



Ministry of Public Works and Transport
Waterways Department

Presents

The Current Conditions of Waterway
Systems and Transport-Related Infrastructure in Cambodia

For

"Seminar on the Promotion of the Mekong River Cruise Tourism"

Hotel Pacific Tokyo, 10 September 2010

Prepared by SAR Vutha
Deputy Director

Email: sarvutha@online.com.kh
Website: www.mpwt.gov.kh



Outline

- I- Inland Waterway Transport
- II- River Ports
- III- Maritime and Ports
- IV- Air Transportation
- V- Tourism Destination
- VI- Necessity for Assistance



I- Inland Waterway Transport

I- Inland Waterway Transport

1- Background

Historically, inland water transport (IWT) has been the most reliable and conventional form of transport in Cambodia. Although it was thought before the 1970s that road and rail transport might replace it, it is now clear that IWT still remains the most important traditional and most useful mode of transport.



Short Distance Passenger Boat



I- Inland Waterway Transport (con't)



2- Present State of River Navigation:

Cambodia's navigable inland waterways measure a total length of 1,750km. The Mekong mainstream accounts for 30% of the total, the Tonle Sap River 15%, the Bassac River 5%, and other tributaries 50%. Year-round navigation is possible through 780km long and a third of the width of the river. Inadequate dredging and navigation aids have been impediments to increased use of these waterways.

3- Present State of the Mekong River Navigation:

For the 102 km stretch between Vietnam border and Phnom Penh, the bends of the river prevent the passage of vessels more than 110m long.

- For existing cargo vessel designs this probably means a limitation of about 7,000 dwt. Boats up to 150 ton capacity can be used as far as Kratie. Larger boats can be used at high water. At low water the 600-ton boat can only carry 80 tons to Kratie while the 80- 130 ton boats can usually carry 50-60 tons.

Between Kratie and Stung Treng (120 km) 50-ton boats can pass without difficulty in the rainy season but at low water levels the rocky conditions limit passable to smaller vessels of up to 20 tons. Above Stung Treng to Veunkham just across the Lao border only small boats can pass some 10-15 tons at low water and perhaps 50 tons a high water.

4- Present State of Tonle Sap River and Lake:

On the Tonle Sap river the draft is about 1m in the dry season but can reach up to 4m in the rainy season. There is a water depth of only 0.5m at the entrance to the Great Lake in the dry season.

Some traffic between Phnom Penh and Siem Reap, for example goes by road from Phnom Penh to the Lake and then proceeds by boat at Kampong Chhnang or Battambang provinces. A high water boat up to 150 ton capacity can be used between Phnom Penh and the Lake.

5- Present State of Bassac and Other Navigable Waterways:

The main other waterway of importance for commercial river transport is the Bassac which links Phnom Penh with Chau Doc, the capital of Vietnam's An Giang Province.

This can be used by 100-ton boats and it also has a network of tributaries and canals mostly in Takeo province which can take up to 100 ton boats at high water but loads can be limited to 10 tons at low water.

Most vessels on this network are in the 20-30 ton range and are used for trade between Takeo and the Vietnam delta area.

I- Inland Waterway Transport (con't)

6- Maximum navigable vessel size in the Mekong River basin by section

River	River Section	Length (km)	Year-round navigation possible?	Vessel Size Restriction (DWT)	
				Low Water	Mean-high water
Mekong Mainstream	Golden Triangle - Luang Prabang	362	Yes - but is limited by rocky passages and strong currents		60
	Luang Prabang - Vientiane	425	Yes - but requires small boats and skilled pilots during dry season	15	60
	Vientiane- Savannakhet	459	Yes	200	500
	Savannakhet - Pakse	261	No "high water" only navigation possible	Less than 10	50
	Pakse - Khinak	151	Yes	50	
	Khinak - Veune Kham	14	No - navigation not possible at any time due Khone Falls		
	Veune Kham - Stung Treng	30	Yes - with size limitations at low water	15	50
	Stung Treng - Kratie	128	Yes - with size limitations at low water	20	50
	Kratie - Kampong Cham	121	Yes	80	400
	Kampong Cham – Phnom Penh	106	Yes - navigable by sea-going ships	2,000	
	Phnom Penh- Junction of Vam Nao Pass	154	Yes - navigable by sea-going ships	3,000-4,000	5,000
	Vam Nao pass – South China sea	194	Yes - navigable by sea-going ships	3,000-4,000	3,000- 4,000

I- Inland Waterway Transport (con't)

6-1: Maximum navigable vessel size in the Mekong River basin by section

River	River Section	Length (km)	Year-round navigation possible?	Vessel Size Restriction (DWT)	
				Low Water	Mean-high water
Bassac River	Phnom Penh - Junction of Vam Nao Pass		Yes - but not possible by sea-going ships	20	50
	Vam Nao Pass – South China Sea	188	Yes - navigable sea-going ships	5,000	5,000- 6,000
Tonle Sap River					
	Phnom Penh - 5km South of Kampong Chhnang	94	Yes - navigable by sea-going ships	1,000	2,000
	Kampong Chhnang - Chhnok Trou	46	Yes - with size limitations at low water	20	150
	Chhnok Trou - Chong Kneas	109	Yes - with size limitations at low water	20	150
Mekong Delta Waterways					
	Dense network of man-made canals, natural creeks and tributaries, with a total navigable length of 4785 km	4,785	Yes - Vessel size restrictions within this network vary from 10-300DWT		
	Se-kong - Mekong tributary (Lao PDR and Cambodia)		Yes - this waterway is navigable between the Lao PDR and , providing an alternative international transit corridor to the Mekong which is non-navigable through the Khone Falls		

7- Regulated Waterway in Cambodia

Phnom Penh port is on the Mekong River so access is through the delta in Vietnam and through Ho Chi Minh City.

In regard condition, to get access to the sea, Cambodia has to negotiate with the Vietnamese.

The negotiation on regulated waterways and transit routes started in late 90's and it was on 17th December 2009 that the Agreement had been signed in Phnom Penh.

The critical section for the Mekong route which is preferred by Cambodia is the river mouth with a depth of only 2.4 m during low tide and 4.5 m during the average high tide (allowing vessels up to 2,000 and 4,000 dwt respectively).

I- Inland Waterway Transport (con't)

7-1: Regulated Waterway in Cambodia

'Regulated waterways' means the waterways and stretches of waterways belonging to the Mekong river system within the respective territories of Cambodia and Vietnam, which are listed in the table bellow or any other waterway jointly designated by Cambodia and Vietnam.

'Transit routes' means those parts of the regulated waterways which are open to maritime vessels engaged in transit transportation

Name of Waterway	Starting Point – End Point	Length (km)
Tonle Sap Lake	From Chong Kneas to Kampong Chhnang	152 km
Tonle Sap River	From Kampong Chhnang to Phnom Penh	100 km
Mekong River	From Phnom Penh to Kaom Samnor/Vinh Xuong border gate	102 km
Mekong River	From Kampong Cham to Phnom Penh	106 km



II- River Ports

II- River Ports (con't)

There are seven main river ports located in six provinces such are Kampong Cham , Kratie , Stung Treng , Kampong Chhnang , Battambang , Siem Reap and one domestic port in Phnom Penh Capital City.

II- River Ports



II- River Ports (con't)

More than 3.9 million Cambodians living along the Inland Waterways networks in Cambodia, which consist of 3 main arteries:

a) Mekong River (upstream to Lao P.D.R and down stream to Vietnam,

b) Bassac river (to Vietnam) and

c) Tonle Sap river (Including Tonle Sap great lake to Siem Reap port).

These three major waterway transport lines run across 6 provinces: Phnom Penh, Kampong Cham, Kratie, Stung Treng, Kampong Chhnang, Pursat and Siem Reap.



II- River Ports (con't)

1- *Phnom Penh Autonomous Port (PPAP)*

The Phnom Penh International Port is the country's traditional river port, accessible to vessels from the South China Sea through Vietnam. Phnom Penh port is located in the city, on the Tonle Sap river some 3-4 km from its junction with the Mekong. It is some 330 km from the mouth of the Mekong of which about 102 km is in Cambodia and the rest in Vietnam.

The distance from Singapore is about 1450 km. Vessels of up to 2,000 dwt can use the route without difficulty, and 5,000 dwt boats can pass the entrance to the Mekong (the Main bottleneck) on favorable tides. Regular dredging is necessary at three points in Cambodia for the 5,000 dwt vessels to reach Phnom Penh. The port serves up to 150 ships per year, including 3 Singapore-based cargo vessels which take 10-12 days for the return voyage.



PPAP Facilities



PPAP Container Yard

II- River Ports (con't)

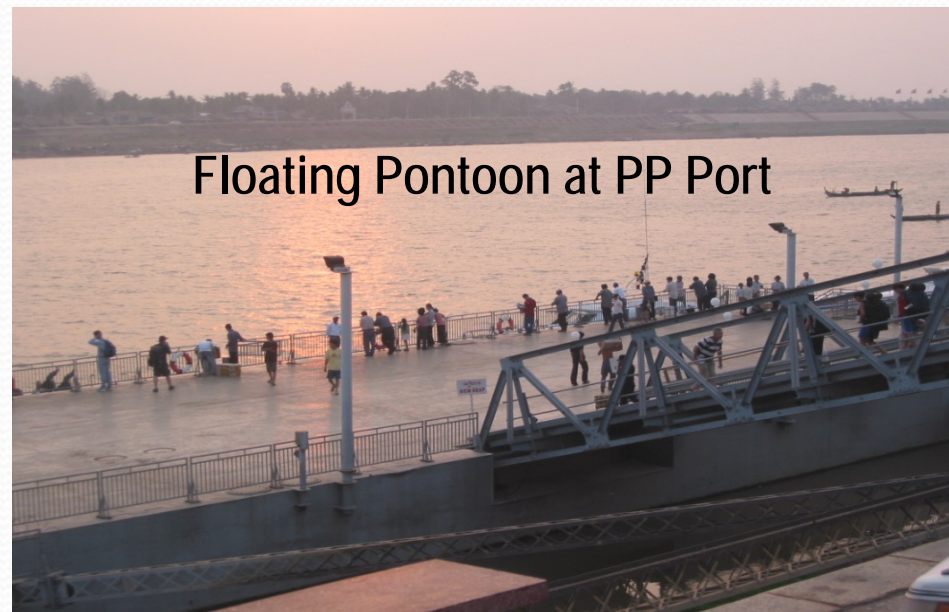
2- Phnom Penh Passenger Port

The most important domestic ports are in Phnom Penh and at Kampong Cham, Kratie and Stung Treng on the Mekong, and Kampong Chhnang, Chhnok Trou, Krakor and Siem Reap on the Tonle Sap river and lake. Thus the Mekong is important both for internal journeys between the provinces and for the distribution of goods via Phnom Penh port. Traffic is transshipped from ocean-going to smaller vessels in Phnom Penh.

Landing Facilities at PP Port



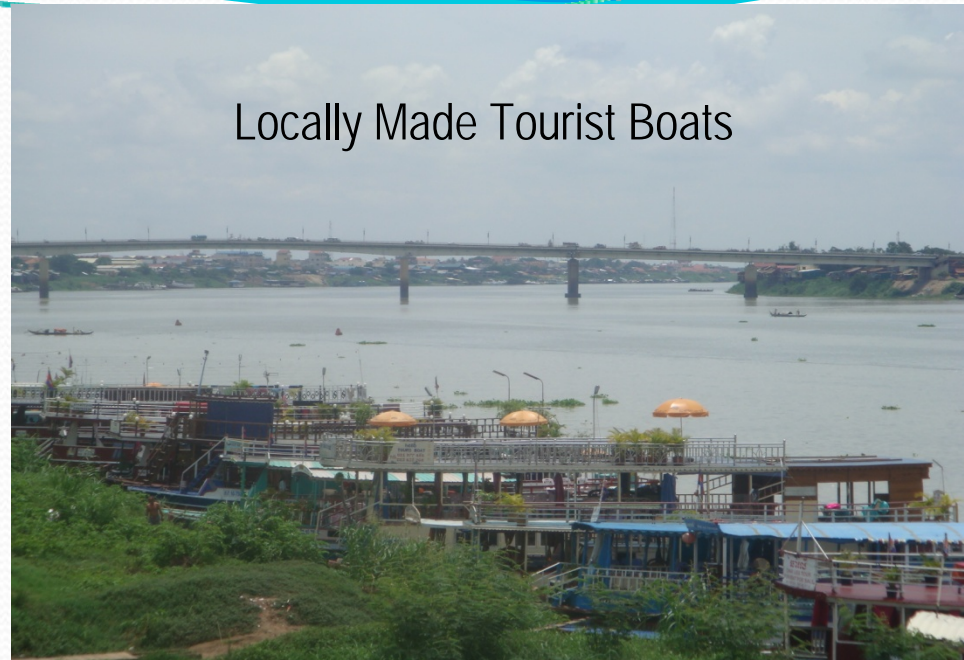
Floating Pontoon at PP Port



II- River Ports (con't)

2-1: Phnom Penh Passenger Port:

There are two domestic ports in Phnom Penh, situated side-by-side at Km 3 north of the city, sandwiched between Road 5 and the Tonle Sap river. The most active and congested area is the northerly one, run by Phnom Penh Municipality. The adjoining southerly site comes under the jurisdiction of the PPAP, under the Ministry of Public Works and Transport. The site is a temporary one, to which the ports were moved in December 1993.



Locally Made Tourist Boats



Locally Made Tourist Boats

II- River Ports (con't)

3- Current Transport Between Phnom Penh Capital City and Provinces

Current IWT usage is of four types:

- Passenger speed boats service between Phnom Penh and Chong Kneas (Siem Reap) Port.
- Cargo boats service operate between the Phnom Penh Domestic Port and provincial ports at Chong Kneas, Kratie and Stung Treng.
- Operation of cargo boats to transport construction materials (mainly bricks) between various locations on the Mekong and Tonle Sap river and Chong Kneas port.
- Operation of barges to transport petroleum from Phnom Penh to Chong Kneas Port.



Passenger Speed Boats



Passenger Terminal at PP Port

4- Kampong Cham Port:

Kampong Cham is one of the most important provinces in Cambodia, situated on a cross-roads of two main trading routes: north-south along the Mekong from Laos to the sea., and east- west between Thailand and Vietnam along the historic route via Siem Reap. It is growing quickly and is an important centre for the rubber plantations. Much of the transport to and from Phnom Penh is by river. Apart from the Road 7 ferry, there is a passenger landing and a 10 m long pontoon for barges up to about 400 ton capacity. During the dry season the pontoon is grounded and the river bank is used.



Abandoned wharf at Kampong Cham, East Bank



II- River Ports (con't)

5- Kratie Port:

Although Road 7 was just rehabilitated back in 2005, most of the current traffic between Phnom Penh and Kratie is carried by river.

Kratie is a provincial capital and another important centre for the rubber trade.

The port has a 35m long pontoon, used only in the rainy season, and a 1,000 sq.m warehouse said to have a capacity up to 5,000 tons.



Kratie Passenger Port



Cargo Port in Kratie

II- River Ports (con't)

6- Stung Treng Port:

Stung Treng is an important regional centre, located where the Sekong joins the Mekong and also with road access both to Laos (Road 7) and Vietnam (Road 78). The Sekong and its tributaries San and Srepok provides the only means of access to large parts of the Stung Treng and Rattanakiri provinces.

Some 130 vessels are registered in Stung Treng including about 50 in the range 10-35 tons.

Although there are some dedicated port facilities such as ramp and jetty sometime the river banks have to be used during the low water season.



Stung Treng Port Landing Facility



Concrete Jetty

II- River Ports (con't)

7- Kampong Chhnang Port:

Kampong Chhnang is on the Tonle Sap River, between Phnom Penh and the Great Lake. It has three ports: Tourist, Passenger and Goods; and fishing port. It is also a market town for a rather large area on both sides of the Tonle Sap river, and lake. Much of the boat traffic transships between road and river, for journeys to/ from Phnom Penh. The port facilities are congested, with a large adjacent market area, and the whole area needs improvement and paving. At present, however, the function of the port is more of a provincial one than a national one, as larger vessels cannot enter the lake at low water.



Passenger landing Facility



Kampong Chhnang Port Area

8- Pursat Port:

It has a fishing port at Krakor, which is an important site at the south-east corner of the Tonle Sap Lake. It is important for fishing but also as transshipment point between boats and road transport for journeys between Siem Reap and Phnom Penh. Unlike Tonle sap river the lake is navigable the whole year and is used both for passenger and goods traffic. Most of this traffic uses Road 5 to and from Phnom Penh.



II- River Ports (con't)

9- Siem Reap Port:

The port for Siem Reap is located about 15 km from the city . Large goods vessels and passenger speed boats can only be used at high water. During the dry season the water level may be as much as 10 m lower and up to 11 km from the port. There, goods and passengers have to transfer to smaller vessels or speed boats that can reach to the newly built port.

The port is mainly used for passenger traffic to/from Phnom Penh either directly via the Tonle Sap River or with transshipment in Krakor or in Chhnok Trou in the southern end of the lake. Some 12 passenger vessels also ply the route and there are some new express services for tourists to Angkor Wat.

New Landing facility at SR Port



Passenger transfer at Phnom Krom Port (SR province)





III- Maritime and Ports

1- Present State of Ports:

Among the ports in Cambodia, only Sihanoukville Port and Phnom Penh Port handle international containers.

Other ports besides the two autonomous ports are extremely small sea ports.

The Ministry of Public Works and Transport is right now under the process to consider the establishment of a kind of Port Administration, in order to regulate all ports of Cambodia.

III- Maritime and Ports (con't)



2- Sihanoukville Autonomous Port

The Port of Sihanoukville, situated in the Bay of Sihanoukville Province, is the principal and only deep-water maritime port of the Kingdom of Cambodia. The capacity of Sihanoukville port, in its present condition, is estimated at about 950,000 tons per year. This is about twice its present traffic. The port can accommodate ships of 10,000 - 15,000 ton deadweight.

The main access to the port is via a 3 km fairway channel, marked by buoys and leading lights for daylight navigation only. Due to rocky outcrops in the channel, the entrance to the port is restricted to vessels with a draft of less than 8.0-8.5 m. In practice boats of up to about 10,000 dwt can use the port. The port is located 540 nautical miles (1000 km) from Singapore.

On the land side, the port is served by National Highway No. 4 (226 km to Phnom Penh, the main link between Phnom Penh and the coast.



3- Status of Current Port Usage

Sihanoukville Port has a cargo handling volume of approximately 1.6 million tons, and Phnom Penh Port, approximately 740,000 tons. Sihanoukville Port accommodated approximately 700 vessels in 2005, and Phnom Penh Port 1,070 vessels (mostly small barges). Container vessels account for 60% of vessels entering Sihanoukville Port. On the other hand, tanker barges account for 65% of vessels in Phnom Penh Port. At Sihanoukville Port, the development of a special economic development zone of 70ha that is integral with the port is underway with Japanese aid, in conjunction with the development of a container terminal. Six offshore oil fields are being developed off the coast of Sihanoukville Port. As a supply base for their development, materials and equipment for trial exploration and drilling are stored and supplied at Sihanoukville Port.



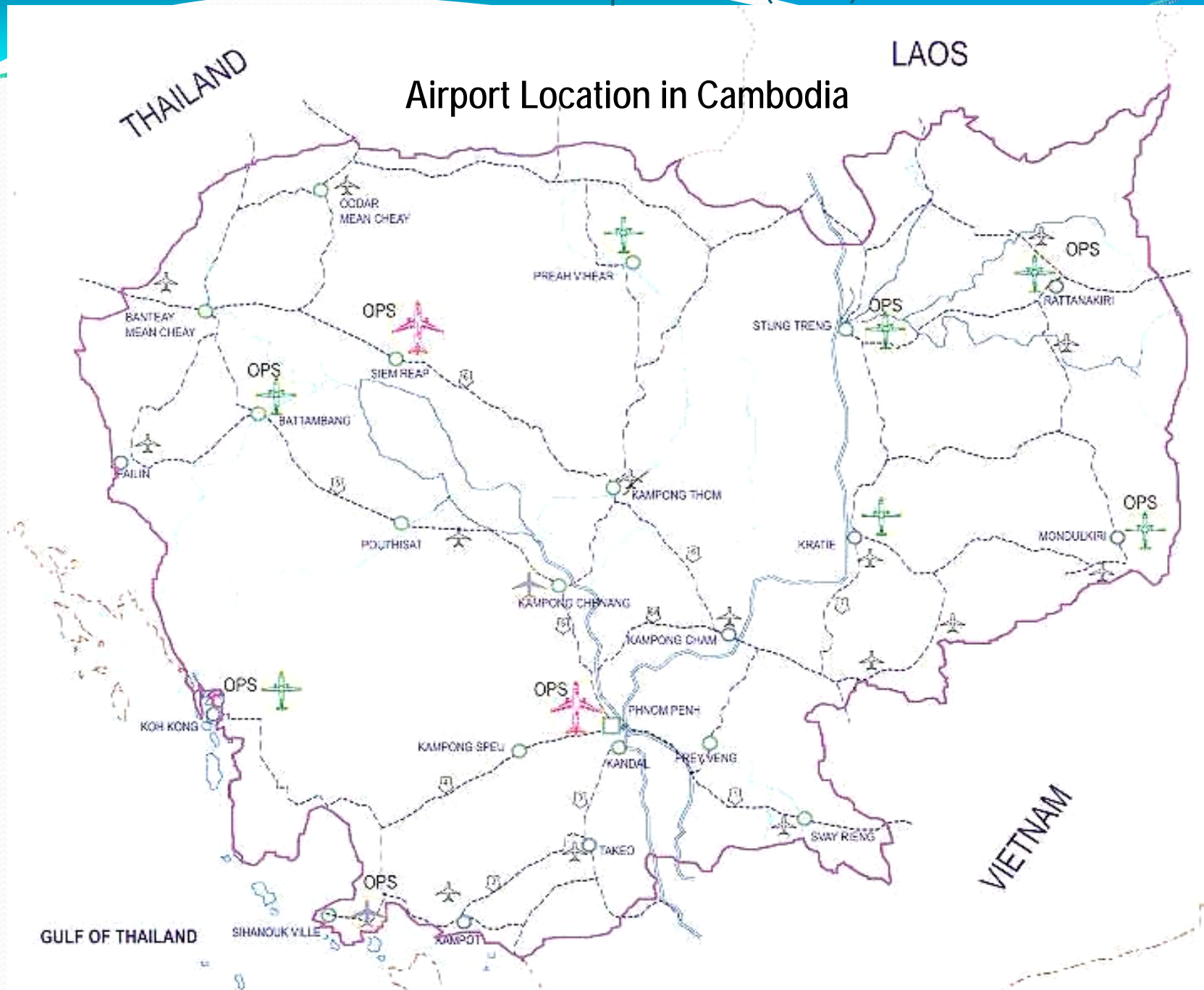
IV- Air Transportation

1- International Obligation

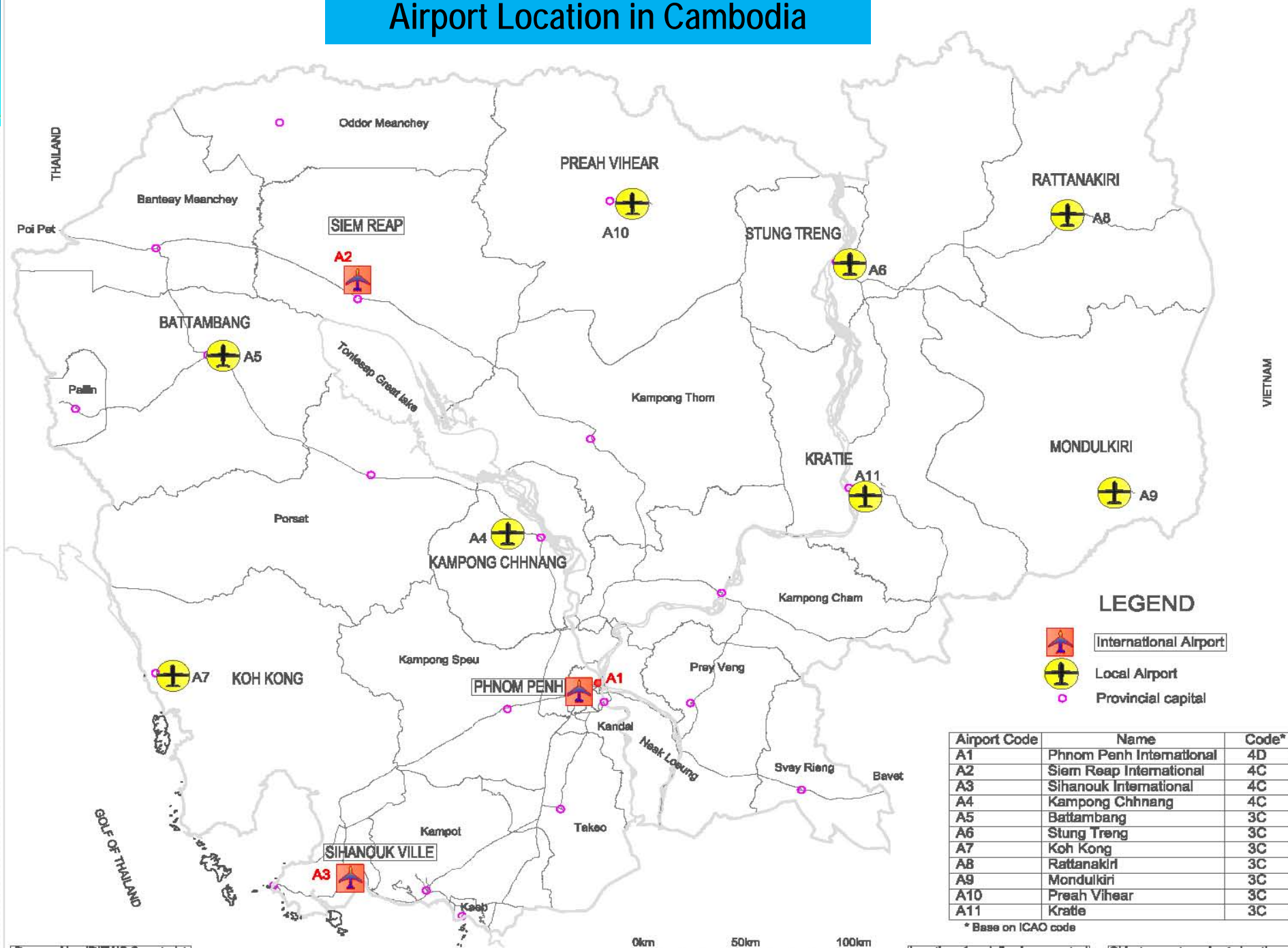
Cambodia is a signatory of the Chicago Convention since 16 Jan 1956.

- International Air Services Transit Agreement (Chicago-Dec-1944),
- Warsaw Convention for the Unification of certain rules relating international carriage by air (Warsaw-1953),
- Hague Convention on offences and Certain other Acts Committed on Board Aircraft (The hague-Dec-1970),
- Tokyo Convention on offences and Certain other acts committed on board Aircraft (Tokyo-Sept-1971),
- Montreal Convention-Protocol for the suppression of un lawful Acts against the Safety of Civil Aviation (Montreal-Sept-1971),
- Montreal Convention-Protocol for the suppression of un lawful Out of Violence at Airports Serving International Civil Aviation (Montreal-Feb-1988).

IV- Air Transportation (con't)



Airport Location in Cambodia



IV- Air Transportation (con't)

There are 3 International Airports in Cambodia: Phnom Penh, Siem Reap and Sihanoukville airports. They are being contracted out to SCA for operation, management and development under BOT concessions.

1- Phnom Penh International Airport: Passenger Terminal was completed in 2002. The airport located about 7km from the city center. The most comfortable transport means from the airport to the city is by counter-meter taxi which costs about US\$7.



Arial View of PPIA



Runway (3,600m x 60m)

IV- Air Transportation (con't)

2- Siem Reap Int'l Airport: New Passenger Terminal is under construction. Growing traffic, Siem Reap needs bigger international airport to accommodate larger aircrafts. The airport located about 8km from the provincial city and about 6km from the World Heritage site of Angkor Wat.



3- Sihanoukville Int'l Airport has been reopened as 3C type since early 2007 to accommodate aircraft type ATR 72 or equivalent

The airport has been upgraded to the international type since 2008. It located in the Sihanoukville coastal province about 226km on National Road 4 from Phnom Penh capital city and 19 km from provincial town. Flying time from the airport to Phnom Penh is 1 hour.



4- Airport Facilities

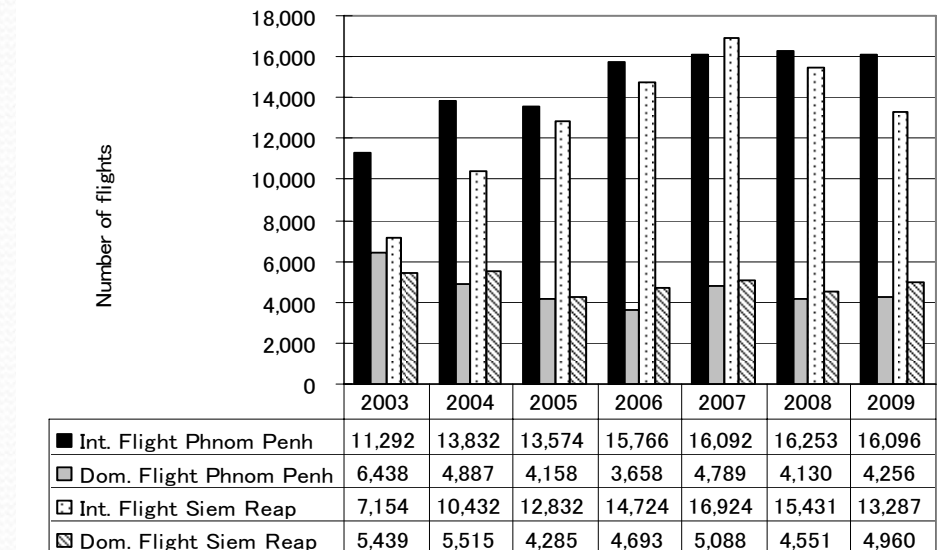
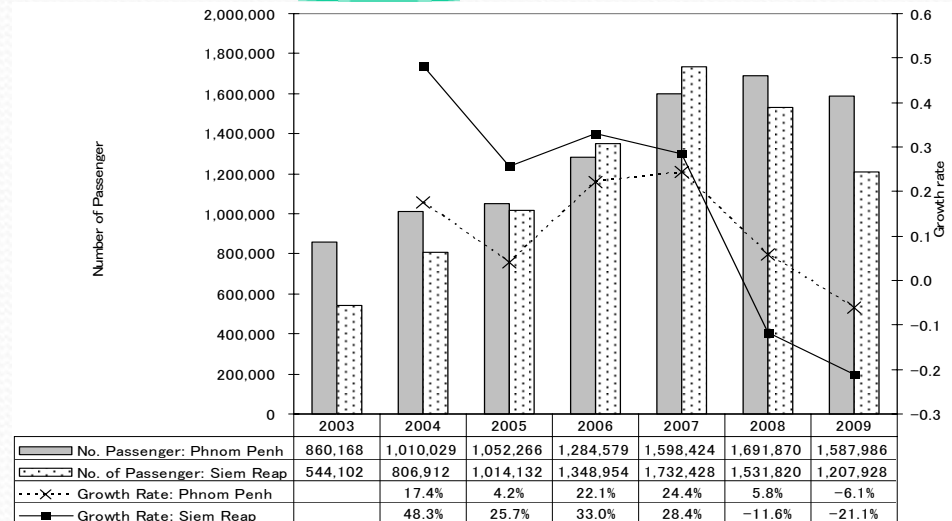
Airport	Runway (m) Surface/Ref. Code	Area (ha)	Owner/ Operator	Open/ Close	Distance to City Town
International Airport					
Phnom Penh	3,600x60/ Asphalt/ 4D	387.00	RGC/SCA	Open	7 km
Siem Reap	2550x45/ Asphalt/ 4C	197.00	RGC/SCA	Open	8 km
Sihanoukville	2500x34/ Asphalt/ 4C	123.84	RGC/SCA	Open	19 km
Domestic Airport					
Kampong Chhnang	2400x45/ Concrete/ 4C	2011.00	RGC/Air Force	Close	
Battambang	1600x34/ Bitumen/ 3C	128.68	RGC/SSCA	Open	3 km
Stung Treng	1300x20/ Bitumen/ 3C	112.50	RGC/SSCA	Open	5 km
Rattanakiri	1300x30/ Laterite/ 3C	48.09	RGC/SSCA	Open	
Koh Kong	1300x30/ Laterite/ 3C	125.66	RGC/SSCA	Open	
Mondulkiri	1500x30/ Laterite/ 3C	36.00	RGC/SSCA	Open	
Preah Vihear	1400x30/ Laterite/ 3C	150.98	RGC	Close	
Kratie	1180x30/ Laterite/ 3C	112.50	RGC	Open	3.5 km

IV-Air Transportation (con't)

5- Present State of Airport Usage

The usage of international airports has been increasing yearly owing to the increase of tourist demand.

The number of international flights per year varies from year to year, and during 5 years between 2003 and 2009, it has increased approximately 1.4-fold at Phnom Penh International Airport and approximately 1.9-fold at Siem Reap International Airport. The number of domestic flights, on the other hand, has been decreasing on the whole. The number of international flight passengers has been increasing yearly (except in 2009) at Phnom Penh International Airport, and has marked 1.5 million in 2009. When combined with the number of domestic flight passengers, the airport is used by a total of some 1.6 million passengers a year.





V- Tourism Destination

Four Priority Tourism Zones



1- Siem Reap Province:

We all know that Angkor Wat Temple is the World Heritage of Humanity and is the most attractive place you can't miss when you visit Cambodia, but that is not all of it. There are a lot of remarkable places, both natural and historical, where tourists will be amazed by our country spectacular beauty.

The Siem Reap province is accessible on direct flights from many major cities in the region including Bangkok, Danang, Hanoi, Ho Chi Minh, Pakse Vientiane, Kuala Lumpur, Singapore, Hong Kong, Kunming, Taipei, etc. Today there are around 16-20 direct flights per day to Siem Reap and more direct international flights planned for the near future. It can also be reached on domestic flights from Phnom Penh (forty-minutes flying time) by different types of aircrafts. There are seven daily flights between Phnom Penh Capital and Siem Reap Province operated by two domestic airline companies.

The Siem Reap province can also be reached by speedboats along the Tonle Sap River and its Lake from Phnom Penh Capital and Battambang Province.



2- UNESCO-World Heritage Preah Viheah Temple

Preah Viheah Temple is situated in Preah Viheah Province about 180 km away from Siem Reap town center or Angkor Wat.

The largest Hindu temple in the world was built in 11th century. The magnificent mountain temple of Preah Viheah is Cambodia's second UNESCO-World Heritage Site, inscribed just recently, in 2008.

The way to Preah Viheah goes to some deep forests to the Damrek Mountains. The location of the temple in 600 m above sea level, overlooking the Cambodian plain is unique.

You will be seduced by these great views and by the amazing bas-reliefs on temple. Some of the reliefs belong to the most beautiful artifacts of khmer art.



3- Sihanoukville Province:

The Province is the economic center of a small peninsula that juts into the warm waters of the Gulf of Thailand, and it is a potential coastal province located 230 km and 260 km southwest of Phnom Penh, along the National Road No 4 and No 3 respectively. It is also a Cambodian seaside paradise visited all year round.

It takes about 4 hours to journey from Phnom Penh Capital to Sihanoukville Province by a comfortable luxury air-conditioned bus.



A view of Sihanoukville downtown from the Leu Hill.

4- Phnom Penh Capital City:

Phnom Penh was founded by a rich old lady named Penh, who built up a sanctuary on the hill called "Wat Phnom Daun Penh" (Old Lady Penh's Pagoda). In 1434, King Ponhea Yat moved the capital from Bassac City (in the ancient Kampong Cham Province) to Phnom Daun Penh. The sanctuary was removed, and it was replaced by the King. Then he built up the hill and constructed a brick Stupa on top.

The capital of Cambodia was named after Penh, a woman who founded a sanctuary on the hill in 1372 where the grand stupa still stands today. Tourists are much attached to the wat Phnom because it is a leisure and sentimental place.



4-1: Phnom Penh Capital City:

Phnom Penh a capital of Cambodia covering an area of 290 square kilometers, offers visitors plenty of opportunity for the city tour, shopping and dinner. It is home to the Royal Palace, National Museum and Wat Phnom, and it is the commercial political, cultural and tourism hub. Phnom Penh received the world leadership award Number One for Urban Renewal Planning for Population Boom. Particularly, valuable products that can be found here include seafood, freshwater food, fresh fruit, traditional handicrafts, and artistic articles.



Royal Palace



National Museum

5- Mekong River:

The Mekong River crosses Cambodia from North to South about 600 km and has its source in Tibet, China. The Mekong River is a lifeline for Cambodia due to the movement of freshwater fish to the Great Lake.

In Phnom Penh, it bursts into 4 branches:

- The Upper Mekong River or Tonle Thom
- The Lower Mekong River or Tonle Toch
- The Tonle Bassac
- The Tonle Sap

This four-way division is called "Chaktomuk" Because the river seems to have 4 faces. In the wet season, water flows from the Mekong River into the Tonle Sap Lake. In the dry season, the water flows back from the Tonle Sap Lake into the Mekong River and then to the sea. At that time, Cambodian people celebrate the water festival in Phnom Penh.

6- Mekong Trip to Laos:

The Mekong River between Stung Treng and the Laos border is very light on population and heavy on beautiful scenery. Boulder outcroppings, numerous sets of rapids, swirling pothole currents, wide sweeping stretches of river and forested landscape along the banks all await the boat traveler. It makes for a great trip, either for the traveler that wants to continue on to Laos or for those wanting to enjoy a wild stretch of the Mekong in Cambodia.



Long Distance Passenger Speed Boat



Mekong Cruise Vessel

6-1: Mekong Trip to Laos:

The trip is difficult to downright impossible to make on this shallow stretch of the Mekong during the dry season, with countless sunken islands and a virtual forest of trees growing right in the middle of the river.

The trip becomes an obstacle course for the boat drivers this time of the year, as they carefully try to choose the best way to guide their craft through the maze that nature has created without losing a propeller to the river.

The best time of the year to take this trip is from May to November when sufficient upstream rains have raised the river to a level that allows the boats to pass through carefully.

There is not a whole lot to do once you get to the border area, but travelers can leave their passport with Cambodian immigration (at the small checkpoint on the west bank of the river) and cross to the Laos side to eat at a riverside restaurant and look at the tiny market in the Laos village of Geedahn. Cambodian immigration officers may ask you see them, but it is not a fee set by the central government so you don't have to pay it.

6-2: Mekong Trip to Laos:

To take the trip, head down to the river bank area (near the small bullet boats just east of the pier) in Stung Treng town before 8:30 am and talk to one of the operators of the small freight boats.

The fare is \$3,5 (one way) and the trip to the border area takes about 5 ½ hours, but is cut down to just over three hours on the trip back south as the swift current on this stretch of the Mekong pushes the boats right along.

If you want a faster journey, approach one of the small fiberglass boat operators, the ones that have the 40-hp outboard motors, they want \$20-\$25 (one-way) to make the trip, but if you are looking for a quick trip or fast fun, the trip time going upriver is cut down to only 1 ½ hours.

The slow boats are fast enough coming back downstream so you could save money by grabbing one of those on the return trip.

For those wanting to cross into Laos using this route you will need a Laos's visa in your possession and you also need to stop at the main police station in Stung Treng town to get a letter of permission to cross the border at this point.

7- Fresh Water Dolphin:

Fresh Water Dolphin: Nowadays the dolphins live mainly in the rivers and waterways of Kratie and Stung Treng provinces.

The number of these mammals is estimated to be between 40 and 60 and they are often seen travelling in small groups of 6 to 10 individuals. The females usually give birth to young once every two years most often during the months of June to August. The young dolphins are about 1m in length at birth and suckle milk. By adulthood the dolphins can attain a length of over 2.5m and weigh up to 180kg. Their diet consists mainly of small fish, shellfish and snails. The dolphins can swim at speeds up to 40km per hour and stay submerged for periods between five and ten minutes.

Mekong Dolphin



8- Stung Treng Province:

It is a northern province of Cambodia. It was formerly called Xieng Teng and was once a part of the vast Khmer Empire, then the Lao kingdom of Lan Xang and later the Lao kingdom of Champassack. During the period of French Indochina it was again ceded to Cambodia.

The provincial capital is also named Stung Treng and is an important trade hub with a few hints of Lao influence scattered about, owing to the fact that the Lao border is about 50 km away. It's a friendly, quiet country town situated on the confluence of the San River and the Mekong River. It actually sits on the banks of the San River, with the mighty Mekong coming into the picture on the northeastern outskirts of the town.

9- Boeung Yeak Loam Resort:

Boeung Yeak Loam Lake is a natural, almost circle-shaped lake situated in the middle of a mountain in Ban Lung District, 5km from Rattanakiri provincial town. The lake is approximately 800m in diameter with a depth of 48m during the dry season, and was created by volcanic movements centuries ago.

Boeung Yeak Loam has picturesque mountainous scenery, a charming bird sanctuary and provides the visitor with an opportunity to experience the daily life of local hill-tribe people.





VI- Necessity for Assistance

Technical and Financial Supports are needed to address the following issues

1- Waterway Design

- Waterway database and classification study

2- Port Planning

- Phnom Penh domestic port development (Greentrade)
- Kampong Chhnang domestic port development
- Kampong Cham domestic port development
- Kratie domestic port development
- Stung Treng domestic port development

3- Waterway Safety

- Framework for rules and procedures supporting the safe navigation of vessels
- Framework for the introduction of a technical regime for approval of plans and construction of Cambodian domestic and cross-border vessels
- Framework for reporting marine accidents in Cambodia
- Framework of regulations and training standards to deal with prevention of oil pollution from ships
- Framework of regulations and training standards to deal existing and future carriage of dangerous goods
- Framework for domestic search and rescue
- Framework for sharing the Mekong river by all users (consultation with fisheries department)
- Provide a basic aids to navigation on the Kampong Cham - Stung Treng section



THANK YOU