Areas:</i></p> <ul style="list-style-type: none"> <li>• <i>Development of the rural economy</i> - support for pro-poor, sustainable economic growth through intervention to relieve key constraints to broad-based agricultural growth involving               <ul style="list-style-type: none"> <li>○ facilitation of government leadership in improving water resource management</li> <li>○ activities to encourage agriculture sector development, rural development, and improved management of critical wetlands.</li> </ul> </li> <li>• <i>Human resource development</i> –</li> </ul>	<p><i>ADB's overarching goal for Cambodia:</i> sustainable poverty reduction</p> <p>The <i>three strategic pillars</i> of the CSP and the means by which to achieve these are as follows:</p> <p>(i) broad-based economic growth, through --</p> <ul style="list-style-type: none"> <li>• investments in physical infrastructure</li> <li>• development of the financial sector</li> <li>• support for greater regional integration</li> <li>• sustainable development of small and medium-sized enterprises, and</li> <li>• investments in agriculture and irrigation</li> </ul> <p>(ii) inclusive social development, through--</p> <ul style="list-style-type: none"> <li>• basic education</li> <li>• empowering vulnerable groups such as women and ethnic minorities</li> <li>• control of communicable diseases</li> <li>• provision of rural water supply and sanitation facilities, and</li> <li>• community-based sustainable management and conservation of natural resources in the Tonle Sap basin</li> </ul> <p>(iii) good governance, through--</p> <ul style="list-style-type: none"> <li>• improved public financial</li> </ul>	<p><i>The strategy of poverty reduction</i> through broad-based private-sector-led growth, inclusive social development, and stronger governance for sustainable development remains relevant. However, because of persistent high levels of rural poverty the CSP's strategic thrust, needs to have sharper focus on (i) agriculture and rural development; (ii) private-sector led growth; and (iii) risk management.</p> <ul style="list-style-type: none"> <li>• <i>Agriculture and Rural Development</i> - to respond to Government priorities including rural development projects, fostering rural finance, enhancing access to credit and decentralized registration of businesses in rural areas, increasing knowledge inputs for farmers and rural industries, and the Tonle Sap Initiative (TSI)</li> <li>• <i>Private-Sector-Led Growth</i> - to translate public policy advances into sustainable investment in the economy</li> <li>• <i>Risk Management</i> under 3 categories               <ul style="list-style-type: none"> <li>○ risk that public funds will not be used optimally</li> <li>○ weak institutions that could lead to failure in achieving economic diversification</li> <li>○ governance risks that threaten broad-based</li> </ul> </li> </ul>	<p><i>Focus on priority areas of –</i></p> <ul style="list-style-type: none"> <li>▪ agriculture and rural development</li> <li>▪ private sector development</li> <li>▪ governance and capacity development, and</li> <li>▪ the GMS</li> </ul> <p>The COBP programming targets the key objective of enhancing rural development to foster more pro-poor growth and accelerate poverty reduction, especially around the Tonle Sap basin where most of Cambodia's poorest live.</p> <p>In the near term (2008 and 2009), interventions would mostly center around the Tonle Sap basin area and be geared to</p> <ul style="list-style-type: none"> <li>▪ expand the connectivity internally between rural roads and the provincial and national network, and externally with emerging subregional transport corridors</li> <li>▪ foster the development of smallholder agricultural producers; and</li> <li>▪ widen access for the poorest to rural water supply and sanitation while strengthening local community management</li> </ul>

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
<p>poor to employment opportunities generated by the growth process and contributing to better health, education, training, population planning, enhanced role of women, and provision of basic social and physical services</p> <ul style="list-style-type: none"> <li>o developing human resources</li> <li>o addressing consequences of poverty</li> <li>o rural development</li> <li>o targeted support for women and the poor</li> <li>o provision of credit, where feasible</li> <li>• improving and protecting the environment <ul style="list-style-type: none"> <li>o improving policies and institutions</li> <li>o supporting remedial actions to control environmental degradation</li> <li>o ensuring environmental compatibility</li> <li>o managing natural resources</li> </ul> </li> </ul> <p>Given the nature of the country's absorptive capacity and security situation, ADB's interventions should center on what is feasible and practical in the medium term. This requires flexibility in the timing of interventions as well as imagination and creativity in their design. Moreover, given capacity limitations and the number of aid agencies</p>	<p>to improve the quality and efficiency of social services and facilitate equitable access to them. This includes</p> <ul style="list-style-type: none"> <li>o facilitating government leadership of sector development in education (particularly basic education) and investments in basic health, water supply, and sanitation</li> <li>o provision of key capacity building assistance to government agencies involved in ensuring that the needs of women and vulnerable groups are addressed</li> <li>• <i>Development of enabling environment for the private sector</i> – involving <ul style="list-style-type: none"> <li>o selected interventions in transportation, finance and energy</li> <li>o development of institutional framework to support public-private partnerships in public infrastructure and services</li> </ul> </li> </ul> <p><i>Key elements of the strategy:</i> (i) policy dialogue to achieve efficiency and cost recovery, (ii) sustainable capacity building, and (iii) investments that contribute to equitable long-term economic growth.</p> <p><i>Governance</i> is the primary crosscutting theme of the strategy which will receive assistance involving two modalities:</p> <ul style="list-style-type: none"> <li>o promoting transparency through frequent and thorough project and program reviews, training workshops in ADB procedures</li> </ul>	<p>management to enhance the development effectiveness of public expenditures</p> <ul style="list-style-type: none"> <li>• decentralization and deconcentration initiatives to strengthen local participation in government, and</li> <li>• improve public service delivery</li> </ul> <p><i>Four crosscutting themes:</i></p> <ul style="list-style-type: none"> <li>• governance</li> <li>• private sector development</li> <li>• gender</li> <li>• environment</li> </ul> <p><i>Geographic focus:</i> Tonle Sap basin</p> <p><i>Subregional focus:</i> Greater Mekong Subregion (GMS)</p> <p><i>Selective sector intervention:</i> Sector interventions in ADB's future assistance program to Cambodia, within the context of a reduction in ADF resources, will be based on the following criteria: the binding constraints to poverty reduction; the identification of priorities from consultations with stakeholders; ADB's comparative advantage; past performance in particular sectors; a realistic assessment of Government's commitment to reform; and the likely extent of interventions by other development partners in particular areas.</p> <p><i>Harmonized donor strategy:</i> ADB, DFID, and the World Bank have also harmonized their strategies, coordinated their programs, and</p>	<p>economic growth</p>	<p>capacity.</p> <p>These "hardware" interventions would be accompanied by a long-term programmatic approach to improving governance.</p>

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
involved, it argues against undue sectoral concentration in the early years of loan activity —although recognizing the need for a clear definition of the sectors/ subsectors that require urgent/priority attention — and it argues strongly for close aid coordination, especially in technical assistance activities.	<p>and capacity building TA, and</p> <ul style="list-style-type: none"> <li>o support for Government's efforts to improve governance through a broad package of TA in the areas of macroeconomic management and law and development</li> </ul> <p>(This COS is distinct from the previous one focusing on poverty reduction over a longer 5-year horizon, concentrating investments in the populous rural areas of the Plains and Tonle Sap natural regions where the majority of the poor reside.)</p>	<p>agreed on areas where one partner has a comparative advantage and will take the lead. In areas where one partner takes the lead role in helping the government formulate the sector strategy and program, the others will play a supporting role by continuing to undertake technical assistance and investment lending and also by participating in national dialogue on development policies and related concerns in the relevant sector.</p> <p><i>ADB will take the lead role in four priority sectors: (i) agriculture and water resources, (ii) education, (iii) finance, and (iv) transport.</i></p> <p>ADB will continue to support the power sector (where the World Bank will take the lead).</p>		

ADB = Asian Development Bank; COBP = Country Operational Business Plan, COS = Country Operations Strategy; CSP = Country Strategy and Program, CSPU = Country Strategy and Program Update, MTR = Midterm Review, NGO = nongovernment organizations  
Sources: ADB country operational strategies, country strategy and programs and updates, country operational business plans

## B. Transport and Communications

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
<p><b>Transport</b></p> <p><i>Sector Focus:</i></p> <ul style="list-style-type: none"> <li>• Roads</li> <li>• Airports</li> </ul> <p><i>Objective/Means:</i></p> <ul style="list-style-type: none"> <li>• Capacity building <ul style="list-style-type: none"> <li>o Improving policies and strengthening institutions</li> </ul> </li> <li>• Sustainable economic growth</li> </ul>	<p><b>Transportation</b></p> <p><i>(Under priority area 3: Development of enabling environment for the private sector)</i></p> <p><i>ADB assistance:</i></p> <ul style="list-style-type: none"> <li>• continue road rehabilitation/ restoration under the Primary Roads Restoration Project</li> </ul>	<p>ADB will –</p> <ul style="list-style-type: none"> <li>• continue to assist the Government to improve access by further restoring Cambodia's secondary national and provincial roads and by rebuilding the institutional and physical infrastructure of Royal Railways of Cambodia, to be done with greater private sector participation in both road and</li> </ul>	<p>In the transport sector (as in health and energy) ADB has decided to phase out national assistance and move toward supporting new analytical work and subregional initiatives.</p> <p>Given continuing challenges in terms of rural access and sector wide best practice standards, ADB will shift from large-scale</p>	<p><b>Transport Sector Outcomes Supported by ADB:</b></p> <ul style="list-style-type: none"> <li>• Increased transport efficiency</li> <li>• Improved sustainability of transport infrastructure</li> <li>• Improved rural access</li> <li>• Improved safety</li> <li>• Implementation of adequate safeguard policies</li> </ul> <p><i>Areas for intervention:</i></p>

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
<ul style="list-style-type: none"> <li>○ generating economic activity</li> <li>○ fostering market integration</li> <li>○ supporting growth poles/corridor</li> <li>○ support for tourism/regional integration</li> <li>● Access of the poor to growth benefits <ul style="list-style-type: none"> <li>○ generation of economic activity</li> <li>○ providing market access and reducing market fragmentation</li> </ul> </li> <li>● Environmental protection <ul style="list-style-type: none"> <li>○ ensuring environmental compatibility of projects</li> <li>○ improving safety</li> </ul> </li> </ul> <p>In the transport sector, priority should be accorded to the primary road network, supported by interventions in secondary and tertiary roads to capitalize on the potential linkages in the transport system. For primary roads, assistance should be directed at restoring to appropriate standard those roads that have critical economic and social impacts. There should be little emphasis on major and concentrated new road or road improvement projects until the basic network is in reasonable condition.</p> <p>In addition, there is a need to provide safe, economic travel to the main city centers of the country which are important international business and tourist destinations. Since air transportation is a key component in the development of the country's economy and is closely linked to the tourism industry, ADB's priority with regard</p>	<p>approved in 1999</p> <ul style="list-style-type: none"> <li>● facilitate government leadership of the development of road network</li> <li>● assist government efforts to update its investment plan through a transportation sector study</li> <li>● TA to strengthen the Government's capabilities in multimodal transportation planning and public-private partnerships to achieve maximum efficiency in the transportation system</li> </ul>	<p>rail sectors.</p> <ul style="list-style-type: none"> <li>● support strengthening the Fund for the Repair and Maintenance of Roads by helping establish appropriate institutionalized funding mechanisms.</li> <li>● help develop policy-making and regulatory oversight capacities of the road transport agencies.</li> </ul> <p>Through the GMS program, ADB will</p> <ul style="list-style-type: none"> <li>● continue to support the harmonization of cross-border trade and transport regulations, ensuring that Cambodia derives more value-added from its role as a "land bridge" between Thailand and Viet Nam.</li> <li>● provide TA support for policy reform of the telecommunications sector as a follow-up to ongoing GMS support in this area</li> </ul>	<p>public sector lending for national roads and railway operations to (i) fostering technical cooperation, standard setting and private investment in national transport; and (ii) supporting subregional projects that promote access to remote rural areas, operationalize cross-border transport agreements, and establish a basis for second-generation GMS trade and logistics support in the next country partnership strategy period.</p>	<ul style="list-style-type: none"> <li>● In cooperation with World Bank and the Government of Australia, ADB is financing a Road Asset Management Project that will resurface the paved national roads to prevent them from deteriorating prematurely and will improve the Government's road asset management capacity. ADB intends to prepare a similar project to preserve the assets of provincial and rural roads.</li> <li>● ADB and other development partners will continue to work together to strengthen the project implementation capacity of MPWT and MRD at the central and provincial levels; secure observance and strengthen implementation of safeguard policies; and develop the capacity to plan and execute infrastructure maintenance and development.</li> </ul> <p>ADB operations during 2009–2010 will shift from large-scale rehabilitation works in the national program to fostering (i) subregional transport connectively, (ii) rural development impacts by enhancing rural access, and (iii) technical cooperation in terms of setting social safeguards and technical standards.</p>

1995 COS	2000 COS	2005 CSP	2007 CPS MTR	2008 COBP
to civil aviation should be to provide safe and reliable air transport by improving existing facilities to safe operating levels in compliance with international civil aviation standards.				

ADB = Asian Development Bank; COBP = Country Operational Business Plan, COS = Country Operations Strategy; CSP = Country Strategy and Program, CSPU = Country Strategy and Program Update, DFID = Department for International Development of the United Kingdom, GDP = gross domestic product, MTR = Midterm Review, NGO = nongovernment organization

Sources: ADB country operational strategies, country strategy and programs and updates, country operational business plans

## ADB'S ASSISTANCE PROGRAM TO THE TRANSPORT SECTOR IN CAMBODIA

Table A4.1: ADB Loans to the Transport Sector in Cambodia, 1992–2008

Subsector	Loan No.	Loan Title	Fund Type	Amount (\$ million)	Date Approved	Current Status	PCR Rating	PPER Rating
<b>A. Civil Aviation</b>								
1.	1503	Siem Reap Airport	ADF	15.0	12-Dec-96	Closed	S	
				<b>Sub-total A</b>	<b>15.0</b>			
<b>B. Railways</b>								
2.	2288	GMS: Rehabilitation of the Railway in Cambodia <sup>a</sup>	ADF	42.0	13-Dec-06	Active		
				<b>Sub-total B</b>	<b>42.0</b>			
<b>C. Roads and Highways</b>								
3.	1659	GMS: Phnom Penh to Ho Chi Minh City Highway (Regional)	ADF	40.0	15-Dec-98	Closed	S	S
4.	1697	Primary Roads Restoration <sup>b</sup>	ADF	68.0	21-Sep-99	Closed	S	S <sup>c</sup>
5.	1945	GMS: Cambodia Road Improvement <sup>d</sup>	ADF	50.0	26-Nov-02	Active		
6.	2373	GMS: Southern Coastal Corridor (Regional)	ADF	7.0	28-Nov-07	Active		
7.	2406	Road Asset Management Project <sup>e</sup>	ADF	6.0	21-Jan-08	Active		
				<b>Sub-total C</b>	<b>171.0</b>			
				<b>Total</b>	<b>228.0</b>			

ADF = Asian Development Fund, GMS = Greater Mekong Subregion PCR = project completion report, PPER = project performance evaluation report, S = successful.

Notes: <sup>a</sup> The Organization of Petroleum Exporting Countries Fund for International Development provided cofinancing in the amount of \$13 million. The Government of Malaysia also provided grant in kind assistance in the amount of \$2.8 million.

<sup>b</sup> The Organization of Petroleum Exporting Countries Fund for International Development provided cofinancing in the amount of \$6 million.

<sup>c</sup> Based on draft PPER dated September 2009.

<sup>d</sup> The Organization of Petroleum Exporting Countries Fund for International Development provided cofinancing in the amount of \$10 million.

<sup>e</sup> The International Development Agency provided cofinancing in the amount of \$30 million.

Sources: ADB Loan, Technical Assistance, Grant and Equity Approvals Database, Project Completion Reports, Project Performance Evaluation Reports.

**Table A4.2: ADB-Administered Grant-Financed Projects for the Transport Sector in Cambodia, 1992–2008**

Subsector	Grant No.	Project Name	ADF (\$'000)	JFPR (\$'000)	Total ADB Funding (\$'000)	Other Funding (\$'000)	Total Project Cost (\$'000)	Date Approved
<b>A. Civil Aviation</b>								
		none						
<b>B. Multimodal Transport &amp; Sector Development</b>								
		none						
<b>C. Railways</b>								
		none						
<b>D. Roads and Highways</b>								
1.	3398(L)	Primary Roads Restoration	-	-	-	860 <sup>a</sup>	860	21-Sep-99
2.	9048	Mainstreaming Labor-Based Road Maintenance to the National Roads Network	-	2,200	2,200	-	2,200	17-Jun-04
3.	0096	Greater Mekong Subregion Southern Coastal Corridor	-	-	-	8,000 <sup>a</sup>	8,000	28-Nov-07
4.	0104	Road Asset Management	-	-	-	4,800 <sup>a</sup>	4,800	21-Jan-08
<b>TOTAL</b>			<b>-</b>	<b>2,200</b>	<b>2,200</b>	<b>13,660</b>	<b>15,860</b>	

ADF = Asian Development Fund; JFPR = Japan Fund for Poverty Reduction.

<sup>a</sup> Funding provided by Australia, but administered by ADB.

Source: ADB Database on Loan, TA, Grant and Equity Approvals.

**Table A4.3: ADB-Supported Technical Assistance Projects for the Transport Sector in Cambodia, 1992–2008**

Sector	TA No.	TA Title	Type	Amount (\$'000)	Date Approved	Current Status	TCR Rating	TPAR Rating
<b>A. Civil Aviation</b>								
1.	2197	Airports Improvement	PP	500	03-Nov-94	Completed		
2.	2706	Institutional Strengthening of the State Secretariat of Civil Aviation	AD	550	12-Dec-96	Completed	PS	
<b>Sub-total A</b>				<b>1,050</b>				
<b>B. Multimodal Transport &amp; Sector Development</b>								
3.	1866	Transport Rehabilitation Study	AD	1,319.4	31-Mar-93	Completed	GS	HS
4.	2416	Developing a Planning Capability in the Ministry of Public Works and Transport	AD	800	02-Oct-95	Completed		PS
5.	3414	Capacity Building in Public-Private Partnerships for Transport	AD	150	15-Mar-00	Completed		
6.	3651	Transport Sector Strategy	AD	850	27-Apr-01	Completed	S	
<b>Sub-total B</b>				<b>3,119.4</b>				
<b>C. Railways</b>								
7.	4645	Restructuring of the Railway in Cambodia	AD	1,500	14-Sep-05	Ongoing		
8.	4645	Restructuring of the Railway in Cambodia (Supplementary)	AD	250	25-May-07	Ongoing		
<b>Sub-total C</b>				<b>1,750</b>				
<b>D. Roads and Highways</b>								
9.	2722	Transport Network Improvements	PP	600	19-Dec-96	Completed		

Sector	TA No.	TA Title	Type	Amount (\$'000)	Date Approved	Current Status	TCR Rating	TPAR Rating
10.	2722	Transport Network Improvements (Supplementary)	PP	385	17-Mar-98	Completed		
11.	3164	Project Preparation & Implementation Assistance to the Ministry of Public Works and Transport	AD	150	03-Feb-99	Completed		
12.	3257	Strengthening the Maintenance Planning and Management Capabilities at Ministry of Public Works and Transport	AD	735	21-Sep-99	Completed	HS	
13.	3852	Economic Analysis for the GMS Cambodia Road Improvement Project	PP	150	04-Apr-02	Completed		
14.	3854	Environmental Assessment for the GMS Cambodia Road Improvement Project	PP	60	11-Apr-02	Completed		
15.	3855	Resettlement Study and Social Impact Assessment for the GMS Cambodia Road Improvement Project	PP	150	11-Apr-02	Completed		
16.	3868	Engineering Design Update for the GMS: Cambodia Road Improvement Project	PP	400	21-May-02	Completed		
17.	4691	Transport Infrastructure Development and Maintenance	PP	1000	14-Nov-05	Ongoing		
18.	7199	Provincial/Rural Road Asset Management	PP	500	10-Dec-08	Ongoing		
<b>Sub-total D</b>				<b>4,130</b>				
<b>Total</b>				<b>10,049.4</b>				

AD = advisory and operation, GS = generally successful, HS = highly successful, PP = project preparatory, PS= partially successful, TA = technical assistance, TCR = technical assistance completion report, TPAR = technical assistance performance audit report, S = successful.

Source: ADB Database on Loan, TA, Grant and Equity Approvals, Technical Assistance Completion Reports, Technical Assistance Performance Audit Report.

**Table A4.4: Assessment of ADB's Lending Assistance**

Loan Identification	Project Description	Assessment /Status	Lessons /Issues
<p><b>1. Loan 1503 : Siem Reap Airport Project</b></p> <ul style="list-style-type: none"> <li>• EA: State Secretariat of Civil Aviation (SSCA)</li> <li>• Amount (ADF): \$15M</li> <li>• Approval: 12 Dec 1996</li> <li>• Closing: 17 April 2003</li> <li>• PCR: CAM 27406 (28 December 2004)</li> </ul>	<p>The project aimed to provide the required infrastructure and improve the operational capacity of Siem Reap Airport to cater to the expected increase in tourists visiting Angkor Wat historical sites.</p> <p>The Project provided: (i) civil works for aerodrome, operational buildings, and airport terminal; (ii) equipment for air traffic services, aeronautical communications, and navigational aids; and (iii) consulting services to assist in preconstruction activities (preparation of designs, tender documents, and bid evaluation), project management, and construction supervision.</p> <p>The loan was ADB's first for the civil aviation sector in Cambodia.</p>	<ul style="list-style-type: none"> <li>• <i>Status.</i> Closed on 17 April 2003</li> <li>• <i>2004 PCR rating:</i> Partly successful (Partly relevant, Partly effective/ efficacious, Highly efficient in achieving outcomes and outputs, and Likely to be sustainable) <ul style="list-style-type: none"> <li>○ Project objective was fully achieved</li> <li>○ Passenger arrivals and departures at Siem Reap Airport increased (roughly quadrupled from 1995 to 2003)</li> <li>○ International visitors to Siem Reap increased (doubled from 1999 to 2000) due mainly to the adoption of the Open Sky Policy in Dec 1999</li> <li>○ However, the objective of strengthening the institutional capacity of SSCA as the airport operator was not achieved.</li> </ul> </li> <li>• <i>2008 GMS Transport SAPE rating:</i> Partly successful (Partly relevant, Partly effective, Highly efficient, Likely to be sustainable, and Substantial impact) <ul style="list-style-type: none"> <li>○ Project was relevant to the needs of the country, but there was still room for improvement in "quality-at-entry"</li> <li>○ Notable growth in traffic and use of private sector in operating the airport</li> <li>○ High EIRR</li> <li>○ Continued demand because of increased tourist traffic</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Better aid coordination should be ensured to avoid delays (e.g., in the eventual withdrawal of the grant assistance by the Government of Japan).</li> <li>• The circumstances around the EA changed dramatically from the time of loan appraisal, which also affected compliance with some related covenants. Under such a substantial change in EA's function, the loan covenants and due compliance should have been revised as appropriate, and additional loan covenants should have been agreed upon with the Borrower as a conditionality to continue project implementation.</li> <li>• Had the consultant recruitment followed ADB's standard consultant selection procedure, the terms of reference, engineering inputs, and costs could have been clearer and dispute between the EA and a consultant could have been avoided.</li> <li>• High number of contract packages required for the project entailed too much time preparing, reviewing, and evaluating bid documents and solving issues. .</li> </ul>
<p><b>2. Loan 1659: (GMS) Phnom Penh to Ho Chi Minh City Highway Project</b></p> <ul style="list-style-type: none"> <li>• EA: Ministry of Public Works and Transport (MPWT)</li> <li>• Amount (ADF): \$40M</li> <li>• Approval: 15 Dec 1998</li> </ul>	<p>The Project aimed to encourage traffic and trade flows between Cambodia and Viet Nam by: (i) improving the highway link between Phnom Penh and Ho Chi Minh City, (ii) improving facilities at the border crossing, and (iii) facilitating government efforts to reduce bureaucratic and procedural constraints to cross-border trade.</p> <p>For Cambodia, the Project provided: (i) civil works for reconstruction of 105 kilometers</p>	<ul style="list-style-type: none"> <li>• <i>Status.</i> Closed on 20 July 2006</li> <li>• <i>2008 PCR rating:</i> Successful (Highly relevant, Effective, Highly efficient, Less likely to be sustainable, and Significant socio-economic impact) <ul style="list-style-type: none"> <li>○ Transborder activities at Bavet/Moc Bai, in terms of persons and vehicles crossing the border and values of imports and exports increased soon after the completion of main civil works. c. From 2003-2006, there was notable</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The prequalification of firms that do not have the capacity to undertake civil works in a timely manner not only results in delays but extends the period of the construction supervision consultants. The prequalification process needs to be more rigorous to avoid delays caused by the incorrect choice of contractors.</li> <li>• ADB needs to undertake a careful analysis of the legal and policy</li> </ul>

Loan Identification	Project Description	Assessment /Status	Lessons /Issues
<ul style="list-style-type: none"> <li>• Closing: 20 July 2006</li> <li>• PCR: IN.9-08 (9 January 2008)</li> </ul>	<p>(km) of National Road1 (NR1) from Neak Leoung to the border with Viet Nam at Bavet, (ii) civil works for minor improvements to 58 km of NR1 from Phnom Penh to the Mekong River ferry, and (iii) consulting services for construction supervision.</p>	<p>increase in (i) total value of trade through the Bavet/Moc Bai border post by about 41% per annum , (ii) number of people crossing the border by 53% , and (iii) number of vehicles crossing the border increased at an average annual rate of 38%</p> <ul style="list-style-type: none"> <li>○ Less than full potential cross-border movement and no through movement of trade traffic between Thailand, Cambodia and Viet Nam</li> <li>○ Reduced travel time from Phnom Penh to Bavet by 30%.</li> <li>○ The Project was rated less likely to be sustainable because: (i) expenditure on road maintenance was well below what was required; (ii) funds available to the government was very limited so that fees collected from road users for road maintenance have been used for significant road works, and for other sectors.</li> </ul> <ul style="list-style-type: none"> <li>• <i>2008 PPER and 2008 GMS Transport SAPE ratings: Successful (Highly Relevant, Effective, Efficient, Less likely to be sustainable, and Substantial impact)</i> <ul style="list-style-type: none"> <li>○ Traffic increased on the project road, although the rate of growth of the traffic was not quite as expected at appraisal and traffic was predominantly national rather than international.</li> <li>○ The Project was less likely to be sustainable owing to the difficulties in funding maintenance costs.</li> <li>○ A number of outstanding resettlement issues were yet to be fully resolved even after the closing date of the project.</li> </ul> </li> </ul>	<p>framework in a country in relation to ADB policy. Such analysis may help anticipate and address potential resettlement risks.</p> <ul style="list-style-type: none"> <li>• The management structure for planning and implementing resettlement needs careful thought and planning to avoid conflicts of interest and to ensure efficient implementation.</li> <li>• Environmental problems caused by contractors not taking an active role in protecting the environment could be avoided by more active monitoring.</li> </ul>
<p><b>3. Loan 1697: Primary Roads Restoration Project</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (ADF): \$68M</li> <li>• Approval: 21 Sep</li> </ul>	<p>The Project was aimed to:(i) improve accessibility, especially in rural areas, to promote economic and human development; (ii) reduce road transport costs to facilitate more efficient movement of goods and passengers; and (iii) increase the capacity of</p>	<ul style="list-style-type: none"> <li>• <i>Status.</i> Closed on 6 Aug 2006</li> <li>• <i>2006 PCR rating:</i> Successful (Highly relevant, Effective, Highly efficient, Less likely to be sustainable, Some adverse environmental impact, and Significant socio-economic impact) <ul style="list-style-type: none"> <li>○ Most of the expected outcomes indicated</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The Project demonstrated that a contractor's ability to commit physical resources to a contract is crucial to performance.</li> <li>• The prequalification process needs to be more rigorous to avoid future delays in</li> </ul>

Loan Identification	Project Description	Assessment /Status	Lessons /Issues
<p>1999</p> <ul style="list-style-type: none"> <li>• Closing: 6 Aug 2006</li> <li>• PCR: IN.336-06 (22 November 2006 )</li> </ul>	<p>MPWT to manage and maintain the road network effectively.</p> <p>The Project had four components: (i) restoration of about 577 kilometers (km) of the national road network, (ii) rehabilitation of bridges along the road network, (iii) institutional strengthening of MPWT, and (iv) provision of consulting services for construction supervision and training of MPWT personnel.</p>	<p>in the design and monitoring framework were realized. However, the Project also undermined road safety initially, because of increased vehicle speeds and traffic growth.</p> <ul style="list-style-type: none"> <li>○ Sustainability is hampered by absence of an effective mechanism to secure sustained release of road maintenance funds.</li> <li>○ The majority of civil works contractors did not implement environmental mitigation measures fully, although some improvements were observed following the recommendations of ADB review missions.</li> <li>○ A number of outstanding resettlement issues were yet to be fully resolved even after the closing date of the project.</li> </ul>	<p>the implementation of civil works contracts.</p> <ul style="list-style-type: none"> <li>• The performance of consultants needs to be monitored closely.</li> <li>• Resettlement activities need to be prepared and monitored thoroughly during project implementation.</li> <li>• Environmental problems that arose because contractors did not take an active role in protecting the environment could be avoided through active monitoring of civil works.</li> </ul>
<p><b>4. Loan 1945: (GMS) Cambodia Road Improvement</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (ADF): \$50M</li> <li>• Approval: 26 Nov 2002</li> <li>• Closing: 30 Jun 2009</li> </ul>	<p><i>Objectives:</i> (i) to promote economic activities and facilitate trade among Cambodia, Thailand, and Viet Nam; and (ii) to improve the prospects for poverty reduction along the Southern Economic Corridor</p> <p><i>Expected outputs:</i> (i) rehabilitation of a road section of about 150 km of highway and about 45 bridges on 2 national roads connecting 3 major towns; (ii) reconstruction of about 50 bridges on provincial roads; (iii) poverty reduction monitoring program; (iv) capacity building for MPWT; (v) road network maintenance strategy and financing mechanism; (vi) HIV/AIDS program; and (vii) cross-border facilities</p>	<ul style="list-style-type: none"> <li>• <i>Status - Active</i></li> <li>• <i>PPR ratings</i> (as of 31 August 2009) <ul style="list-style-type: none"> <li>○ Impact and Outcome (IO) – Satisfactory</li> <li>○ Implementation Progress (IP) – Satisfactory</li> </ul> </li> <li>• <i>Project Progress</i> (as of 31 August 2009) – 87%</li> <li>• <i>2008 GMS Transport SAPE rating:</i> Likely to be successful ( Highly relevant, Effective, Efficient, Less likely to be sustainable, and Expected substantial impact) <ul style="list-style-type: none"> <li>○ The benefits of the project will be realized after implementation of the Cross-Border Trade Agreement (CBTA).</li> <li>○ The project is less likely to be sustainable since in Cambodia, the current maintenance regime is not sufficient to ensure appropriate maintenance.</li> </ul> </li> <li>• <i>2009 Cambodia Transport SAPE rating:</i> Successful ( Highly relevant, Effective, Highly efficient, and Likely to be sustainable)</li> </ul>	<p>Major issues in implementation encountered as of 31 May 2008 include: (i) slow progress of civil works; (ii) delayed identification of the location for new border facilities; (iii) untimely resolution of collapsed transmission poles under the Cambodia Transmission Line Project; and (iv) reported noncompliance with environmental safeguard policy.</p>

Loan Identification	Project Description	Assessment /Status	Lessons /Issues
<p>5. <b>Loan 2288 : (GMS) Rehabilitation of the Railway in Cambodia Project</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (ADF): \$42M</li> <li>• Approval: 13 Dec 2006</li> <li>• Closing: 30 Jun 2010</li> </ul>	<p>The project aims to: (i) increase the efficiency of the Cambodia transport sector, (ii) secure the long-term sustainability of the railway subsector, (iii) reduce road damage and road traffic risks associated with the movement of heavy and dangerous goods, (iv) facilitate economic growth in Cambodia by providing cost-effective and efficient railway transport, (v) pave the way for proposed future construction of a new railway line between Cambodia and Viet Nam, (vi) reduce wear and tear from heavy cargo haulage on Cambodia's road network, (vii) improve road safety by diverting heavy and hazardous cargo from the roads to inherently safer railway transport, and (viii) reduce public sector losses.</p> <p>Expected outputs: (i) rehabilitation of 594 km of existing railway track and associated structures, passing loops, and spur lines; (ii) reconstruction of 48 km of destroyed railway line to Thailand; (iii) construction of direct railway access to the container terminal in the port of Sihanoukville; (iv) restructuring of the railway subsector; (v) assisting employees made redundant because of the restructuring; and (vi) provision of consulting services and training for project monitoring, engineering design, and supervision of civil works.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Active</li> <li>• <i>PPR ratings</i> (as of 31 August 2009) <ul style="list-style-type: none"> <li>○ IO – Satisfactory</li> <li>○ IP – Satisfactory</li> </ul> </li> <li>• <i>Project Progress</i> (as of 31 August 2009) – 3%</li> <li>• <i>2008 GMS Transport SAPE rating</i>: Likely to be successful ( Highly relevant, Effective, Efficient, Less likely to be sustainable, and Impact expected to be substantial) <ul style="list-style-type: none"> <li>○ It is expected that traffic will build up on the railway after implementation of the CBTA and that the railway project will be operated as a PPP.</li> </ul> </li> </ul>	
<p>6. <b>Loan 2373: (GMS) Southern Coastal Corridor</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (ADF): \$7M</li> <li>• Approval: 28 Nov 2007</li> <li>• Closing: 31 Dec 2012</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Expected impact</i> : (i) promotion of economic growth in the project area and GMS by strengthening connectivity with neighboring countries and increasing competitiveness.</li> <li>• <i>Expected outcomes</i>: (i) reduced transport times and costs; and (ii) more efficient movement of passengers and goods between Thailand, Cambodia, Viet Nam, and within project provinces.</li> <li>• <i>Expected outputs</i>: (i) rehabilitation of</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Active</li> <li>• <i>PPR ratings</i> (as of 31 August 2009) <ul style="list-style-type: none"> <li>○ IO – Satisfactory</li> <li>○ IP – Satisfactory</li> </ul> </li> <li>• <i>Project Progress</i> (as of 31 August 2009) – 2%</li> <li>• <i>2008 GMS Transport SAPE rating</i>: Likely to be successful ( Highly relevant, Effective, Efficient, Less likely to be sustainable, and Expected substantial impact) <ul style="list-style-type: none"> <li>○ It is expected that traffic will build up on the road after implementation of the CBTA</li> </ul> </li> </ul>	

Loan Identification	Project Description	Assessment /Status	Lessons /Issues
	<p>transport infrastructure - In Cambodia, 15 km of National Road 33 will be improved to the border with Viet Nam at Preak Chak; (ii) construction of new cross-border facilities; (iii) HIV/AIDS and trafficking awareness and prevention program; and (iv) road maintenance in Cambodia.</p>	<p>approved in 2006.</p> <ul style="list-style-type: none"> <li>○ The project is less likely to be sustainable since in Cambodia, the current maintenance regime is not sufficient to ensure appropriate maintenance.</li> </ul>	
<p><b>7. Loan 2406: Road Asset Management Project</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (ADF): \$6M</li> <li>• Approval: 21 Jan 2008</li> <li>• Closing: 31 Dec 2013</li> </ul>	<p>The Project will assist the Government of Cambodia with periodic maintenance of the national and provincial roads administered by the MPWT (the MPWT roads).</p> <p>The Project will (i) assist the Government in periodic maintenance of about 950 km of MPWT roads; and (ii) help to build capacity at MPWT to improve the management and maintenance of its roads network and start a process of privatizing MPWT's force account units.</p> <p>The institutional strengthening of MPWT includes supporting a permanent and dedicated road asset management office (RAMO) within the general department of works of MPWT, formally established before loan effectiveness. RAMO will be responsible for systematic maintenance planning for the MPWT roads and will support and train MPWT management and line organizations to become efficient road asset managers.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Active</li> <li>• <i>PPR ratings</i> (as of 31 August 2009) <ul style="list-style-type: none"> <li>○ IO – Satisfactory</li> <li>○ IP – Satisfactory</li> </ul> </li> <li>• <i>Project Progress</i> (as of 31 August 2009) – 1%</li> </ul>	

Source: ADB database on loan documents and project performance reports

Table A4.5: Assessment of ADB's Grant Assistance to Cambodia

Grant Identification	Project Description	Assessment /Status
<p>1. <b>Grant 3398(L): Primary Roads Restoration</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (Australia): \$0.86M</li> <li>• Approval: 21 Sep 1999</li> <li>• Closing: 6 August 2006</li> </ul>	<p>This was a grant from the Government of Australia administered by ADB in support of Loan 1697: Primary Roads Restoration Project.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i>. Closed</li> <li>• <i>See assessment of Loan 1697</i></li> </ul>
<p>2. <b>Grant 9048: Mainstreaming Labor-Based Road Maintenance to the National Roads Network</b></p> <ul style="list-style-type: none"> <li>• Type : Capacity Building</li> <li>• EA: MPWT and MRD</li> <li>• Amount (JFPR): \$2.2M</li> <li>• Approval: 17 Jun 2004</li> </ul>	<p>The Project's overall goal was to demonstrate the potential for increasing the direct poverty reduction impact of the national road network and mobilize road maintenance funds for the provincial governments. The Project's purpose was to pilot-test sustainable decentralized finance and management of labor-intensive road maintenance.</p> <p>The expected outcomes were: (i) sustained employment and income for the rural poor through labor-intensive maintenance of roads under the Ministry of Public Works and (MPWT) and Ministry of Rural Development (MRD); (ii) preservation of existing rural road assets to secure sustainable access to education and health services, markets, and jobs; and (iii) development of emerging small-scale private contractors in the project area that are trained in labor-intensive road maintenance techniques.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i>. Closed</li> </ul>
<p>3. <b>Grant 0096: Greater Mekong Subregion Southern Coastal Corridor</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (Australia): \$8M</li> <li>• Approval: 28 Nov 2007</li> <li>• Closing: 31 Dec 2012</li> </ul>	<p>This is a grant from the Government of Australia administered by ADB in support of Loan 2373: (GMS) Southern Coastal Corridor.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i>. Ongoing</li> <li>• <i>See assessment of Loan 2373</i></li> </ul>
<p>4. <b>Grant 0104: Road Asset Management Project</b></p> <ul style="list-style-type: none"> <li>• EA: MPWT</li> <li>• Amount (Australia):\$4.8M</li> <li>• Approval: 21 Jan 2008</li> <li>• Closing: 31 Dec 2013</li> </ul>	<p>This is a grant from the Government of Australia administered by ADB in conjunction with Loan 2406: Road Asset Management Project.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i>. Ongoing</li> <li>• <i>See assessment of Loan 2406</i></li> </ul>

Source: ADB database on grant documents

**Table A4.6: Assessment of ADB's Technical Assistance to Cambodia**

TA Identification	Project Description	Assessment/Status
<p><b>1. TA 1866: Transport Rehabilitation Study</b></p> <ul style="list-style-type: none"> <li>• Type : AD</li> <li>• EA: MPWT</li> <li>• Amount (UNDP/Sweden): \$1,319,400</li> <li>• Approval: 31 March 1993</li> <li>• TCR: IN.184-96 (24 Sep 1996 ); TPAR: IN.181-01 (7 Sep 2001)</li> </ul>	<p>The overall objective of the TA was to help rebuild the economic, social, and physical systems destroyed or disrupted during two decades of war. The TA was to address the most urgent transport rehabilitation needs, , refugee repatriation and general economic recovery. Another objective of the TA was to enhance Cambodia's capacity and capability for planning of transport infrastructure investments.</p> <p>The scope of the TA included identifying the essential transport rehabilitation requirements in all regions of Cambodia and encompassed all modes of mechanized transport except civil aviation. The output was a list of screened and ranked rehabilitation projects along with proposed institutional strengthening programs.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> <li>• <i>TCR Rating (Sep 1996)</i> : Successful (high quality of work and timely completion of tasks)</li> <li>• <i>2001 TPAR Rating and Assessment</i>: Highly successful <ul style="list-style-type: none"> <li>- TA continued to have high relevance in terms of conformity with the government's priorities and goals. It achieved its main objective of prioritizing rehabilitation needs, and most of its recommendations have been adopted.</li> </ul> </li> <li>• <i>2009 Cambodia Transport SAPE Rating</i>: Highly successful</li> </ul> <p><i>Lessons learned</i></p> <ul style="list-style-type: none"> <li>• (TCR, 1996) Close monitoring and active supervision of work under the TA provided the base for high quality outputs. Appropriate selection of consultants, having extensive experience with similar work in similar environments and adequate field expertise was also an important factor in successful implementation. The aid coordination meeting was most useful in discussing TA findings and conclusions with a view to coordinate future external assistance to the transport sector in Cambodia.</li> <li>• (TPAR, 2001) Need for (i) a long-term cost-effective strategy for capacity building; (ii) better TA design, supervision, self-evaluation, and record keeping; and (iii) improving government ownership</li> </ul>
<p><b>2. TA 2197: Airports Improvement</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: State Secretariat of Civil Aviation</li> <li>• Amount (JSF): \$500,000</li> <li>• Approval: 3 Nov 1994</li> </ul>	<p>The PPTA was to assist the Government and the State Secretariat of Civil Aviation to identify priority areas for further investment and to prepare one or more projects suitable for ADB assistance. It aimed to determine the feasibility and requirements for upgrading the airports (Siem Reap and Kang Keng).</p> <p>The Project consisted of the following components: (i) civil works for aerodrome, operational buildings, and airport terminal; (ii) equipment for air traffic services, aeronautical communications, and navigational aids; and (iii) consulting services to assist in preconstruction activities, project management, and construction supervision.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul> <p>The intended project outputs were generally achieved at completion period. Following the adoption of the Open Sky Policy in 1999 allowing the landing and departure of international flights at Siem Reap Airport, the Government requested ADB to change the terminal design from a domestic airport to an international airport in late 2000.</p> <ul style="list-style-type: none"> <li>• <i>Resulting Loan</i>: Loan 1503-CAM: Siem Reap Airport (approved on 12 Dec 1996)</li> </ul>

TA Identification	Project Description	Assessment/Status
<p><b>3. TA 2416: Developing a Planning Capability in the Ministry of Public Works and Transport</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (JSF): \$800,000</li> <li>• Approved: 2 Oct 1995</li> <li>• TPAR: IN.181-01 (7Sep 2001)</li> </ul>	<p>The TA's principal objectives were to: (i) establish a transport planning unit (TPU) within MPWT, and (ii) train the TPU staff to be able to maintain the unit on a self-sustaining basis once the TA has been completed.</p> <p>The newly established TPU would perform a series of core functions in the areas of transport sector policies, medium- and long-term traffic forecasting, preparing and reviewing investment programs, setting up and maintaining central transport databases, and helping prepare and monitor major externally assisted projects.</p> <p>Additional tasks under the TA included analyzing the functions and efficiency of the structure and operations of MPWT, and making necessary recommendations.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> <li>• The main service provided was the conduct of a formal training program for the newly established Planning Department (referred to as TPU in the TA report) of MPWT, which included 18 courses on subjects related to transport planning.</li> <li>• <i>2001 TPAR Rating and Assessment</i>: Partly successful - TA accomplished its training program but achieved little in terms of improving MPWT's institutional efficiency, and had low cost effectiveness.</li> <li>• <i>Lessons learned</i>. The need for -- <ul style="list-style-type: none"> <li>(i) <i>a long-term cost-effective strategy for capacity building</i> - The training of six MPWT planning staff members at \$500,000 was not cost-effective nor sustainable way to achieve institutional strengthening. A more cost-effective approach would have been to "train the trainers" by involving existing research institutes and universities.</li> <li>(ii) <i>better TA design, supervision, self-evaluation, and record keeping</i> - low cost-effectiveness of the TA was largely due to poor design of training approach ; and</li> <li>(iii) <i>improving government ownership</i> - TA did not fully achieve objectives due largely to lack of government ownership. Such ownership may be improved through greater involvement of the recipient governments in TA formulation and consultant selection and making strong efforts to identify practical solutions suitable for the needs of developing member countries, which should be tried out on a pilot basis before wide-scale application.</li> </ul> </li> </ul>
<p><b>4. TA 2706: Institutional Strengthening of the State Secretariat of Civil Aviation (SSCA)</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: SSCA</li> <li>• Amount (JSF): \$550,000</li> <li>• Approval: 12 Dec 1996</li> </ul>	<ul style="list-style-type: none"> <li>• The TA was to (i) finance advisory services to assist SSCA, (ii) define the long term role of the organization, and (iii) formulate comprehensive business plans and operational training programs. It was to assist the government to transform SSCA into a viable and market-oriented organization able to cope with the demands of growing economic activity.</li> <li>• This TA was attached to Loan 1503 Siem Reap Airport Project.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul>

TA Identification	Project Description	Assessment/Status
<p>5. <b>TA 2722: Transport Network Improvement</b></p> <ul style="list-style-type: none"> <li>• Type : PP</li> <li>• EA: MPWT</li> <li>• Amount (JSF): \$600,000</li> <li>• Approval: 19 Dec 1996</li> </ul>	<p>The TA aimed to: (i) formulate a road improvement project suitable to ADB financing to improve about 280 km of national roads including bridge works; (ii) assess the capability of the domestic private sector in construction works particularly bridge construction; and (iii) conduct training to MPWT staff in project design and contract procurement.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul>
<p>6. <b>TA 2722: Transport Network Improvement (Supplementary)</b></p> <ul style="list-style-type: none"> <li>• Amount (JSF): \$385,000</li> <li>• Approval: 17 Mar 1998</li> </ul>		
<p>7. <b>TA 3164: Project Preparation &amp; Implementation Assistance to the Ministry of Public Works and Transport</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$150,000</li> <li>• Approval: 3 Feb 1999</li> <li>• Closing: 31 Dec 2001</li> </ul>	<p>The TA was to assist the EA in completing resettlement, procurement and legal activities for the Phnom Penh to Ho Chi Minh City Highway Project (Loan 1659). It was also partly to assist MPWT with procurement for the ICB component of the Road Network Improvement Project.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Closed</li> <li>• <i>TPR Rating as of 31 Dec 2002</i> <ul style="list-style-type: none"> <li>○ TA Objective – Unsatisfactory</li> <li>○ Implementation Progress (IP) - Incomplete</li> </ul> </li> </ul>
<p>8. <b>TA 3257: Strengthening the Maintenance Planning and Management Capabilities at Ministry of Public Works and Transport</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (JSF): \$735,000</li> <li>• Approval: 21 Sep 1999</li> <li>• Closing: 31 Jan 2004</li> <li>• TCR: IN.358-03 (24 Dec 2003)</li> </ul>	<p>The objective of the TA was to strengthen the capabilities of MPWT to plan, manage, and implement the maintenance that was necessary to protect the investments that were being made to restore the road system.</p> <p>The scope of the TA included: (i) reviewing MPWT's present capacity for the planning, management, and implementation of road, bridge, and plant maintenance; (ii) advising MPWT on appropriate criteria for determining priorities for maintenance and allocating available resources to those priorities; and (iii) assisting MPWT in implementing the proposed Road Maintenance Fund.</p> <p>This TA was attached to the Primary Road Restoration Project (Loan 1697-CAM).</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Completed on 1 August 2002</li> <li>• <i>TCR Rating (Dec 2003): Highly successful</i> (Highly relevant, Efficacious, Efficient, High sustainability) <ul style="list-style-type: none"> <li>○ TA was in line with needs for road maintenance and repairs in Cambodia.</li> <li>○ Major outputs were incorporated into the GMS: Cambodia Road Improvement Project.</li> <li>○ TA provided tangible and beneficial outputs to MPWT and provincial Public Works Department.</li> </ul> </li> </ul> <p><i>Lessons learned.</i> One of the major reasons for the success of the Project was the use of modern technology such as the Global Positioning System (GPS) to measure travel speed on roads and quantify road conditions.</p>

TA Identification	Project Description	Assessment/Status
<p>9. <b>TA 3414: Capacity Building in Public-Private Partnerships for Transport</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$150,000</li> <li>• Approval: 15 March 2000</li> <li>• Closing:</li> </ul>	<p>The objective of the TA was to assist the Government in developing a policy on public-private partnerships (PPPs) for transport, including strategies and models with bidding processes to establish such PPPs.</p> <p>The TA involved (i) documentation of PPPs and pilot cases, and (ii) a series of workshops for PPPs for senior Government officials, selected staff of MPWT, SSCA, other line ministries and key stakeholders.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Completed</li> </ul>
<p>10. <b>TA 3651: Transport Sector Strategy</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (JSF): \$850,000</li> <li>• Approval: 27 Apr 2001</li> <li>• Closing: 31 July 2004</li> <li>• TCR: IN.279-04 (12 Nov 2004)</li> </ul>	<p>The objective of the ADTA was to assist the Government in formulating a comprehensive and integrated transport sector strategy for the development of an efficient national transport system in of support poverty reduction and national economic growth.</p> <p>The work included (i) review of the transport sector; (ii) identification of policy and institutional reform issues; (iii) development of sector reform strategies; (iv) assessment of private sector participation potential and policies, and strategies for road maintenance; (iii) formulation of a strategic investment plan; and (iv) capacity building to assist Government officials and service operators.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Completed on 30 January 2004</li> <li>• <i>TCR Rating</i> (Nov 2004): <i>Successful and Sustainable</i> <ul style="list-style-type: none"> <li>○ The ADTA provided (i) a strategic vision for the development of the transport subsectors in institutional, regulatory, and legal terms; (ii) a sound plan for the integrated development of institutions, infrastructure, and services; (iii) clear guidance on what was required to optimally involve the private sector in the provision of transport services and infrastructure; and (iv) guidance for future external financing and Government sector funding over the coming 15 years.</li> <li>○ Following the ADTA, the EA initiated a process of national policy formulation based on the strategy study.</li> </ul> </li> <li>• <i>Lessons learned.</i> The project illustrated the value of close liaison with the EA and other stakeholders to foster ownership that enabled effective dissemination and application of TA outputs.</li> </ul>
<p>11. <b>TA 3852: Economic Analysis for the GMS Cambodia Road Improvement Project</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$150,000</li> <li>• Approval: 4 April 2002</li> </ul>	<p>The TA was an economic analysis of the GMS: Cambodia Road Improvement Project in order to: (i) confirm the economic feasibility of the proposed project based on updated traffic forecast, and (ii) review design parameters adopted in the earlier studies and prepare recommendations for their modification as required. It was intended to confirm the findings of an earlier feasibility study undertaken under TA 5535 (REG) -Promoting Subregional Cooperation among Cambodia, PRC, Lao PDR, Myanmar, Thailand, and Viet Nam – Phase II approved on 10 June 1993.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Completed</li> <li>• Resulting loan was Loan 1945-CAM: Cambodia Road Improvement approved on 26 November 2002 for \$50 million.</li> </ul>

TA Identification	Project Description	Assessment/Status
<p><b>12. TA 3854: Environmental Assessment for the GMS Cambodia Road Improvement Project</b></p> <ul style="list-style-type: none"> <li>• Type : PP</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$60,000</li> <li>• Approval: 11 Apr 2002</li> </ul>	<p>The TA was for the conduct of environmental examination of the proposed Cambodia Road Improvement Project (Loan 1945). It was also intended to confirm the findings of an earlier feasibility study undertaken under TA 5535.</p> <p>The expected outputs of the TA were (i) an initial environmental examination (IEE) report and (ii) a summary IEE.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul>
<p><b>13. TA 3855: Resettlement Study and Social Impact Assessment for the GMS Cambodia Road Improvement Project</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$150,000</li> <li>• Approval: 11 Apr 2002</li> </ul>	<p>The TA was to: (i) analyze the overall development impact of the proposed Cambodia Road Improvement Project (Loan 1945), particularly its impact on poverty reduction and (ii) examine the constraints that will keep the poor and vulnerable groups from benefiting from socio-economic growth resulting from the proposed Project.</p> <p>Target outputs included: (i) socio-economic profile of project beneficiaries, (ii) social impact assessment in accordance with ADB guidelines, (iii) a resettlement plan prepared in accordance with ADB's Policy on Involuntary Resettlement, and (iv) measures recommended for mitigating social risks.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul>
<p><b>14. TA 3868: Engineering Design Update for the GMS: Cambodia Road Improvement Project</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: MPWT</li> <li>• Amount (TASF): \$400,000</li> <li>• Approval: 21 May 2002</li> </ul>	<p>The purpose of the TA was to update the existing design of the GMS: Cambodia to Road Improvement Project to assure compliance with ADB's policies and to facilitate rapid deployment of the Project upon loan approval.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> - Completed</li> </ul>
<p><b>15. TA 4645: Restructuring of the Railway in Cambodia</b></p> <ul style="list-style-type: none"> <li>• Type: AD</li> <li>• EA: MPWT</li> <li>• Amount (France): \$1,500,000</li> <li>• Approval: 14 Sep 2005</li> </ul>	<p>TA objectives: (i) Increase the efficiency of the transport sector at large by increasing the competitiveness of the railway, (ii) Secure long-term sustainability of the railway sector, and (iii) rRduce road damage and road traffic risks associated with the movement of heavy and dangerous goods.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Ongoing</li> <li>• <i>TPR Rating as of 31 August 2009</i> <ul style="list-style-type: none"> <li>○ TA Objective – Satisfactory</li> <li>○ IP - Satisfactory</li> </ul> </li> </ul>
<p><b>16. TA 4645: Restructuring of the Railway in Cambodia (Supplementary)</b></p> <ul style="list-style-type: none"> <li>• Amount (TASF): \$250,000</li> <li>• Approval: 25 May 2007</li> <li>• Closing: 30 Jun 2009</li> </ul>	<p>The TA planned to restructure the railway in Cambodia and rehabilitate the railway's infrastructure and connect it to the railway in Thailand and the container port in Sihanoukville.</p>	

TA Identification	Project Description	Assessment/Status
<p><b>17. TA 4691: Transport Infrastructure Development and Maintenance</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: MPWT</li> <li>• Amount (JSF): \$1,000,000</li> <li>• Approval: 14 Nov 2005</li> <li>• Closing: 28 Feb 2009</li> </ul>	<p>TA objectives: (i) provide reliable all-year road access from provincial towns and rural areas to markets, employment, and social services such as advanced health and education facilities; (ii) provide access from the outside world to historical and natural sites that can lead to the development of the tourism industry; and (iii) increase the efficiency of the transport sector by enabling more direct routes to international border crossings and thus facilitate bilateral trade.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Ongoing</li> <li>• <i>TPR Rating as of 31 Dec 2008</i> <ul style="list-style-type: none"> <li>○ TA Objective – Satisfactory</li> <li>○ IP - Satisfactory</li> </ul> </li> </ul>
<p><b>18. TA 7199: Provincial/Rural Road Asset Management</b></p> <ul style="list-style-type: none"> <li>• Type: PP</li> <li>• EA: MRD</li> <li>• Amount (JSF): \$500,000</li> <li>• Approval: 10 Dec 2008</li> <li>• Closing: 30 Sep 2009</li> </ul>	<p>The PPTA aimed to (i) design a project to rehabilitate about 500 km of the rural road network in Cambodia; (ii) strengthen MRD's capacity for road maintenance planning, management and monitoring, and (iii) ensure funding for road maintenance, disaster mitigation, and over-loading control.</p>	<ul style="list-style-type: none"> <li>• <i>Status</i> – Ongoing</li> <li>• <i>TPR Rating as of 31 August 2009</i> <ul style="list-style-type: none"> <li>○ TA Objective – Satisfactory</li> <li>○ IP - Satisfactory</li> </ul> </li> </ul>

\$M = Million US dollars, AD = Advisory and Operations, ADF = Asian Development Fund, CAM = Cambodia, CBTA = cross border transport agreement, EA = Executing Agency, EIRR = economic internal rate of return, GCF = Governance Cooperation Fund, GMS = Greater Mekong Subregion, IP = Implementation progress, JSF = Japan Special Fund, km = kilometer, MPWT = Ministry of Public Works and Transportation, MRD = Ministry of Rural Development, PPR = project performance report, PPAR = project performance audit report, PPP = public-private partnership, PPTA = project preparatory technical assistance, RRP = report and recommendation of the President, SAPE = sector assistance performance evaluation, SSTA = small scale technical assistance, TA = technical assistance, TASF = technical assistance support fund, TCR = technical assistance completion report, TOR = terms of reference, TPR = technical assistance performance rating, TPAR = technical assistance performance audit report

Source: Asian Development Bank Loan, Grant and TA documents, ADB database

**Table A5.1: EXTERNAL ASSISTANCE TO THE TRANSPORT SECTOR IN CAMBODIA**

Donor/Funding Agency	Development Objectives	Projects/Activities
<p>1. World Bank (WB) Group</p>	<p>Since 1992, WB has provided the country with technical expertise, more than \$645.2 million in loans and grants, and about \$90 million in trust funds to support efforts to reduce poverty and promote economic growth. It has contributed to the building or rebuilding of rural roads (a major strategic development priority of the Government), and helped establish guidelines for future transport sector reform through the Road Rehabilitation Project. A transport strategy adopted in 2002 provided some clarification regarding management roles for national, provincial, and rural roads. This has enhanced coordination between the relevant government ministries although the role of the military in road rehabilitation activities remains a contentious issue.</p> <p>Under the WB's current country strategy, its transport sector operations are framed within the parameters of a roads sector-wide approach (SWAp), and are expected to contribute to government-led and ADB-supported development of a coherent transport strategy, medium-term investment and maintenance programs, and sustainable road maintenance funding. Lending complements the activities of other funding agencies and focuses on secondary, tertiary and rural community roads.</p>	<p>Emergency Flood Repair (\$50M), 2002-2003                      Road Rehabilitation (\$50M), 2002-2004                      Road Maintenance ((\$30M), 2009-2013</p>
<p>2. United Nations Development Programme (UNDP)</p>	<p>UNDP supports government and communities to further their own solutions to the challenges of development. In Cambodia, UNDP's overarching aim is supporting progress towards the country's Millennium Development Goals. In particular, UNDP supports Cambodia in achieving a number of priority goals and targets of the National Strategic Development Plan (NSDP) in the fields of governance reforms, political processes (support to the National Election Commission and the Parliament), gender equity, environmental sustainability and rural energy, de-mining, and private sector development.</p>	<p>Transport Rehabilitation Study (\$1.3M), 1993                      Emergency Flood Repair (\$0.4M), 1992-1993</p> <p><i>No ongoing transport projects</i></p>
<p>3. OPEC Fund for International Development (OFID)</p>	<p>OFID's key aim is to foster social and economic progress in the developing world through the provision of concessional financing for developing countries. It promotes cooperation in many spheres among countries of the developing world.</p> <p>OFID provides financial assistance through public sector loans for development projects and programs, balance of payments support and debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative;</p>	<p>Railway Rehabilitation (\$13M), 2007-2011</p> <ul style="list-style-type: none"> <li>• rehabilitation of the Northern and Southern railways lines, 335 km and 254 km respectively;</li> <li>• reconstruction of a 48-km stretch linking the Northern Line to the Thai border; and</li> <li>• capacity strengthening of the network operator</li> </ul>

Donor/Funding Agency	Development Objectives	Projects/Activities
	<p>trade financing; and support to private enterprises.</p> <p>In the transport sector it has co-financed (with ADB) a railway rehabilitation project, which aims to upgrade worn structures of the country's 642 km-long railway.</p>	Royal Cambodian Railways
<p>4. Japan International Cooperation Agency (JICA)/ Japan Bank for International Cooperation (JBIC)</p>	<p>Japan's Official Development Assistance (ODA) to Cambodia has the following development priorities: (i) establish good governance, (ii) develop human resources, (iii) promote agriculture and rural development, (iv) conserve environment and natural resources and restore and preserve the country's cultural heritage, and (v) expand the size of the economy and create job opportunities. Attention was also paid to the need to foster Cambodia's self-reliance in the Mekong river basin and ASEAN region and to support Cambodia's development plans in line with the Millennium Development Goals (MDGs) development strategy.</p> <ul style="list-style-type: none"> <li>• Priority areas <ul style="list-style-type: none"> <li>○ Good governance</li> <li>○ Improvement of conditions for economic growth</li> <li>○ Improvement of social and economic infrastructure</li> <li>○ Health sector development</li> <li>○ Education sector development</li> <li>○ Agricultural and rural development</li> <li>○ Mine actions and support for persons with disabilities</li> <li>○ Environmental resource management</li> </ul> </li> </ul> <p>JBIC is encouraging improvements in the region's investment climate through a two-pronged approach: (i) support for infrastructural developments that are key to economic growth, and (ii) support for policy and institutional reforms.</p>	<p>Road Reconstruction (\$109M), 1994–1999  Bridge Construction (\$53.2), 1998–2001  Road Improvement (\$10.4M), 2001–2002  Bridge Reconstruction (\$11.3M), 2001–2002  Road Improvement (\$15.4M), 2001–2003  Port Modernization (n.a.), 2001–2007  Road Rehabilitation (\$15M), 2002–2003  Road Improvement (\$42.1M), 2005–2009  Bridge Rehabilitation (\$6.6M), 2005–2006  Bridge Construction (n.a.), 2009–2012</p> <p><i>Sihanoukville Port Special Economic Zone Development Project.</i> In March 2006, JBIC provided an ODA loan of approximately 300 million yen for a comprehensive design project for a new special economic zone with an area of about 70 hectares at Sihanoukville Port, and also to support corresponding legislative reform measures. The port, Cambodia's only international marine gateway, was developed with ODA loan support.</p>
<p>5. Australia/Australian Agency for International Development (AusAID)</p>	<p>AusAID's assistance to the region focuses on improving government service delivery, supporting peace, justice and security, promoting regional and international economic integration, rural development, clean water and sanitation, and addressing transboundary threats. Over the last decade Australia's assistance has shifted in focus from emergency assistance to longer term development.</p> <p>The goal for the Cambodia Australia Development Cooperation Program is: to advance Australia's national interest through contributing to poverty reduction and sustainable development in Cambodia. AusAID Cambodia program's objectives are: (i) to increase productivity and incomes of the rural poor (with a focus on market-based agricultural development); (ii)</p>	<p>Bridge Reconstruction (\$9M), 1992–1996  Primary Roads Restoration (n.a.), 1999  Road Maintenance ((\$4.8M), 2009–2013</p>

Donor/Funding Agency	Development Objectives	Projects/Activities
	reduce vulnerability of the poor (through food security, mine action and disaster preparedness activities); and (iii) strengthen rule of law (targeting the criminal justice system, democratic participation, electoral processes and financial management).	
6. Danish Government International Development Aid (DANIDA)	<p>Poverty reduction remains the fundamental challenge for Danish development cooperation. Danish development assistance is focused on five areas:</p> <ul style="list-style-type: none"> <li>▪ social and economic development</li> <li>▪ human rights, democratisation and good governance</li> <li>▪ stability, security and the fight against terrorism</li> <li>▪ refugees, humanitarian assistance and regions of origin</li> <li>▪ environment</li> </ul>	<p>Ferry Rehabilitation (\$2.5M), 1995-1999</p> <p><i>No ongoing transport projects</i></p>
7. Swedish International Development Cooperation Agency (Sida)	<p>Sida is one of the largest aid agencies in Cambodia. Swedish aid in Cambodia aims to contribute to the country's efforts to reduce poverty. The current cooperation agreement between Sweden and Cambodia is focused primarily on support to education and rural development, and democracy and human rights. Environmental aspects, as well as gender equality and HIV/AIDS are considered in all initiatives.</p> <p>Cambodia receives assistance through many of the regional projects to which Sida contributes such as those relating to the environment, narcotics, private sector development, and small and medium-sized businesses.</p>	<p>Transport Rehabilitation Study (\$1.3M), 1993</p> <p>Road Rehabilitation (\$5M), 1993-1997</p> <p><i>No ongoing transport projects</i></p>
8. United States Agency for International Development (USAID)	USAID's objectives in Cambodia are to combat corruption; strengthen key political rights and civil liberties; improve private sector competitiveness and the business enabling environment to attract investment and create jobs; strengthen national health systems and improve the health of Cambodians; and improve basic education.	<p>Road Reconstruction (\$30.6M), 1994-1996</p> <p><i>No ongoing transport projects</i></p>
9. German Development Bank (KfW)		Tertiary Rural Infrastructure Programme (TRIP) Phases I,II,III,IV(\$25.4M), 1992-2007
10. Thailand		<p>Road Rehabilitation (\$6.4M), 1992-1993</p> <p>Road Reconstruction (\$7.6M), 2002-2004</p> <p>Road Rehabilitation (\$37M), 2005-2009</p> <p>Road Reconstruction (\$28.3M), 2006-2008</p>
11. Viet Nam		Road Rehabilitation (\$26M), 2006-2009

Donor/Funding Agency	Development Objectives	Projects/Activities
12. People's Republic of China (PRC)		Road Rehabilitation (\$65M), 2004–2008 Funding for feasibility study of proposed Phnom Penh to Ho Chi Minh City railway line.
13. Republic of Korea		Road Rehabilitation (\$17M), 2004–2007

n.a. = not available, ASEAN = Association of South East Asian Nations, OPEC = Organization of Petroleum Exporting Countries.

Sources: Various websites – AusAid ([www.ausaid.gov.au](http://www.ausaid.gov.au)), DANIDA ([www.um.dk](http://www.um.dk)), JBIC ([www.jbic.go.jp](http://www.jbic.go.jp)), JICA ([www.jica.go.jp](http://www.jica.go.jp)), SIDA ([www.sida.org](http://www.sida.org)), UNDP ([www.undp.org](http://www.undp.org)), World Bank ([web.worldbank.org](http://web.worldbank.org)), [www.mfaic.gov.kh](http://www.mfaic.gov.kh).

**Table A5.2: Externally Funded Capital Projects in the Transport Sector in Cambodia**

Project Type	Source	Start Year	Completion Year	Value (\$ million)
Road Rehabilitation	Thailand	1992	1993	6.4
Emergency Repair	UNDP	1992	1993	0.4
Bridge Reconstruction	Australia	1992	1996	9.0
Road Rehabilitation	Sida	1993	1997	5.0
Road Reconstruction	USAID	1994	1996	30.6
Road Reconstruction	Japan	1994	1999	109.0
Ferry Rehabilitation	Danida	1995	1999	2.5
Bridge Construction	Japan	1998	2001	53.2
Road Improvement	Japan	2001	2002	10.4
Bridge Reconstruction	Japan	2001	2002	11.3
Road Improvement	Japan	2001	2003	15.4
Port Modernization	Japan	2001	2007	—
Road Rehabilitation	Japan	2002	2003	5.0
Road Rehabilitation	Japan	2002	2003	10.0
Emergency Flood Repair	World Bank	2002	2003	50.0
Road Reconstruction	Thailand	2002	2004	7.6
Road Rehabilitation	World Bank	2002	2004	45.0
Road Rehabilitation	World Bank	2002	2004	5.0
Road Rehabilitation	Korea	2004	2007	17.0
Road Rehabilitation	PRC	2004	2008	65.0
Road Improvement	Japan	2005	2009	42.1
Road Rehabilitation	Thailand	2005	2009	37.0
Bridge Rehabilitation	Japan	2005	2006	6.6
Road Reconstruction	Thailand	2006	2008	28.3
Road Rehabilitation	Viet Nam	2006	2009	26.0
Railway Rehabilitation	OFID	2007	2011	15.0
Bridge Construction	Japan	2009	2012	—
Road Maintenance	IDA	2009	2013	30.00
Road Maintenance	Government of Australia	2009	2013	4.80
			<b>Total</b>	<b>647.60</b>

— = not available; Danida = Danish Government International Development Aid; IDA = International Development Agency (of the World Bank); NR = national road; OFID = OPEC Fund for International Development; PRC = People's Republic of China; Sida = Swedish International Development Cooperation Agency; UNDP = United Nations Development Programme; USAID = United States Agency for International Development.

Source: Asian Development Bank. 2009. *Report and Recommendation of the President to the Board of Directors for a Proposed Loan to the Kingdom of Cambodia: Greater Mekong Subregion (GMS): Cambodia Northwest Provincial Road Improvement Project*. Manila. Draft report dated March 2009.

## MANAGEMENT RESPONSE TO THE SECTOR ASSISTANCE PROGRAM EVALUATION FOR THE TRANSPORT SECTOR IN CAMBODIA

On 21 October 2009, the Director General, Independent Evaluation Department, received the following response from the Managing Director General on behalf of the Management:

### I. General Comments

We appreciate the comprehensive and balanced Sector Assistance Program Evaluation (SAPE) for the Transport Sector in Cambodia. The SAPE provides constructive guidance for prioritizing, designing, and implementing ADB's future technical assistance (TA) and lending operations in the sector. We agree with the SAPE's overall assessment that ADB assistance has been "successful". We also agree with the overall top-down rating as "successful" and the overall bottom-up rating as "partly successful," but at the higher end. The SAPE has identified a number of lessons to be taken into account to ensure the future success and sustainability of ADB's operational programs in the sector.

### II. Specific Comments on Recommendations and Follow-up Action

**Recommendation 1. ADB should engage in further policy dialogue with the Government to expedite the issuance of the Transport Policy, which is expected to contribute to efficiency gains in sector institutions and foster more consistent policies that keep overall economic and social concerns in view.** We agree. This recommendation supports ADB's decade-long efforts to engage the Government in policy dialogue to foster a more effective and proactive approach to developing the transport sector. The outcome of this assistance has been a number of important policy and institutional reform initiatives, including: (i) the establishment of an interministerial committee for road maintenance, which has led to a five-fold increase in road maintenance allocations and disbursements over the last 3 years; (ii) strengthening of the Ministry of Public Works and Transport's (MPWT) capacity to manage a contractor-based road maintenance program; (iii) the establishment within MPWT of the National Road Safety Committee, which coordinates and implements much needed road safety initiatives with support from many donors including ADB; and (iv) the successful restructuring of the railway in Cambodia, where a private operator now is committed to a long-term contract for operating and maintaining the railway on commercial terms and conditions.

**Recommendation 2. ADB should continue to pursue private sector involvement in future transport infrastructure investments, including public private partnerships in focus areas.** We agree. Cambodia was an early proponent of private sector involvement in transport, fully deregulating road and inland water traffic in the 1990s, then deregulating domestic and international air traffic, and most recently, privatizing railway maintenance and operations. Cambodia has also experimented with the privatization of road maintenance, starting with the toll-financed maintenance and development concession for National Road 4 between Phnom Penh and Sihanoukville; this concession has largely been successful. Subsequent attempts at developing the toll roads model, however, have not been successful, primarily due to traffic flows that are

insufficient to attract private sector participation. Under an ADB-financed screening study of the highway network, initial results suggest that certain highways are approaching commercially viable traffic levels. Other areas that offer potential for greater private sector involvement are (i) river and sea ports, (ii) the domestic contracting industry for construction and maintenance, and (iii) transport-related services such as road safety and the testing and certification of transport equipment and vehicles. The ongoing Road Asset Management Project, for example, will use private contractors for all civil works, and ADB will expand this assistance, as appropriate, in the coming years.

**Recommendation 3. TAs for capacity development and institutional strengthening should focus on a clear capacity development framework and a long-term perspective with proper sequencing and incentives for capacity retention.** We agree. This recommendation relates to a central issue in ADB's policy dialogue with the Government and specifically the need to transform MPWT from a provider of infrastructure into an efficient and impartial agent for developing and implementing sector-wide strategies, plans and policy reforms. Future programmed capacity development will address the need for an independent regulatory agency in Cambodia to regulate the different providers of transportation services, both public and private. The Government has already decided to establish a new Railway Department within MPWT to manage and regulate the railway and the new railway concession. ADB will assist MPWT in the formation of this Railway Department and help build its capacity to manage the railway concession and eventually assume its longer-term role as regulator for the railway sector. MPWT views the creation of the Railway Department as an important step toward establishing an overarching regulatory authority that would be responsible for all transport modes under MPWT's purview.

## **DEVELOPMENT EFFECTIVENESS COMMITTEE (DEC)**

### **Chair's Summary of the Committee Discussion on 26 October 2009**

#### **COUNTRY ASSISTANCE PROGRAM EVALUATION – CAMBODIA: GROWTH AND SECTOR REFORM**

- a) Sector Assistance Program Evaluation for the Transport Sector in Cambodia – Focusing on Results**
- b) Sector Assistance Program Evaluation for the Agriculture and Rural Development Sector in Cambodia**

1. DEC discussed the country assistance program evaluation (CAPE) for Cambodia and the sector assistance program evaluations (SAPEs) on Asian Development Bank's (ADB's) assistance to the transport sector and the agriculture and rural development sector in Cambodia. Management (represented by Advisor and Head, Regional Cooperation and Integration Group SERD; Country Director, Cambodia Resident Mission; and Officers-in-Charge, SETU and SEAE) acknowledged the findings and overall ratings for the CAPE and the SAPEs, which validate ADB's strategic thrust for Cambodia. The CAPE findings and recommendations would be considered during the preparation of the next country partnership strategy (CPS) for Cambodia.

#### **Aid coordination**

2. DEC members emphasized the importance of effective synergy and coordination among development partners in providing support to Cambodia, recognizing the fragile and challenging environment in the country. Strong partnership and continuous policy dialogue with the Government should also be ensured.

3. Management explained that aid coordination is central to ADB operations in Cambodia, not only as a requirement of Strategy 2020 and Paris Declaration on Aid Effectiveness, but also because of the nature of engagement in Cambodia. Development partners have been satisfied that as a lead development partner, ADB has moved forward the general dialogue with the Government in terms of key strategic and cross-cutting issues, ranging from governance and capacity development to sectoral challenges. Out of nearly 20 sectoral technical working groups for Cambodia, ADB remains active in about two working groups where ADB has core operations, and where ADB has comparative experience, expertise and advantage.

#### **Sector focus**

4. While recognizing that low-income countries like Cambodia at their early stages of development rely heavily on assistance from donors, the Independent Evaluation Department (IED) emphasized the necessity of narrowing the focus of ADB operations in Cambodia in subsectors where it has a comparative advantage and good track record. DEC members supported the recommendation.

5. Recognizing the many opportunities for ADB intervention in the Tonle Sap basin to help improve the conditions of the rural poor, and achieve environmental protection and sustainability, one DEC member supported continuous engagement in various subsectors in the areas of agriculture and rural development. Potential for engagement in the energy sector, particularly,

oil and gas, should also be explored. DEC Chair sought clarification on who could best intervene to address issues of land tenure, which is essential in promoting rural development. In the transport sector, one DEC member encouraged a sharper subsector focus, and noted serious resettlement issues.

6. Management explained the approach that has worked well for Cambodia, wherein ADB would initiate strengthening the sectors through sector development programs (SDPs) and institutional changes. Thereafter, other development partners would come in and contribute. On the potential to engage in the oil and gas sectors, Management explained that future engagements would be on a partnership basis, such as sector-wide approaches (SWAPs). But, it was quite pre-mature to guarantee the potential of this subsector, they added.

7. On resettlement issues, Management informed DEC about the significant amount of technical assistance (TA) efforts, both at the legal and policy areas, and at the implementation end. These included TAs on post-resettlement issues that explore micro-financing of livelihood projects for the affected people. IED staff also advised DEC that coordination between the Ministry of Public Works and Transport and the Inter-ministerial Resettlement Committee had improved in recent years. This augured well for more timely completion of future projects.

8. Management acknowledged land tenure as an important area for rural development, and noted that the World Bank, CIDA, and KfW are actively involved in this area. ADB continues to have close association with their programs and is also engaged in dialogue with the development partners.

### **Evaluation Methodology**

9. One DEC member suggested a differentiated approach rather than a standardized evaluation framework. Country context is important in looking at the challenges, economic, social and political conditions, and potential and prospects for growth. IED explained that CAPEs focus on the evaluation of ADB's performance in a country, based on what the strategy and projects aimed to achieve. A country's context should be taken into consideration during project formulation.

### **Private Sector Development**

10. DEC noted the recommendation to explore OCR financing for private sector operations. DEC Chair sought clarification about Cambodia's budget legislation that does not allow public borrowing at commercial rates. Management explained that the Government has been very careful with respect to contingent liabilities in the form of guarantees for private sector operations. This prompts the need to have public investment projects to nurture private sector investment. Public-private partnerships tailored specifically for Cambodia would not only address this, but also the limited capacity for project maintenance.

### **Portfolio Management**

11. DEC noted the evaluation findings on project implementation delays. IED recognized that this issue was a Bank-wide problem. However, it was noted that for Cambodia, some indicators such as disbursement ratio had improved, and the proportion of project-at-risk has been lower than the average for ADB. Management noted that, following persistent efforts across very challenging sectors to increase the disbursement ratio, ADB has had very good results as compared to the World Bank.

## **Conclusions**

12. DEC expressed satisfaction that ADB has made significant contribution to the development of the Cambodian economy during 1998 to 2008. It also noted that portfolio performance has been satisfactory except in energy, agriculture and rural development, where implementation delays were somewhat large.

13. Members expressed the view that given the limitation of resources and expertise, for better effectiveness ADB should focus on fewer subsectors, possibly those with good track record and prospect for supporting development priorities. This could be duly reflected in the Country Operations Business Plan (COBP) and CPS.

14. Members also emphasized the importance of nurturing private sector-led growth and a sharper focus on maintenance of valuable assets built up with ADB assistance.

**ASHOK K. LAHIRI**

Chair, Development Effectiveness Committee