Chapter 2

Cambodia Country Report

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November 2014

This chapter should be cited as
Sotharith, C. (2014), 'Cambodia Country Report', in Zen, F. and M. Regan (eds.), *Financing ASEAN Connectivity*, ERIA Research Project Report FY2013, No.15.Jakarta: ERIA, pp.63-102.

CHAPTER 2

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Introduction

After years of civil unrest and political isolation, Cambodia is now moving towards a free market economy and peace as a nation, thanks to its efforts on national reconciliation and on political and economic reforms.

After it became the newest ASEAN member in 1999, Cambodia is in the right direction in rebuilding itself. Economic growth averaged about 7 percent per year, and GDP per capita increased about three-folds from US$310 in 2002 to about US$1,000 in 2012.[1]

Higher inflows of foreign direct investment (FDIs) contributed to Cambodia's strong economic growth in 2012. Outcomes exceeded expectations in agriculture, construction, and tourism. Further robust growth is forecasted, with the trajectory expected to steepen slightly in 2014 with recovery in major export markets. Inflation subsided in 2012 and is projected to remain modest through the forecast period. Although poverty has declined, persistently high

[1] Source: Cambodia National Statistics Year Books 2011.

child malnutrition remains a critical development challenge.

Cambodia's gross domestic product (GDP) grew by 7.2 percent in 2012, driven by robust consumption and investment. Consumption expanded by an estimated 9.5 percent and made the biggest contribution to GDP growth from the demand side. Gross fixed investment increased by 30 percent, spurred by a surge in FDI and higher bank lending. However, net exports dragged on GDP growth as they fell, partly reflecting elevated imports needed for power-generation projects. Economic growth is forecasted at 7.2 percent in 2013, and rising further to 7.5 percent next year as recovery in Europe and the United States takes hold (ADB, 2014).

Meanwhile, the ASEAN connectivity becomes key to ASEAN member countries' move towards realizing the ASEAN Economic Community 2015 and beyond. However, the ASEAN still faces several obstacles in all three pillars of connectivity—i.e., physical, institutional, and people-to-people connectivity. Initiatives on attaining physical connectivity are mainly governed by the Master Plan of ASEAN Connectivity (MPAC) document that lists several prioritised projects. Because the progress has not increased in pace, the ASEAN established The ASEAN Connectivity Coordinating Committee (ACCC) in 2011. The ACCC is tasked to coordinate and oversee the effective implementation of the Master Plan.

One of the main problems in the MPAC implementation pertains to financing. One may attribute this to lack of funds, and rightfully so if one is to gauge such from a country’s budget for infrastructure development. However, there are non-dedicated funds that are deemed large enough be used to finance infrastructure. They can also come, for instance, from capital markets, savings, international financial institutions, pension funds, and bonds.

As one of the ASEAN member states, Cambodia has an obligation to support infrastructure development within the ASEAN. This country study aims to assess how Cambodia's fiscal situation and policy, with emphasis on financing infrastructure, can contribute to greater people-to-people connectivity in the ASEAN and beyond.

Current Infrastructure Development Situation

Along with the peace and political stability as well as support from the international community that Cambodia now enjoys, its infrastructure has been growing remarkably. National and provincial roads have been rehabilitated and asphalted, bridges constructed across main rivers and streams, and railways repaired and upgraded. The same development trend has been observed in other infrastructure sectors.

Such development is not without its negative impact as well. The impact may be seen in the increase in road accidents and in overloaded transport vehicles and poorly maintained infrastructure. The government, though, had taken measures to tackle these problems seriously.

To frame its development plan, the Royal Government of Cambodia implemented the second stage of its Rectangular Strategy for Growth, Employment Equity and Efficiency - Phase II (The Strategy). Entitled "Future Rehabilitation and Construction of Physical Infrastructure", the second phase (Figure 2.1) has four components: (1) further rehabilitation and construction of transport infrastructure; (2) water resources and irrigation system management; (3) development of the energy sector; and (4) development of information and communication technology (ICT) (Royal Government of Cambodia, 2008). To implement the strategy, a five-year plan called “National Strategic Development Plan Update 2009-2013" (NSDP) was adopted.

Figure 2.1: Rectangular Strategy-Phase II

As stated in the strategy and plan, the government believes that a functioning physical infrastructure is a pre-requisite for sustained economic development, growth, and poverty reduction. The depth and diversity of the physical infrastructure influences not only the pattern of growth; any lack of it prevents access to health and education, trade liberalisation as well as access to local, regional, and international markets. The government's key physical infrastructure priorities include repair, maintenance and upgrade of the road network from national to rural levels, improved water supply and sanitation, creation of an efficient power sector, rural electrification, and better telecommunications.

Infrastructure in Cambodia is still in its early stage of development because of several challenges: a long protracted war and political strife for about two decades, poor physical infrastructure, inadequate legal framework, lack of a strategic plan, inadequate infrastructure maintenance, and shortage of financial resources.

Cambodia's underdeveloped transport sector, specifically, constrains regional integration as well as regional and global trade, and therefore holds back

economic development and poverty reduction. The strategic challenges in the transport sector pertain to the lack of connectivity to services and markets, resulting in lost economic opportunity; high operating, maintenance, and logistics costs; lack of competitiveness; and unsafe and unsustainable infrastructure (ADB, 2011).

Because of these weaknesses in the transport sector, Cambodia faces difficulties in implementing the various ASEAN agreements and protocols for the sector. The main roads in Cambodia's part of the proposed regional corridors are sub-standard and comprise only of two lanes. The railway system, too, needs more time and funds for upgrade and expansion.

So, too, are the subordinate infrastructure, including rural roads and rural market places, in poor condition. Traffic violations, poor road conditions, and lack of traffic signs all add up to high fatalities in road accidents.

Meanwhile, the electricity supply in most parts of the country is still very expensive, which takes its toll on production for local consumption, import substitution and export.

The Asian Development Bank (ADB) is Cambodia's leading development partner in the transport sector. Others are the Japan International Cooperation Agency (JICA) (for ports, highways, bridges, and technical assistance to the Ministry of Public Works and Transport [MPWT]) and the World Bank (for 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 (for ports, energy, and special economic zones). The Mekong River Commission is driving a program to improve navigation along the Mekong River, which will help modernise inland water transport. The People's Republic of China, Republic of Korea, Thailand, and Viet Nam are all providing assistance to rehabilitate roads, especially those connecting to towns at border areas (ADB, 2009). China is also increasingly providing assistance for highway construction, energy, and currently studying the feasibility of a new railway line from Phnom Penh to Ho Chi Minh City.

1.1. Roads

Figure 2.2 shows the entire road network in Cambodia. Most of the national road networks have been rehabilitated and are now in good condition. In contrast, the provincial and rural road networks are in disrepair due to many years of limited investments and neglect.

By 2013, Cambodia's road network measured approximately 11,618 km, of which only 4,100 km or 35.29 percent was paved (Table 2.1). In addition, there are tertiary roads or rural road network of approximately 33,005 km under the responsibility of the Ministry of Rural Development (MRD).

No divided expressway exists yet in Cambodia. The strategic National Road No. 4 that connects the capital of Phnom Penh to the coastal hub, the Sihanoukville International Port, has adopted the public private partnership (PPP) approach in its Build-Operate-Transfer (BOT) arrangement, with private company AZ Group overseeing the operations and maintenance (CDC, n.d.).

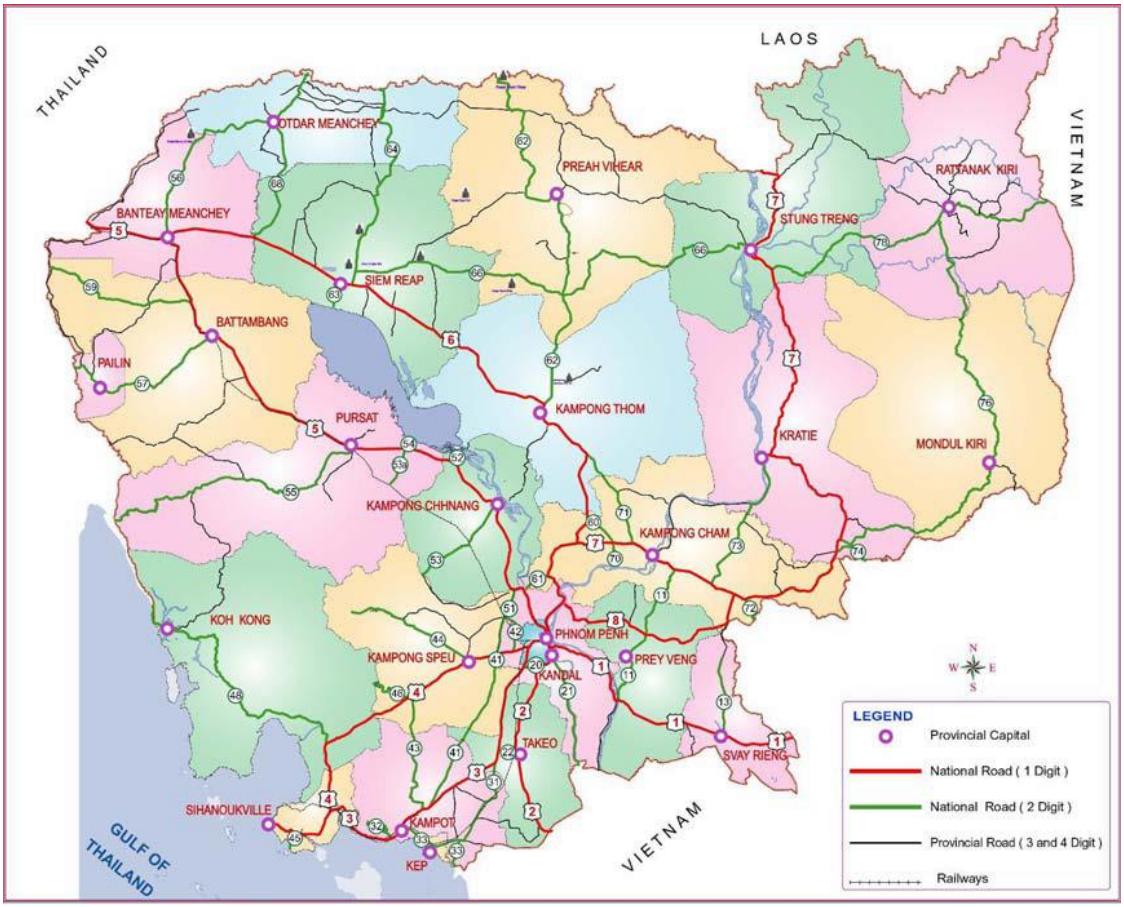
Meanwhile, there are six bridges across the Mekong River. More bridges are planned to be built across the Mekong River, Sab River, Basac River and other streams and other tributaries.

Table 2.1: Planned Transport Indicators

Indicators	Unit	2008	2009	2010	2011	2012	2013
Primary and Secondary Roads	Km	11,494	11,494	11,618	11,618	11,618	11,618
Of which: Paved Road	Km	2,342	2,661	2,781	2,800	3,500	4,100
Railways	Km	650	650	650	650	650	650
International Ports	No.	2	2	2	2	2	2
International Airports	No.	2	2	2	2	2	2
Domestic Airports	No.	9	9	8	8	8	8

Source: NSDP Update 2009-2013.

Figure 2.2: Road Network in Cambodia



Source: IRITWG, 2009.

1.2. Sea Port

Cambodia has only one deep seawater port in Sihanoukville of Peah Sihanouk province. At present, the total operational land area of the Sihanoukville Autonomous Port is around 124.76 ha. The port has expanded steadily and now has 12 berths equipped with modern cargo handling facilities. It has two channels; namely, the South Channel (length 5.5 km, depth 8.4 m, width 80-100 m) and North Channel (length 1 km, depth 10 m, width 150-200 m). Details on the port's current situation are shown in Tables 2.2 to 2.6, and Figures 2.3 and 2.4 (CDC, n.d.).

Table 2.2: Berthing Capacity of Sihanoukville Port

Terminal	Length (m)	Depth (m)	Berths	Use
New Wharf	350	-9.0 (-10.50)	2	Medium size vessels
Container Terminal	400	-10.50 (-11.50)	3	Medium size vessels
General Cargo	290	-8.40	2	Inner berth of old jetty
Passenger Terminal	290	-8.40	2	Outer berth of old jetty
Sokimex	200	-10.00	1	Oil jetty
Pontoon	110	-6.00	1	Oil jetty
Stone Wharf	53	-4.50	1	Oil jetty
Total	220	-7.10	1	Oil jetty

Although the container cargo throughput volume of the Sihanoukville Port increased steadily until 2008, it sharply dropped in 2009 mainly because of the reduced garment export to US and EU markets affected by economic issues from 2008. General cargo throughput also decreased in 2009 due to lesser imported construction materials caused by the sluggish domestic real estate market. The container throughput returned to its growth track when the garments export started increasing in 2010. Similarly, the general cargo throughput sharply increased in 2010 and surpassed the peak volume recorded in 2008. The importation of construction materials surged throughout the year due to various large-scale development projects and factory constructions.

The Sihanoukville Port Special Economic Zone, which occupies 70 ha of the Port Authority's land adjoined to a container terminal of the Sihanoukville Port, was completed at the end of 2011 via Japanese soft loans since October 2009. Investors started building factories within the facility in November 2011.

Six offshore oil fields are either being developed or for development offshore of Sihanoukville Port. With assistance from JICA, a new multi-purpose terminal, which will consist of a supply base for these offshore oil fields and a handling area for heavy materials such as wood chip or coal has now completed

its detailed design. Such terminal is estimated to cost more than US$75 million, financed by the Japanese government, and built inside the port this year (Phnom Penh Post, 2013).

Besides the Sihanoukville Autonomous Port, other smaller ports are Sre Ambel Port, Kampot Port and Oknha Mong Port. Among these, Oknha Mong Port is the hub for imported, smaller general cargoes. Kampot Port is now undergoing expansion, while Kirisakor of Koh Kong has an expansion plan for sugar transportation. There are also plans to develop new ports in Kirisakor of Koh Kong Province (Deep seawater port), Steung Hav of Prea Sihanouk Province (International port), and Kep Province (Tourist port).

Table 2.3: Cargo Handling Facilities of Sihanoukville Port

Type	Capacity	Quantity (Unit)
Mobile Harbour Cranes	60 t	2
Quay Gantry Cranes	30.5 t	2
Rubber Tired Gantry Cranes	35.5 t	5
Trans-tainer Cranes	40.6 t	2
Super Stackers	45 t	8
Empty Stackers	7.5 t	2
Trailers	20’ – 40’	34
Shore Cranes	10t – 50 t	7
Forklifts	3t – 25 t	21
Trucks for General Cargo	10t – 20 t	10

Table 2.4: Storage Facilities of Sihanoukville Port

Terminal	Size (㎡)	Capacity	Quantity
New Container Terminal	64,000	4,560 (TEUs)	1
Laden Container Terminal	35,000	72,200 (TEUs)	1
Empty Container Terminal	46,000	3,000 (TEUs)	1
Warehouse	36,000	70,500 tons	5 blocks
Reefer Container			54 socket

Table 2.5: Cargo Throughput of the Sihanoukville Port

	2006	2007	2008	2009	2010	2011	2012
Total cargo throughput (thousand tons)	1,586.8	1,818.9	2,058.0	1,874.1	2,217.2	2,378.0	2,658.8
Container throughput (TEU)	231,036	253,271	258,775	207,861	222,928	-	
General cargo throughput (thousand tons)	197,573	193,572	291,114	241,494	374,801		

Figure 2.3: Actual and Estimated Number of Containers 2005 - 2013

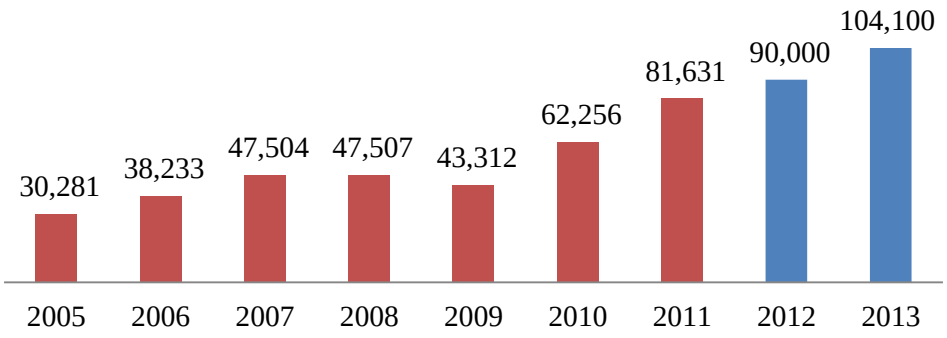
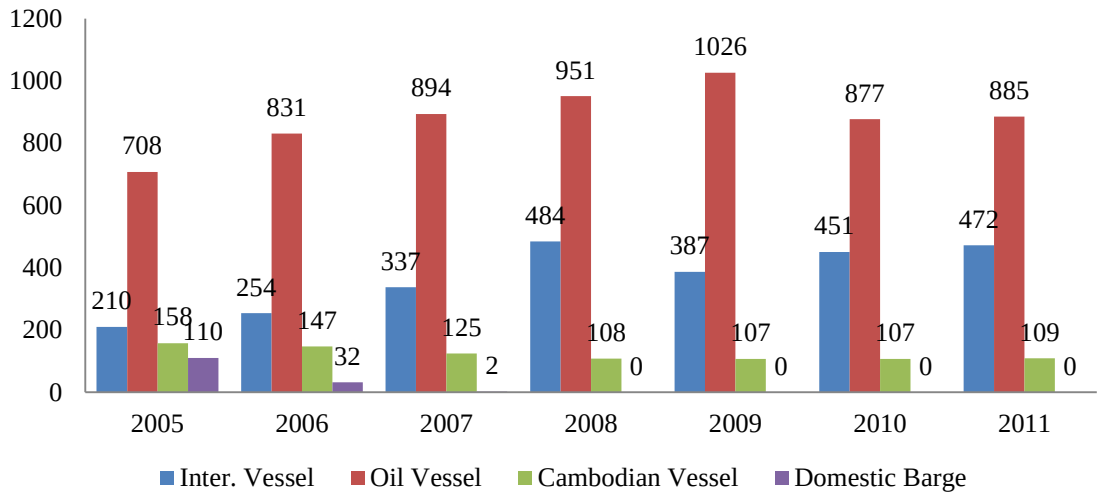


Table 2.6: Ship Calling Status in Sihanoukville Port (2009)

Lines	Frequency	Rotation Ports
MCC & CMA (8 calls/month)	2 calls/week (Thu & Fri)	SGN-SHV-LZP-SGN-HKG-OSA-TYO-YOK-KOB-SGH-YAT-SGN SIN-SHV-TPP-SIN
Cots (2 calls/month)	2 calls/month (Monday)	BKK-SHV-BKK-(LZP)
RCL (12 calls/month)	3 calls/week (Wed., Thu., Fri)	SIN-SHV-SGZ-SIN HKG-SHV-SGZ-HKG-(HPH-TXG-KEL) KUN-SHV-SGZ-SIN-KUN
ITL (ACL) (4 calls/month)	1 call/week (Sat)	SGZ-SHV-SIN-SGZ
APL (4 calls/month)	1 call/week (Fri)	SIN-SHV-SIN
Total		30 calls/month

Figure 2.4: Ship's Movement 2005 – 2010



1.3. Phnom Penh International Port and Inland Ports

The Phnom Penh Autonomous Port (PPAS) is located about 100 km from Kaam Samnar of the Cambodia-Viet Nam border and about 332 km from Cuu Tieu, an entrance mouth to the South China Sea. It has one local terminal that serves as the base for the distribution or collection of goods to/from many provinces. Major ports along the inland water are:

- Stung Treng Port (Stung Treng Province): On the mainstream of the Mekong 128 km up from Kratie Port

- Kratie Port (Kratie Province): On the mainstream of the Mekong 121 km up from Kampong Cham Port

- Tonle Bet Port (Kampong Cham Province): On the mainstream of the Mekong 106 km up from Phnom Penh

- Neak Loeang Port (Prey Veng Province): On the mainstream of the Mekong 60 km down from Phnom Penh Port

- Chong Khneas (Siem Reap Province) Port: On the Tonle Sap River 190 km up from Phsar Krom Port

- Phsar Krom Port (Kampong Chunang): On the Tonle Sap River 100 km up from Phnom Penh Port

Transport by inland waterways vessels through the Mekong River and its tributaries can provide access to markets and other necessary services for those who live in rural areas. Maximum navigable vessel size in the Mekong River basin is shown in Table 2.7. In recent years, however, the inland waterways' transport activities have decreased, except between Phnom Penh and Cai Mep of Viet Nam, as a result of an increase in road transport.

Table 2.7: Maximum Navigable Vessel Size in the Mekong River Basin

	Mekong Mainstream up to Phnom Penh	Tonle Sap, Phnom Penh to Siem Reap
Petroleum	Tanker barges 1,000 DWT/ Draught 4.0 m	
Container	Barges 1,900 DWT (120TEU)/ Draught 3.8 m	
General Cargo	Barges 1,500 DWT/ Draught 4.0 m	
Tourism Cruise Vessels	50-65 passengers Draught 1.5 m	50-65 passengers Draught 1.5 m
Speedboats	25 passengers Shallow Draught	25 passengers Shallow Draught

Source: Infrastructure and Regional Integration Technical Working Group (2010).

The Phnom Penh Autonomous Port (PPAP) accommodated 1,070 vessels (mostly small barges) and handled about 740,000 tons in 2005. Tanker barges

accounted for 65 percent of vessels in Phnom Penh Port. Currently, Phnom Penh Port's cargo handling capacity is 1 million tons of cargo or approximately 50,000 TEUs per year. In 2012, the port accommodated 1,493 vessels and 95,333 TEU compared to 81,631 TEU in 2011. In the first quarter of 2013, the volume of cargo (24,677 TEU) increased 25 percent over the same period in 2011 (18,450 TEU) (DAP News, 2013).

The port also handles international container cargoes. After operation of the Cai Mep deep water port in southern Viet Nam started in June 2009, some exporters from the Phnom Penh area began sending cargoes through the Mekong River to Cai Mep Port, then to the global markets, particularly to Singapore and the United States, as this is said to be cheaper and faster.

To meet the increasing demand, the Phnom Penh Port started on 9 March 2011 the construction of new container dock 30 km east of Phnom Penh, along the Mekong River and the National Road No. 1 in Kien Svay District of Kandal Province. This new container dock covers 10 hectares, can accommodate two 5,000-ton ships to anchor simultaneously and has an annual handling capacity of 120,000 TEUs. The project was financed by the Chinese government, constructed by Shanghai Construction Group and took 30 months to be completed. The new port is now fully operational.

1.4. Railways

The railway network in Cambodia consists of the northern line, southern line, and others lines:

1. *Northern line:* As built, the track on the northern line was laid with 30 kg/m rails on steel sleepers, and except where damage repairs have been carried out, the original track remains. The line has never been renewed and is designed for an axle load limit of only 10 tons. Most of the track is 60 years old or more, with the last 56 at the western end being some 50 years old. There are 167 bridges on the line, of which 46 have suffered mine or other war damage, and received temporary repairs. The speeds are restricted to 5-10 km/h at 30 bridge sites (IRITWG, 2010).

2. *Southern line*: The southern line was built with 43 kg/m rails on untreated wooden sleepers. Because only light traffic is allowed on the line since it was built as well as the weight of the rails, the rails themselves are in very good condition. There are 94 bridges, of which 15 are badly damaged. These have received temporary repairs. The line was built to accommodate axle loads up to 20 tons, but in present conditions a limit of 15 tons is practical.

The Royal Government of Cambodia issued sub-decree No. 163 dated 1 October 2009 to establish the Railway Department and placed it under the supervision and management of the MPWT.

The railway system has since been privatised. Its 30-year concession to manage and upgrade the Royal Cambodian Railways (RCR) was awarded to Toll Holdings, the joint venture between Australia (55% share) and the Royal Group (45%). Revenues are expected to be shared between the government and Toll Holdings once the railways become profitable. Toll Holdings is responsible for upgrading and expanding the network.

Future Development Plan. Cambodia is also considering a supplementary financing arrangement with the ADB and a grant from AusAID, which will fund the construction of a new station in Samrong (9 km from Phnom Penh) and the additional upgrade of the railway system, including the branch line to Green Trade Warehouse (6 km from Phnom Penh) and the northern line. According to the plan, the rehabilitation work will include the following and are to be completed in 2013:

- Update and implementation of the resettlement plan for Samrong (to be completed in mid-2010);
- Design and construction of new freight facility in Samrong (to be completed in March 2013)
- Design and construction of the new spur lines to freight terminals in Phnom Penh (to be completed in March 2013).

Another set of railway lines had also been envisioned:

- Tbaeng Meanchey (Preah Vihear) to Sihanouk Ville (through Kampong Thom, Skun, Batdeung, and Phnom Penh). The primary purpose of this rail is to export mine, particularly iron ore from the mineral rich province of Preah Vihear, to the world through Sihanoukville port.
- Sisophon to Siem Reap. The total length of this line is 105 km.
- Siem Reap to Skun through Kampong Thom, which measures 239 km long.
- Snuol to Lao P.D.R border through Kratie and Thalaborivat (Stung Treng) provinces. Its total length is 273 km.

1.5. Airports

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. At present, Cambodia has 10 airports, including international airports in Phnom Penh, Siem Reap, and Sihanoukville. The Phnom Penh and Siem Reap airports each handles about 1.4 million passengers per year. 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.

Before the wartime (1970-1975), Cambodia had 19 airports, of which 18 served domestic travel. But so far, due to lack of maintenance and investment, most airports had been abandoned. Only three international airports—those in Phnom Penh, Siem Reap and Sihanoukville—are operational. Under a Build-Operate-Transfer (BOT) scheme for operation, management, and development and improvement of airport facilities, all three airports are operated by the private joint enterprise, Cambodia Airports.

Cambodia Airports has the French group's VINCI (70%) and the Malaysian-Cambodian joint venture Muhibbah Masteron Cambodia (30%) as shareholders. This joint venture is now a member of the network of international airports. With its workforce exceeding 1,200, Cambodia Airports is a key contributor to Cambodia’s economic development.

Phnom Penh International Airport has a 3,000-metre runway and is linked to many of Asia's regional hubs and by direct services. Siem Reap Airport has a 2,500-metre runway used both by domestic and international flights and caters more to tourists than cargo deliveries. Meanwhile, Sihanoukville Airport has just upgraded from a domestic to international airport. After all renovation and upgrades are done, it will become the country's biggest airport to transport air cargo and passengers for future development of commercial activities, especially to serve logistic bases and industrialised zones in the coastal areas. With increasing cargo and passenger flights, international airports and warehouses will facilitate transports and trade (Chap, *et al*., 2011). At present, the Sihanoukville airport also operates some domestic flights from Phnom Penh and Siem Reap.

1.6. Waterways

The country has 3,700 kilometres (2,299 miles) of navigable waterways. In fact, it is possible to travel to the famous Angkor Wat complex by jet boats using the Tonle Sap River and the great Tonle Sap Lake. As far as inland waterways are concerned, Kampong Cham is one of the most important centres in Cambodia, as it is situated between two main trading routes: the north-south route along the Mekong (from Lao PDR to the sea), and east-west route between Thailand and Viet Nam (along the historic route via Siem Reap). It is an important centre for rubber plantations.

Much of the transport to and from Phnom Penh is by river. Through licenses and bidding, private sector operators are allowed to run small ports and ferry services along the main rivers and tributaries.

1.7. Energy

From 2008 to 2012, the electricity consumption indicates a two-fold increase from 487,426 to 980,388 households (Table 2.8). Due to the rapid increase in demand, the country has significantly increased its available supply of electricity and expanded its electricity network. To guide the development of the energy sector, the Energy Sector Development Plan 2005-2024 was adopted.

A Rural Electrification Master Plan focusing on the use of renewable energy has also been prepared and is being implemented. Some of the major improvements include:

- A 115 kV-transmission line from the Thai border, to supply electricity to Banteay Mean Chey, Siem Reap, and Battambang Provinces (This has been completed and is fully operational);
- Two 370 KW-microhydro power stations (O Romis and O Mleng) and a reserve;
- Fully operational 300 KW-diesel-powered generator that supplies electricity to the provincial town of Mondulkiri;
- A 230 kV-transmission line (110 km), from Cambodia-Viet Nam to Phnom Penh, and Takeo Sub-station (fully operational since early second quarter of 2009); and
- A 115 kV circuit of 23 km added in Phnom Penh and a sub-station installed in the western part of Phnom Penh in 2009.

As part of the Rural Electrification Policy, the government established the Rural Electrification Funds to promote equity in access to electricity supply services and to encourage the private sector to invest in rural power supply services in a sustainable manner, particularly on new technologies and renewable energy.

Meanwhile, to enhance regional cooperation, Cambodia participates in the implementation of the Greater Mekong Sub-region's (GMS) Power Trade Plan as well as the realisation of the ASEAN Power Grid.

Cambodia has a huge potential for hydro power generation (at about 10,000 MW) but at present, only about 3 percent of the total capacity has been used.

Table 2.8. Energy Statistics in Cambodia

	Unit	2008	2009	2010	2011	2012	2013
Electricity Generated	Million kWh	1,858	1,882	2,488	2,489	2,862	3,292
Household consumers	No.	487,426	560,539	644,621	741,314	852,511	980,388
Per-capita consumption/year	kWhs	139	135	153	174	197	224
Transmission line network (22 kV)	km	1,450	1,595	1,914	2,201	2,531	2,911
Transmission line network (115 kV)	km	323	353	353	476	547.5	547.5
Transmission line network (230 kV)	km	0	100	100	269	1,182	1,407

Source: NSDP Update (2009-2013).

1.8. Telecommunications

Table 2.9 presents the projected state of telecommunications in Cambodia, according to the NSDP Update (2009-2013).

Table 2.9: Telecommunication Statistics in Cambodia

	Unit	2008	2009	2010	2011	2012	2013
Telephones in use (land & mobile)	000's	4,143	6,447	7,100	7,700	8,300	8,900
Internet users	No.	20,108	291,413	350,000	400,000	450,000	500,000
Rate of post service users	%	0.36	0.38	0.4	0.42	0.44	0.46
Clients per station	No.	161,445	163,932	140,968	125,256	111,286	101,147

Source: NSDP Update (2009-2013).

The telecommunications sector in Cambodia is rapidly developing. Although the country has a largely rural population (only 20% live in urban areas), its 15 million inhabitants are pioneers of the mobile web. Recently, Cambodia was recognised as the first country in the world to claim more mobile phones than landlines (Kemp, 2012).

A new infographic report from WeAreSocial reveals that almost one-quarter of the entire nation's internet activity comes from mobile phones. According to the same report, mobile subscribers nearly doubled such that there is now a 131-percent mobile penetration. As for 3G technology, a very encouraging 3.25 million had signed up to the quickest mobile data on offer, which is a solid 16.5 percent of all mobile subscriptions. The number of internet users has leapt by an even more extraordinary 548 percent, as there are now 2.47 million users connected online. This is likely due to seven new internet service providers coming online in 2011 as Cambodia's infrastructure slowly modernises (Millward, 2012).

1.9. Expected Outcomes from the Infrastructure Development

According to a JICA study (2002), Cambodia is expected to obtain the following benefits from infrastructure development:

- Road development will secure year-round access to all isolated areas near the borders with Thailand, Viet Nam, and Lao PDR and strengthen the governance by providing better administrative services to the people. This development will also enhance Cambodia's industrial and economic coordination with other areas in other provinces and neighbouring nations.

- In a 2006 report, JICA calculated the economic effect of road network development in both 2010 and 2020 under the assumption that all road projects were carried out in accordance with the master plan. The resulting economic benefit was US$221 million in 2010 and US$515 million in 2020. The cumulative economic benefit in over 15 years is estimated to be between US$3,800 million and US$4,200 million, and the benefit/cost ratio is 1.62, which is a comparatively good road investment.

- Once all railway and inland waterway problems in Cambodia are completely resolved, the following economic and socio-environmental effects can be anticipated:

  - Lesser damage to or deterioration of paved roads brought by heavyweight vehicles and lower road maintenance cost;

  - Alleviation of traffic congestion of trunk roads;

  - Mitigation of environmental risks (such as air and noise pollution) along trunk roads;

  - Decrease in traffic accidents; and

  - Economic benefits from reduced fuel consumption.

- Infrastructure helps poverty reduction in a number of ways:

  1) Infrastructure strengthens economic growth by increasing employment opportunities, and improving public health and education.

2) It facilitates delivery of a number of basic needs: water for drinking; power for cooking, heating and lighting; telephones to interact with others living in distant locations; and transport, which allows mobility.

3) Adequate rural infrastructure is a *sine qua non* for successful rural transformation and agricultural development. Providing access to these basic services is an important aspect of poverty reduction.

4) Infrastructure plays an equally prominent role in increasing employment and incomes of the poor. Total revenue is higher among those with access to roads than those without. For example, roads and railways increase access to employment, health and education for the poor, who normally live in places far from economic hubs and social facilities.

5) Roads give access to input and output markets, thus lowering costs and enhancing revenue. These also facilitate connectivity to wider employment opportunities in other villages or in urban areas. According to the World Bank report, "Sharing Growth: Equity and Development in Cambodia" (2007), household incomes in villages with an all-weather road connection have typically twice the incomes of villages without a road. Thus, infrastructure development, especially transport development in general and road development in particular, can be highly effective in combating poverty and in reducing inequality in Cambodia.

- Many research studies make it clear that the availability of quality physical infrastructure improves the climate for FDIs as it reduces foreign investors' cost of total investment, thus raising the rate of return. Both the quantity and quality of physical infrastructure are often important considerations in multinational enterprises' choice of FDI locations. Following this logic, it is almost certain that infrastructure development will also “crowd in” domestic private investment. Therefore, the availability of infrastructure is crucial in enabling Cambodia to participate in international trade, especially with neighbouring countries.

- Infrastructure development can also attract a large number of tourists. In particular, tourism is an important sector in Mekong countries. The most obvious and tangible benefits of tourism include income, foreign exchange earnings, tax revenue, and employment generation. Of the Mekong countries,

Cambodia is the most dependent on tourism income, as this is around 12 percent of its GDP (Kaosa-ard, 2006).

Sources of Infrastructure Financing

For its infrastructure development and financing, the government of Cambodia has formulated the five-year National Strategic Development Plan (NSDP), and the rolling three-year Public Investment Plan (PIP). The last NSDP update (covering the years 2009-2013) was approved by the Council of Ministers and adopted by the National Assembly on 31 May 2010. Meanwhile, the PIP 2013-2015 was adopted during the Council of Minister meeting (or cabinet meeting) on 18 January 2013. It does not necessarily have to be approved by the National Assembly.

The regulation instruments on infrastructure financing are:

- NSDP Update 2009-2013
- PIP 2013-2015
- National Budget
- Law on Investment
- Law on Concession
- Law on Appropriation
- Swap arrangements

Meanwhile, the stakeholders or actors in infrastructure financing include:

- Royal Government Agencies: Ministry of Planning (lead), Ministry of Economy and Finance, Supreme National Economic Council (SNEC), Council for Development of Cambodia (CDC), Cambodia Reconstruction and Development Board (CRDB) for public investment, Cambodia Investment Board (CIB) for private investment and PPPs.

- Development Partners (Donors): World Bank, ADB, United Nations agencies, bilateral donors, and others.

1.10. National Budget

Cambodia's national budget in 2012 was 10,767,982 million riels (US$2.62 billion). This was an increase of about 9 percent compared with 2011's US$2.4 billion (Xinhau, 2011). According to the budget rules, the government can borrow up to 700 million SDR (Special Drawing Rights), or US$1.09 billion, in 2012 from foreign countries. Currently, Cambodia's debt to foreign countries is only 29.1 percent of its GDP. In 2011, its GDP was US$11.4 billion.

In 2012, the budget plan mainly focused on general administration, national defence and security, social affairs, and the economic sector.

For 2013, Cambodia's National Assembly approved a budget of US$3.1 billion for government spending, up from the previous year's US$2.6 billion. In the same year's budget, the expected expenses account for 19.8 percent of the country's GDP of about US$15.6 billion. Here, government spending aims to ensure that economic growth is sustained at around 7 percent and poverty is reduced by at least 1 percent a year. According to its Ministry of Economy and Finance’s estimation, Cambodia's per-capita GDP will surpass US$1,000 in 2013, up from US$909 in 2011.

Cambodia's infrastructure financing is also covered by the PIP. Table 2.10 shows the program's projected public investments for 2013-2015.

Table 2.10: Planned Expenditure of the PIP 2013-2015

Expenditures	Million US$
Total planned expenditure in PIP (2013-2015)	**4,938.9**
- Ongoing projects	2,363.1
- Planned Projects	2,575.8
Amount of resources that ministries have reported as committed	**2,732.7**
- By Royal Government of Cambodia	593.9
- By Development partners	2,138.7
- For Ongoing projects: Total commitment	1,989.8
- Royal Government of Cambodia	372.2
- By Development partners	1,617.5
- For planned projects: Total commitments	742.9
- Royal Government of Cambodia	221.6
- By Development partners	521.2
- Additional resources required (in addition to committed funds) for implementing	2,206.2
- Ongoing projects	373.3
- Planned projects	1,832.8

Source: PIP (2013-2015).

1.11. Donors or Development Partners

The government conducts government-donor meetings, which are coordinated by the Cambodia Reconstruction and Development Board (CRDB) every six months to mobilise assistance. At these meetings chaired by the prime minister, government representatives present their real needs by sectors, and donors

pledge assistances according to their areas of interests and/or express their concerns on the cooperation process or project implementation.

The assistance can also be "donor-driven". Here, donors initiate the development projects and feasibility studies themselves and include the projects into the agenda of the donor-government meetings.

Bilateral assistance from neighbouring countries usually served the interests of the partner countries such as in the case of road projects that can connect peoples at border areas and promote cross-border trade.

The PIP preparation is led by the Ministry of Planning, which compiles paper-based submissions or online submission of project proposals and coordinates with various government agencies, where needed.

1.12. Public-Private Partnership (PPP)

In Cambodia, private sector participation is increasingly becoming important in infrastructure development although it is not a new feature. Because of the huge growth in power supply, the government sought more options to finance its infrastructure requirements. It created conditions that encouraged private sector participation and pushed for a transparent competition, offering the best incentives to companies that can provide the most effective-cost and reliable energy.

The mode of participation of private investors, particularly for significant projects, follows the new approach on private investment projects—that is, through a one-stop service provided in a transparent manner. The government has put in place a new legal, institutional and regulatory framework, especially the Investment Law 2003, and gives incentives to investors via the following measures:

- Well organised authorisation system for permits, consents, approvals, and licences;
- Investment in the power sector will be carried out through a competitive procurement processes, particularly in unserved areas;

- A purchasing mechanism that will minimise rural electrification enterprises' costs, especially in isolated areas; and provision of technical assistance and financial incentives to such private rural operators so as to improve their efficiency, quality service, and consumer coverage;

- Ability to realise fair rate-of-return on investment.

The Private Sector Forum, a bi-annual dialog between the government and the private sector, and consisting of seven working groups that include the infrastructure and energy group, has been organised precisely to encourage the private sector's participation in the energy sector.

The Public-Private Infrastructure Advisory Facility, a multi-donor technical assistance managed by the World Bank, also encourages private sector participation in the energy sector based on transparent competition. A sub-decree on procurement was adopted for this purpose, to clarify the rules for private participation, and the roles and responsibilities of public sector, and to establish a transparent and efficient procurement process.

The adoption of the sub-decree can be traced as far back as the early 1990s, where small private operators were involved in the distribution of electricity. Realising that this approach can improve the country’s overall infrastructure facilities, a sub-committee on Private Partnership in Infrastructure (PPI) was created as part of the overall organisational framework of the Private Sector Development Steering Committee in 2006 under the chairmanship of the Ministry of Economy and Finance. Following deliberations, a PPI policy paper was issued describing the PPI policy and its underlying principles; roles and responsibilities of various agencies of the government with respect to PPI projects; and process for identifying and implementing PPI projects. While the policy paper provided a framework and an excellent base for developing the PPP program, it has never been put into operation or adopted as a formal policy.

Notwithstanding this, PPP continues to be given emphasis under the country’s economic development strategy. The current National Strategic Development Plan has clearly identified it as one of the key policy priorities. For Cambodia, PPP is an important method to augment the public sector infrastructure program, both in terms of financing as well as managerial and technical competencies. In the power and telecommunication sectors, private participation has

contributed towards greater efficiency in project development and service delivery. This scenario is unlike the PPP strategy in more developed economies where PPP is seen as an alternative public procurement method. The rationale is obvious. With severely limited public financial resources, the option for the Cambodian government is not determining how projects should be funded but choosing between having the project and not having it at all.

In general, PPP in Cambodia is undertaken as an investment activity under a Qualified Investment Project (QIP)—i.e., an investment project for which a Final Registration Certificate has been issued by the Council for the Development of Cambodia pursuant to the Law on Investment. Public-private partnerships are contractual arrangement between the government and the private sector. Under such arrangements, the private sector agrees to provide infrastructure and related services in exchange for project revenues and government support. Government support will vary for each project, and can range from contingent government obligation guarantees for limited political risks, to direct fiscal offtake obligations under build-operate-transfer (BOT) contracts.

The private sector's participation in infrastructure development via PPP approach also falls under the purview of the Law on Concession (2007). The law lists the following sectors as eligible for concessions:

1) Power generation, transmission and distribution;
2) Road, bridges, rail, airport, seaport and canal transportation facilities;
3) Water supply and treatment;
4) Sewerage and drainage;
5) Irrigation and agriculture-related investment;
6) Solid waste management;
7) Health, education and sport facilities;
8) Oil and gas; and
9) Telecommunication facilities.

Projects that fall under the Law on Concession require approval from the Council of Ministers. The law also states that contracts should be signed within six months from the award date, and the successful bidder has to set up a local special purpose vehicle (SPV) to implement the project. While the necessary approval on technical aspects of project implementation need to be obtained from relevant government agencies, the focal point for project submission is

The Council of Development for Cambodia (CDC). Apart from being the approving authority for fiscal incentives, the CDC is also responsible for reviewing submissions for concession, supervising project preparations and developing capacity within the public sector.

Although the Law on Concession was already enacted by the National Assembly in 2007, its enforcement is pending government's approval on a related draft sub-decree that contains details on how to operationalise such law. Meanwhile, PPP projects are being considered as ordinary private investments, and their approval process is based on prevailing Investment Law. In particular, those with capital expenditures of more than US$50 million require approval from the Council of Ministers, while those between US$2 million and US$50 million have to obtain the approval of the CDC. For projects less than US$2 million, approval is given by the Provincial-Municipal Investment Committee.

Despite the lack of a specific legal framework to support the PPP program in the past, the private sector's participation in infrastructure projects had been quite impressive. This goes to prove that the environment need not have to be completely ideal for the private sector to commit its resources. When there are clear directions on where the country is heading, investors would look at long-term prospects of a venture and may find that a less-than-perfect environment is actually the best time for entry. Hence, over the period 1990 to 2011, 30 PPP projects had been approved for implementation. The large increase occurred after 2006, following signs of a strong uptrend in economic growth (i.e., reaching 13.3% in 2005 from under-7 percent in 2002), political stability and continuing positive investment climate. PPP on energy accounted for 53 percent of the number of projects and 70 percent of the total investment value.

Most project contracts are mainly structured as Build-Operate-Transfer (BOT) arrangements. However, there are many other projects structured differently such as the Operations and Maintenance type or the Build-Operate-Own (BOO) scheme for small operators. So as to make the ventures attractive and financially viable to the private sector, power-sector IPP projects incorporate take-or-pay provisions while the transport sector includes an exclusivity clause in the concession agreement. Among telecommunications PPPs, projects are structured as joint ventures.

One interesting feature of Cambodia's PPP industry is the presence of a

significant number of small PPP operators. These small operators are concentrated in the power and water sectors. Those in the power sector are involved in the generation as well as distribution of power, providing electricity to areas not served by Electricite du Cambodge. They are licensed by provincial authorities.

In the water sector, private operators are licensed by the Ministry of Industry, Mining and Energy - Department of Portable Water Supply and operate under contracts structured as BOT, BOO, leases, or concessions.

Funding of PPP projects are mainly via foreign direct investment (FDI), owners' equity, and user charges and, in the case of small operators of electricity distributors, borrowings from family members. As indicated earlier in this paper, the local banking industry has limited capability to finance small infrastructure projects. Meanwhile, foreign banks operating in Cambodia are focusing their business on existing clients only.

At present, there is no centralised body to provide policy guidance, supervise, manage and promote PPP programs. All these are very much left to individual agencies responsible for specific infrastructure types. Furthermore, projects tend to be issued on a reactive, unsolicited and negotiated basis as this can speed up project execution. Given this situation, it is not clear how the value for money is optimised or, simply put, whether any considerations have been given to it.

However, when viewed from the perspective that PPP is an avenue to address infrastructure deficit in an environment of budgetary constraint, the achievement to date is laudable (See Table 2.11 for Ongoing Transport Sector Capital Investment Projects). This can be attributed to several factors. The first and foremost factor is the positive investment climate, which helped draw foreign investors to participate in the growth and development of the Cambodian economy, including committing their resources to infrastructure development. The country has taken bold steps to liberalise its economy since the mid-1990s and followed that with investment-friendly measures. These factors complemented Cambodia's existing fundamentals such as strategic location, untapped and underutilised manpower resources and political stability.

Second, there is the strong political commitment and support from the highest level of the government towards private participation in infrastructure

development. This can be seen from the fact that important infrastructure projects are deliberated and approved at the Council of Ministers. Once the projects are agreed, the implementation is facilitated by CDC, which reports to the prime ministers.

Third, the untapped power resources and the huge potential demand are strongly attracting investors in the sense that risks on the offtake tend to be manageable. The willingness of the government to share the risk in the form of a take-or-pay provision also contributes towards a successful project execution.

Fourth, the country capitalises on efficiencies and shares the gains from such in terms of lower user charge. The telephony service is perhaps the best example on this. By using mobile phone technologies, investment costs in the telecommunications service are drastically reduced and subsequently make the service more affordable to the general public. On the other hand, one can imagine the implications if the country persists on expanding its fixed landline services. This requires huge financial outlay, but would likely not reach the penetration level seen today. In the case of electricity, tapping the hydro power resources and expanding the transmission network to areas currently served by inefficient private small operators will reduce the tariff substantially and thus, make PPP schemes acceptable to the general public.

Finally, multilateral agencies as well as international non-governmental organisations (NGOs) are willing to commit financial resources as project partners. This gives private corporations greater confidence to participate in infrastructure projects. For private companies, the knowledge they gain about the country from partners such as the ADB is extremely useful and, in fact, far superior than what can be provided by, say, ratings agencies.

Table 2.11: Ongoing Transport Sector Capital Investment Projects

Item	Development Partner	Project	Date		Amount ($ mil.)
			From	To	
Roads					
1	Viet Nam	Improvement of NR78	2007	2009	25.8
2	ROK	Reconstruction of NR3	2008	2011	37
3	JICA	Improvement of NR1	2003	2012	68
4	ADB and OPEC	GMS improvement of NR5 and NR6	2005	2010	77.5
5	PRC	Rehabilitation of NR76	2008	2012	52
6	PRC	Rehabilitation of NR62	2009	2012	52.6
7	PRC	Rehabilitation of NR57	2008	2012	42
8	World Bank	Provincial and Rural Infrastructure Project	2004	2009	16.6
9	Thailand	Rehabilitation of NR67	2007	2010	32.5
10	PRC	Prek Tamak O Raing Ao-Anlung Chey road	2007	2011	77.5
11	ADB	Southern Coastal Corridor Project	2008	2012	18
12	ADB, World Bank Australia	Road Asset Management Project	2008	2013	58.8
13	PRC	Rehabilitation of NR62 and provincial road No. 210	2008	2012	57
14	PRC	Reconstruction of NR78	2008	2011	55
15	Kuwait	Rehabilitation of Thmor Korl-Bavet-Sampov Lun	2010	2012	58.8
16	ADB	Northwest Provincial Road Improvement Project	2009	2012	33
17	RGC	Rehabilitation of NR68	2009	2012	54

18	ROK	NR31, NR33, and Provincial Road N117 Kampot	2009	2012	35
Railways					
1	ADB, Malaysia, OPEC, RGC	Rehabilitation of the railway in Cambodia	2008	2010	73
Major Bridges					
1	JICA	Construction of Neak Loeung Bridge	2011	2015	134
2	PRC	Construction of Prek Tamak Bridge	2007	2010	43.5
3	Viet Nam	Construction of Chrey Thom Bridge	2009	2011	22.7
4	PRC	Construction of Prek Kdam Bridge	2007	2010	29
Shipping Ports					
1	JICA	Sihanoukville port duty free zone, Stage 1 and Stage 2	2006	2012	38
2	JICA	Renovation of Sihanoukville Quay II	2006	2009	40
3	JICA	Sihanoukville east port for offshore petroleum	2009	2015	67
Other					
1	ROK	Siem Reap sewage system	2009	2012	44
2	ADB	GMS Mekong tourism development project	2006	2009	10

Note: ADB = Asian Development Bank, GMS = Greater Mekong Subregion, JICA = Japan International Cooperation Agency, NR = national road, OPEC = Organization of the Petroleum Exporting Countries, PRC = People's Republic of China, ROK = Republic of Korea, RGC = Royal Government of Cambodia.

Source: Ministry of Planning of Cambodia. 2009. Public Investment Programme: 3-Years-Rolling 2010–2012.

1.13. Contribution from People and Community

In Cambodia, ordinary citizens can finance infrastructure projects such as community roads, pagodas, schools, orphanages, health centres and other community assets without wholly using the government's budget. For instance,

50 percent of some of Phnom Penh municipality's urban roads along residential areas were financed by its own people, while the other 50 percent came from the government's budget.

1.14. Others Sources

1.14.1. Domestic Banking Sector

Cambodia has a two-tier banking system consisting of the Central Bank (National Bank of Cambodia); and privately owned commercial banks, specialised banks, microfinance institutions, and a number of NGOs involved in rural credit activities.

The key players in Cambodia's banking sector are the National Bank of Cambodia, 31 commercial banks (consisting of 22 locally incorporated banks and nine foreign bank branches), seven specialised banks including one state bank, two representative offices of foreign commercial banks, 32 microfinance institutions, and 29 NGOs involved in rural credit activities. By December 2011, banks had 1.27 million depositors and lent US$4.07 billion to 294,533 borrowers. In addition, Micro Finance Institutions have US$644 million lent to 1.14 million borrowers, and deposit collections of US$116 million from 242,116 depositors (ABC, 2013).

The banking sector grew significantly in 2011. Total assets increased by 24.39 percent from the previous year, while credit grew by 33 percent, or US$1.08 billion. This credit growth was a result of the 20-percent deposit growth (or US$ 880 million) and 9.85-percent growth (or US$112 million) in the capital base. The level of intermediation increased from 75 percent in 2010 to 83 percent in 2011. Total assets-to-GDP reached 63 percent in 2011, up from 56 percent in 2010. Total credits-to-GDP and total deposits-to-GDP increased from 28 percent to 34 percent; and from 37 percent to 41 percent, respectively, when compared to the previous year (ABC, 2013).

1.14.2. Capital Market

Cambodia established the Security and Exchange Commission of Cambodia (SECC) to oversee its capital market. On 20 November 2006, the government

(represented by the Ministry of Economy and Finance) and the Korea Exchange (KRX) signed a memorandum of understanding (MOU) on "The Development of the Securities Market in Cambodia". On 21 January 2008, the same parties signed another MOU on "The establishment of a Cambodia Securities Exchange in the Kingdom of Cambodia". Later, a joint venture agreement was made on 23 March 2009.

On 23 February 2010, Cambodia Security and Exchange (CSX) was registered as a public enterprise with the government holding the majority share. A year after, it received approval from SECC to operate as market operator, clearing and settlement facility, and depository operator. On 11 July 2011, CSX was inaugurated by Deputy Prime Minister Keat Chhon, Minister of Economy and Finance. Phnom Penh Water Supply Authority became the first domestically listed company on the CSX on 18 April 2012.

At present, the stock exchange in Cambodia is not active due to various issues: Domestic companies hesitate to reveal their financial information; unfavourable rules and regulations exist; potential investors have limited understanding and appreciation of the capital market, etc.

1.14.3. Pension Fund

Cambodia's pension fund remains small due to members' low salary. The fund was prescribed by the Law on Social Security Schemes for Persons as defined in the Labour Law and is managed by the National Social Security Fund (NSSF). At present, this fund is not used for investment purposes but rather deposited in a bank. In the future, it can be used to finance PPP projects.

Issues and Challenges in Infrastructure Development

Infrastructure development in Cambodia faces many challenges:

1) *Lack of Resources.* The government's 2013 budget is only about US$3.1 billion. Because of both the low budget and lack of external financing, infrastructure development is slow in meeting the needs of the people.

2) *Credibility of the Projects.* Most infrastructure projects proceeded despite the poor-quality assessment and feasibility studies, and lack of transparency. In many cases, the project appraisals were done without environment impact assessments and the people's participation. Some of the people were displaced but were not properly compensated or offered resettlement options, thus bringing about numerous protests.

3) *Sustainability of the Projects.* In Cambodia, while project implementation proved to be a success, its sustainability remains a problem. Most infrastructure projects had poor risk management and were not maintained after project completion. Roads and highways eroded quickly due to the overweight transport vehicles and lack of regular maintenance work.

4) *Urban Bias and Regional Gaps.* Since infrastructure investment is heavily focused on urban areas, rural and remote areas are left behind. Such is an example of how a combination of limited resources and poor infrastructure planning impacts rural welfare. For instance, those in rural and remote areas pay double or even triple the price of electricity in the urban areas. Coastal areas, too, still lack roads and other related infrastructure, and hence were left behind in terms of development.

5) *PPP vs Public Goods.* Most Cambodians are still unclear on the benefits of private investment in projects that serve as public goods. They still hold on to the belief that the government should not let the private sector take over projects that serve the public's interest such as highways, airports, and other BOT projects as these would allegedly bring about higher user costs and negatively impact their livelihood.

Conclusions

Physical infrastructure is important in realising both sustainable economic growth and poverty reduction. Though there have been progress for the past 20 years, Cambodia's infrastructure is still in a poor state, which is seen as a major barrier to economic development. The need for better infrastructure and energy to meet the country's demand is very huge and requires substantial investment that may be beyond the government's financing capacity.

Private-Public Participation (PPP) can be one of the best solutions to developing infrastructure given that the country is in dire need of huge investments.

At present, financing the development of infrastructure and other projects through PPP has been initiated and implemented but is still in its early stage. There remains many preliminary work needed such as setting up the institutional and legal framework and ascertaining that the human resource development are done properly, before both the private sector and the public in general can maximise the benefits from PPPs.

Recommendations

1) The government agency or unit responsible for preparing and managing PPP projects should be established in one of the following institutions:

- Ministry of Planning
- Ministry of Economy and Finance
- Council for Development of Cambodia (CDC)
- Office of Council of Ministers (directly under the prime minister).

2) Public-Private Partnerships should be encouraged as these could benefit both the government and the private sector.

3) Areas of focus in infrastructure development through PPPs should include:

- Maintenance and upgrade of infrastructure
- Public consultation and awareness survey

- Resettlement Action Plan (RAP) and Initial Environmental Impact Assessment (IEIA)
- Land issues and de-mining
- Explore additional and innovative methods of financing infrastructure maintenance and development
- Enhance the capability and competency of officers and personnel in agencies that are responsible for overseeing the physical infrastructure projects as well as ascertain that the size of the manpower is adequate.
- Improve regional cooperation and integration
- Formulate and implement a long-term transport and logistic infrastructure development plan with growth poles across the country.

References

Asian Development Bank [ADB] (2009), 'Sector Assistance Program Evaluation on Transport Sector In Cambodia—Focusing On Results'. Asian Development Bank Evaluation Study.

Asian Development Bank [ADB] (2011), *Transport Sector Assessment, Strategy, and Road Map*. Asian Development Bank, September 2011.

Asian Development Bank [ADB] (2014), *Asian Development Outlook 2014 Update*. Manila, at http://www.adb.org/countries/cambodia/economy.

Asian Development Bank [ADB] (2014), 'Economy'. At http://www.adb.org/countries/cambodia/economy. Information sourced from *Asian Development Outlook 2014 Update*. Manila.

Association of Banks in Cambodia [ABC] (2013), http://www.abc.org.kh/abcorg/content/banking-environment. Accessed on 28 July 2013.

Chap, Sotharith, Chheang Vannarith, Inn Tong Ung, and Chhorn Sotheara (2011), 'ERIA Study to Further Improve the ASEAN Economic Community (AEC) Scorecard: Cambodia Country Study'. Jakarta: ERIA.

Council for Development of Cambodia [CDC] (n.d.), at http://www.cambodiainvestment.gov.kh/investors-information/infrastructure/sea-port.html. Accessed on 1 March 2013.

DAP News (2013), 'Cargo in Phnom Penh Port Increased 25% in 1st Quarter

2013', from http://www.dap-news.com. Dated 11 April 2013.

Infrastructure and Regional Integration Technical Working Group [IRITWG] (2009), *Overview on Transport Infrastructure Sectors in the Kingdom of Cambodia.* Infrastructure and Regional Integration Technical Working Group, IRITWG, JICA.

Infrastructure and Regional Integration Technical Working Group [IRITWG] (2010), *Overview on Transport Infrastructure Sectors in the Kingdom of Cambodia*. Infrastructure and Regional Integration Technical Working Group, IRITWG, JICA.Japan International Cooperation Agency [JICA] (2002), 'Country Study for Japan's Official Development Assistance to the Kingdom of Cambodia'. Japan.

Kaosa-ard, Mingsarn (2006), 'Tourism: Blessings for All?', *Journal of GMS Development Studies* (3)1, p. 3.

Kemp, Simon (2012), 'Social, Digital and Mobile in Cambodia'. http://wearesocial.sg/blog/2012/10/social-digital-mobile-cambodia-oct-2012/.

Millward, Steven (2012), 'Cambodia Generates a Quarter of All Web Traffic on Mobiles.' October 30, 2012 from Techinasia website. http://www.techinasia.com/cambodia-internet-users-mobile-web-2012/. (Accessed on 16 July 2013).

National Institute of Statistics (2011), *Cambodia National Statistics Year Book 2011*.

Phnom Penh Post (2013), 'Sihanoukville Port Volume Increases 15 Per Cent', 24 April 2013. From http://www.phnompenhpost.com/2013042465191/Business/sihanoukville-port-volume-increases-15-per-cent.html.

Royal Government of Cambodia (2008), *Rectangular Strategy for Growth, Employment Equity and Efficiency Phase II*.

Royal Government of Cambodia (2010), 'National Strategic Development Plan, NSDP 2009-2013'.

Royal Government of Cambodia (2012), *Public Investment Programme (2013-2015)*.

Royal Government of Cambodia (2013),'Report on Work Progress of Royal Government of Cambodia for 2012'.

World Bank (2007), 'Sharing Growth: Equity and Development in Cambodia'. Report No. 39809-KH at http://siteresources.worldbank.org/INTCAMBODIA/Resources/293755-1181597206916/E&D_Full-Report.pdf.Xinhua (2011),

http://news.xinhuanet.com/english2010/world/2011-11/24/c_131267254.htm. Accessed on 28 May 2013