Chapter 3

Improvements and Challenges Associated with the Facilitation of Road Transport in Cambodia

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Cambodia has made remarkable progress in reforming and modernising its transit transport activities and in aligning its customs procedures, including customs transit, with international standards. Excluding some protocols, the nation has also signed key transport-related Association of Southeast Asian Nations framework agreements and entered into bilateral memoranda of understanding for the initial implementation of the Greater Mekong Subregion Cross-Border Transport Agreement with neighbouring countries.

Furthermore, Cambodia has designed most road traffic signs in accordance with the Convention on Road Traffic that was signed in Vienna on 8 November 1968, even before the nation had become a signatory.

Despite such improvements over the past 2 decades, the demands of development are unmet. There remain challenges. For one, while stipulations on vehicle management (such as those that set loading restrictions for passenger and commercial vehicles) are already covered by Cambodia's Road Law and Road Traffic Law, more transportation laws that facilitate future road transport are needed.

In terms of cross-border transport, Cambodia's challenges include inadequate physical infrastructure, insufficient maintenance of roads, poor traffic safety and overloading, underdeveloped and inefficient urban transport, and low climate resilience. Moreover, the nation must address institutional issues such as inadequate transport logistics, a lack of private sector participation, and funding.

To overcome these challenges and advance the facilitation of road transport in Cambodia, physical constraints such as the insufficient and disjointed transport infrastructure network need be strengthened and upgraded, and nonphysical constraints – including the cost, time, and paperwork associated with customs procedures – must be reduced or eliminated.

Introduction

To help ensure connectivity both within the country and with other countries in the region, the Royal Government of Cambodia of the Fifth Legislature is investing in transport infrastructure and improving trade facilitation as priority areas. It aims to eventually develop a dynamic multimodal transport and logistics network.

Connectivity is key to national and regional networks in such areas as transport, trade, and energy infrastructure. Such connected and more effective domestic and regional networks, in turn, can facilitate the efficient flow of its goods, services, and people, both within Cambodia and with other countries in the region. To develop such connectivity, however, the nation needs to take into account not only the physical aspects of individual networks, but also the policy and regulatory frameworks under which they operate. Cambodia currently faces a number of challenges in its transport infrastructure such as high transportation costs in comparison with that of neighbouring countries, road repair and maintenance, overloaded commercial vehicles, traffic congestion, accidents, weak coordination between border management agencies, and others associated with varied transportation modes. By developing and modernising its infrastructure, the country can bring about improved economic efficiency, competition, and economic diversification, and even reduce the incidence of poverty.

This review thus focuses on the facilitation of road transport in Cambodia, including physical infrastructure development and institutional arrangements, as well as looks at the challenges. Specifically, this chapter consists of this introduction and seven sections. Sections 1 and 2 investigate the physical infrastructure and institutional improvements in Cambodia. Section 3 looks at official road traffic signs, while Section 4 and 5 examine transport facilitation initiatives and the associated challenges, respectively. Section 6 identifies policy recommendations for achieving a successful facilitation of road transport in Cambodia. Section 7 presents the conclusions.

1. Improvements in Physical Road Infrastructure

1.1 Current Status of Roads

Table 3.1 shows how Cambodia has been working to improve its road network, which consists of national, provincial, and rural roads. Its nine one-digit national roads and 146 two-digit national

roads are under the control of the Ministry of Public Works and Transport (MPWT) and have a total length of 2,243 km and 8,864 km, respectively. In total, these national roads measure over 11,107 km, accounting for 20.10% of the country's total road network length and 43.7% of its total bridge length. Also under the control of the MWPT are 236 three- and four-digit provincial roads with a total length of 4,407 km, or 7.98% of the total road network length; and 904 bridges with a total length of 16,309 m, or 21.4% of the total bridge length.

On the other hand, under the purview of the Ministry of Rural Development are 13,355 rural roads totalling 39,728 km, or 71.92% of the total road network, along with 1,869 bridges equal to 46% of total number of bridges accounted for 26,599 m equal to 34.8% of total bridge length (MPWT, 2015).

All the road networks in Cambodia have a combined length of 55,242 km, of which 15,514 km (28.09%) are national and provincial roads, and 39,728 km (71.92%) are rural roads.

Table 3.1. Length of the Road Network in Cambodia

Road Classification	Road Length		Road Number	Bridge Number		Bridge length		Management Authority
	km	%		Number	%	m	%	
1-digit National Roads	2,243	4.06	9	589	14.5	17,643	23.1	MPWT*
2-digit National Roads	8,864	16.05	146	698	17.2	15,710	20.6	
3- and 4-digit Provincial Roads	4,407	7.98	236	904	22.3	16,309	21.4	
Rural Roads	39,728	71.92	13,355	1,869	46	26,559	34.8	MRD
Total Length	**55,242**	**100.00**	**13,746**	**4,060**	**100.00**	**76,221**	**100.00**	

MRD = Ministry of Rural Development; MPWT = Ministry of Public Works and Transport
Source: Ministry of Public Works and Transport (MPWT).

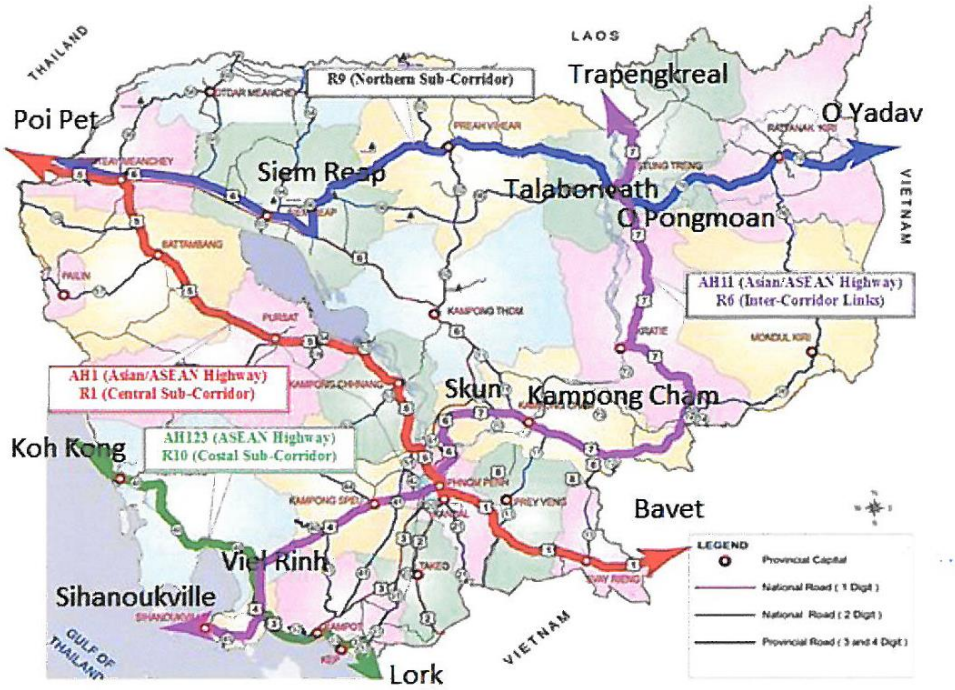
1.2 International Road Network

The following four international roads cross Cambodia: (i) Rattanakiri–Banteay Meanchey; (ii) Svay Rieng–Banteay Meanchey; (iii) Stung Treng–Sihanoukville; and (iv) Kampot–Koh Kong (Figure 3.1). These roads are classified as follows based on width and pavement type per MPWT regulations:

- **Primary: Roads used exclusively by automobiles/asphalt concrete (AC) or concrete pavement;**
- **Class I: Highways with four lanes or more /AC or concrete pavement;**

- **Class II: Roads with two lanes or more/AC or concrete pavement; and**
- **Class III: Narrow two-lane roads/double bituminous surface treatment (DBST) pavement.**

Figure 3.1. International Road Network in Cambodia



Source: Ministry of Public Works and Transport.

Cambodia's road network falls within Class II, Class III, and below Class III (which is considered as of low standard). To promote travel within the region primarily by reducing travel time and cost, Cambodia is currently focused on building Class I roads and upgrading existing ones.

1.3 ASEAN Highway

The ASEAN Highway Network Project signed in 1999 aims to upgrade all designated national routes to Class I standards by 2020, although Class II standards are acceptable for low-traffic, non-arterial routes.

The ASEAN Highway (AH) in Cambodia has a total length of 2,126.4 km. It consists of the following segments:

- AH1, Poipet (Cambodia–Thai Border)–Sisophon–Phnom Penh–Bavet (Cambodia–Viet Nam Border). Total length: 571.5 km. Current condition: paved with AC or DBST. Number of lanes: 2. A long bridge at Neak Loeung across the Mekong River was recently opened;
- AH11, Preah Sihanoukville–Phnom Penh–Kampong Cham–Stung Treng–Trapeang Kriel (Cambodia–Lao Border). Total length: 762.20 km. Current condition: paved with AC or DBST. Number of lanes: 2. Currently being widened to four lanes from Phnom Penh to Skun (75 km);
- AH123, Cham Yeam (Cambodia–Thai Border)–Koh Kong–Sre Ambel–Prek Chak (Cambodia–Viet Nam Border). Total length: 280.8 km. Current condition: under repair. Number of lanes: 2; and
- AH21-R9, Poipet (Cambodia–Thailand border)–Siem Reap–Preah Vihear–Stung Treng–Rattanakiri-O'Yadav (Cambodia–Viet Nam border). Total length: 511.9 km. Current condition: Construction and repair completed. Paved with DBST. Connected by the recently opened Stung Treng Mekong River Bridge. Number of lanes: 2.

The entire two-lane section along AH1 is paved with AC or DBST. The 4 km section from Phnom Penh is being widened to four lanes. There is also a plan to widen the road to four lanes from National Road (NR) No. 5. The bridge over the Mekong River at Neak Loeung, which was built with funding from the Japanese government, has been fully operational since 6 April 2015.

The entire two-lane section along AH11 is also paved with AC or DBST, while the section between Phnom Penh and Skun (75 km) is being widened to four lanes. The AH21 was completed in 2014. The Stung Treng Bridge over the Mekong River is now fully operational.

In total, the ASEAN Highway in Cambodia currently consists of nine roads measuring 2,126.4 km long (Class II: 581.1 km; Class III: 1,162.4 km; below Class III: 385.9 km) (Table 3.2).

1.4 National Road and Key Bridge Improvement Projects

A decade after the end of the civil war, Cambodia entered a phase of infrastructure rehabilitation and development. The key road infrastructure projects that have been built and repaired over the past five years are shown in Table 3.3. Most financial resources for these projects came from foreign donors.

Table 3.2. ASEAN Highway and Classifications

Name of International Road		Transit Cities	Length (km)	International Road Classification				
GMS roads	ASEAN Highway			Primary	Class I	Class II	Class III	Below Class III
Central Sub-corridor	AH 1	Poipet–Sisophon (NR 5)	47.5			47.5		
		Sisophon–Phnom Penh (NR 5)	360.0				360	
		Phnom Penh–Bavet (NR 1)	164.0			57	107	
Sub-total Length (km)			**571.5**			**104.45**	**467**	
Inter-Corridor	AH 11	Phnom Penh–Sihanoukville (NR4)	226.4			226.4		
		Phnom Penh–Skun (NR 6)	75.0			75		
		Skun–Kampong Cham (NR7)	49.0			49		
		Kampong Cham–Trapeang Kriel (NR 7)	411.8				411.83	
Sub-total Length (km)			**762.2**			**350.4**	**411.83**	
Southern Costal Sub-corridor (R1)	AH123	Cham Yeam–Koh Kong (NR 48)	13.0			13		
		Koh Kong–Sre Ambel (NR48)	138.0				138	
		Sre Ambel–Veal Rinh (NR4)	42.0			42		
		Veal Rinh–Kampot (NR33)	36.0				36	
		Kampot–Lork (NR33)	51.8				51.8	
Sub-total Length (km)			**280.8**			**55**	**225.8**	
Northern Sub-corridor (R2)	AH 21 R9	Siem Reap–Talaborivath (NR 66 +NR210+NR62+NR9)	305.2				38.8	266.38[1)]
		Talaborivath–O'Pongmoan (NR 7)	19.0				19	
		O' Pongmoan–O'Yadav (NR78)	187.7			68.2		119.5[1)]
Sub-total Length (km)			**511.9**			**68.2**	**57.8**	**385.9**
Grand Total Length (km)			**2,126.4**			**581.1**	**1,162.4**	**385.9**

Note: 1) AH21 or NR No. 9 was completed in 2014 and can be classified as higher than 'Below Class III', according to assessments by members of the author's team.

Source: Ministry of Public Works and Transport (2015).

Table 3.3. Key National and Provincial Road Infrastructure Construction and Improvement Projects as Shown in the Report of Ministry of Public Works and Transport

Road No.	Donor	Cost (million US$)	Length (km)	Section	Year		Funding	Pavement Status
					Start	End		
	Japan	11.17	9	PK: 4+000-PK:13+000 (3rd phase)	2010	2011	Grant	AC
1	Japan	15	4	Monivong Bridge–PK: 4+000 (4th phase)	2014	2016	Grant	AC (Detailed Design)
	WB	3	107	Neak Loeung–Bavet	2009	2013	Loan	Road Maintenance (Upgrading)
3	Korea	41.5	134.8	Phnom Penh–Kampot (phase 2)	2008	2011	Loan	DBST
3	ADB & AusAid	28.5		Southern Costal Corridor Project (NR3: Kampong Trach to Prek Chak, NR3: Kampot to Veal Rinh, Cross-Border Facilitation at Lork (Viet Nam border)	2011	2014	ADB=$7 AusAid=$8	DBST (Upgrading & Periodic Maintenance)
5	ADB	>1	85	PK:6+00–Kampong Chhnang	2010	2011	Loan	Maintenance
5	China	56.8	30	Phnom Penh–Prek Kdam	2013	-	Loan	AC (4 Lanes) 18.89% (As of 31 May 2014)
5	Japan	88	81.2	Battambang–Sisophon	2013	2017	Loan	AD (Detailed Design)
6	China	248.8	248.525	Thnal Kaeng–Skun (4 lanes)	2013	2016	Loan	AC (24.36% as of 31 May 2014)
	China	70.25	40	PK: 4+000 to Thnal Kaeng	2012	2015	Loan	AC (4 Lanes) 79.87% (as of 31 May 2014)
8	China	71.5	109.08	Prek Tameak–Anlong Chrey	2007	2012	Loan	AC
8-1	China	14.8	5.6	Krabao–Moeun Chey	2010	2012	Loan	AC
8-2	China		18.56	Anlong Chrey–Krek	2010	2012	Loan	
9	China	63.8	143.33	Tbeng Mean Chey-Talaborivath	2012	2016	Loan	DBST
11	China	63	90.4	NR1:Neak Loeung–NR7: Thnal Tortoeung	2015		Loan	AC
13	ADB	23.39	62.4	Svay Rieng–Anlong Chrey	2014	2016	Loan	DBST
21	VN		0.4	Chrey Thom			Loan	Bridge (50–50 with Cambodia)
23	China	33	53	Pea Reang Leu–Chambork (border)	2013	-	Loan	DBST
	ADB	13	17	Kampong Trach–Lork (Viet Nam border)	2007	2010	Loan	DBST
41	WB			NR4–Prek Thnout River	-	-	Loan	DBST
	China	95.28	46.25	Thnal Tortoeung– Chum Kiri–Kampot	2010	2013	Loan	DBST
43	China	42	77	NR4:Treng Troyeung–	2015	-	Loan	

				NR3: Lvea Thmey				DBST (Under Negotiation)
44	China	80.3	139.14	Chbarmorn–Oral–Amleang– Udong	2012	2015	Loan	DBST
55	China	140	189.7	Pursat–Thmar Da. Thai–Cambodia border	2013	-	Loan	DBST (Next 5-year Plan)
56	ADB+ Korea	29.9	84	29km from Sisophon to Samrong	2009	2015	Loan	Road Improvement
57	China	41.88	103.14	Battambang–Pailin–Thai border	2008	2012	Loan	DBST
57B	China	176.81	89.98	1) Thmar Kol–Bovel–Sampov Loun 2) Bovel–Sanseb–Phnom Prek 3) Sanseb–Kamrieng	2010	2014	Loan	DBST
58	China	77	132	Banteay Meanchey–Banteay Meabrith–Thmar Daun–Phaong	2014	-	Loan	DBST (Under Negotiation)
59	China	72.89	140.25	NR59 (Kaun Damrey–Malay– Sampov Loun–Phnom Prek–Kam Rieng–Pailin)	20010	2013	Loan	DBST
60B	China	130	140+1.67	Kg. Thmar–Kratie–Bridge	2015	-	Loan	DBST(+Bridge Cost)
61	China	9.76	15.63	Prek Kdam-–Thnal Kaeng (NR6)	2010	2012	Loan	AC
62	China	57.8	157	Koh Ker–Thnal Bek, Tbeng Meanchey–Preah Vihear temple	2008	2012	Loan	DBST
	China	52	128	Kampong Thom–Tbeng Meanchey–	2009	2013	Loan	DBST
64C	China	100	132	Tbeng Meanchey–Thalaborivath	2011	2014	Loan	DBST
66	WB	3.2	18	Rovieng–River Stung Sen			Loan	DBST (Not Started)
68	Cambodia	33	113.74 3.18	O' Smach- Kralanh + Bypass Samrong town	2009	2011	Nat. Budget	DBST Re-Pavement
70B	China	90	150	Tonle Bet–Srey Santhor–Prek Tameak–Lvear Em–Peam Ro	2015	-	-	DBST
71C	China	66	110	Tbong Khmum–Kroch Chhmar–Chamkar Leu	2015	-	-	DBST (+ Kroch Chmar Bridge)
71+7+72	China	112	145	Trapeang Phlong–Krek-Troeung– Kg. Thmar	2015	-	-	AC
76	China	51.9	127	Snuol–Sen Monorom	2008	2011	Loan	DBST
76	China	91.68	171.78	Sen Monorom–Koh Nhek–Lumphat–Taang	2012	2016	Loan	DBST
78	China	73.3	121.1	O' Porng Moan–Banlung	2009	2013	Loan	DBST
92	China	75	137	Sam An (NR9)–Kg. Sralao 2–Kg. Sralao 1–Mum Bey	2015	-	-	DBST
134B+135	China	24	43	Chumkiri–Chhuk–Dorng Tung–Kg. Trach	2015	-	-	DBST
258D	China	48.3	20	Kob (NR5, PK:383)–O' Bey Choan	2011	2013	Grant	DBST
314D	ADB	14.32	25.6	NR1–VN border: Prey Mlu	2014	2016	Loan	DBST
378	China	85	141	NR7: Dong Kralaor–NR78: Banlung	2015	-	-	DBST
1551	China	72	135	NR4: Smach Meanchey–NR55: Prmoy	2016	-	-	DBST
1554	China	41	70	Veal Veng (NR55)–Samlot (PR1577)	2015	-	-	DBST

1577	China	25	55.16	Sek Sork–Samlot–Border Pass400	2015	-	Loan	DBST
3762	China	14.89	26.38	Sen Monorom–Dakdam	2015	-	-	DBST
3787	China	98	180	Banlung–Kantuyneak	2015	-	-	DBST

AusAid = Australia Aid; AC = asphalt cement; ADB = Asian Development Bank; DBST = double bituminous surface treatment; WB = World Bank.
Notes: Prek Chak and Lork indicate the same place; 'Kg.' is an abbreviation of 'Kampong.'
Source: Ministry of Public Works and Transport (2015).

Most major bridges in Cambodia were built with financial support from donors Japan (in the form of grants), and China and the Republic of Korea (both via loans) as well as from private entities (Table 3.4). The most important bridge on NR1, which is currently being constructed at Neak Loeung, is funded by a grant from Japan. This bridge will enable the smooth flow of goods between Viet Nam and Thailand through Cambodia.

All national roads that also make up part of the international road network are being rehabilitated or improved. Some of the improvements are as follows:

- **NR5: Widened to four lanes with funding from China (from Phnom Penhto Prek Kdam), and Japan (Battambang–Sisophon);**
- **NR6: Widened to four lanes with funding from China (from Phnom Penh toThnal Keng);**

NR1: One of the most important routes in Cambodia, NR1 stretches from Phnom Penh to the southern part of Cambodia. It forms part of the Asian Highway Route AH1 that connects Ho Chi Minh City and Bangkok through Phnom Penh. The NR1 was funded by the Asian Development Bank (ADB) (for the section between Neak Loeung and the Viet Nam border) and grants-in-aid from Japan (for the section between Neak Loeung and Phnom Penh). To accelerate the transit of goods and passengers between Indochina and the GMS, the Japanese government provided funding (through grants-in-aid) and technical support for the construction of Cambodia's longest cable-stayed bridge at Neak Loeung, which was opened to public transport/traffic (except container transport) on 6 April 2015. This bridge was named Tsubasa ('Wing'), because the spans of the bridge resemble two yellow birds (representing Cambodia and Japan) spreading their wings (MPWT, 2015).

Table 3.4. Key Bridge Improvement Projects Carried Out Over the Past Five Years

Name of Bridge	Type of Bridge	Donor	Cost (US$ million)	Length (Km)	Location	Year		Funding	Status
						Start	End		
Tsubasa Bridge	Cable-Staved	Japan	$85.59	2.2	Kandal, Prey Veng, NR1	2011	2015	Grant	Completed
8 bridges	Concrete	Japan	$15.00	-	On NR 11 (Prey Veng)	2012	2015	Grant	Completed
Prek Tameak	Concrete	China	$43.50	1.066	Kandal, NR8 & NR6	2007	2010	Loan	Completed
Prek Kdam	Concrete	China	$28.90	0.975	Kandal, NR5 & NR61	2007	2011	Loan	Completed
New Second Chroy Changvar	Concrete	China	$30.00	0.719	Phnom Penh–NR6	2010	2013	Loan	Completed
Prek Phnov	Concrete	Private	$42.00	1.543	Phnom Penh – NR6	-	2010	B-O-T	Completed
Mekong River Bridge	Concrete	China	$52.72	1.731	Stung Treng (Junction NR7 &NR9)	2012	2015	Loan	Completed
Takmao Bridge	Concrete	China	$32.89	0.855	Takmao town	2012	2015	Loan	Completed
Chrey Thom Bridge	Concrete	Viet Nam	$35.84	0.48	Viet Nam border	2014	2015	Loan ($17.8)	In Progress
Koh Poh Bridge	Concrete	Private	$31	0.9	Sihanoukville–Morokot Island	2009	2011	B-O-T (99 Years)	Completed

B-O-T = build-operate-transfer
Source: Ministry of Public Works and Transport (2015).

2. Institutional Improvement

2.1 Transport Legislation

Cambodia has recently adopted several pieces of legislation related to road transport and traffic, namely, the Road Law and the Road Traffic Law.

2.1.1 The Road Law

The Road Law was adopted by the National Assembly on 3 April 2014, approved by the Senate on 11 April 2014, and promulgated by Preah Reach Kram NS/RKM/0514/008 on 4 May 2014. The Road Law is composed of 13 chapters and 81 articles:

Chapter 1: General Provisions (Articles 1-4): Describes the objective and scope of the law;

Chapter 2: All roads to be managed by the following governmental bodies:

- **Ministry of Public Works and Transport - In charge of expressways, national roads, and provincial roads;**
- **Ministry of Rural Development - In charge of rural roads and others as assigned by the Royal Government; and**
- **Sub-national Administration - The competent authority whose responsibilities include road planning, design, construction, repair and maintenance within capital, cities, and provincial towns.**

Chapter 3: Competent Authority for Road Management: One of the most notable revisions in this law is the expansion of the road classification scheme from three categories (national, provincial, and rural roads) to six categories (expressways, national roads, provincial roads, rural roads, urban roads, and special roads). This change indicates Cambodia's strong intention to build more expressways and improve its overall management of land infrastructure.

Chapter 4: Road Development and Maintenance;

Chapter 5: Technical Entities and Regulations for Road Infrastructure;

Chapter 6: Road Use;

Chapter 7: Protection of Road Infrastructure;

Chapter 8: Road Certification;

Chapter 9: Funding for Road Use, Maintenance, and Development;

Chapter 10: Inspection of Road Infrastructure;

Chapter 11: Penalties; and

Chapter 12: Final Provisions.

2.1.2 The Road Traffic Law

The Road Traffic Law was adopted by the National Assembly on 5 December 2014, approved by the Senate on 30 December 2014, and promulgated by Preah Reach Kram NS/RKAM/0115/001 on 9 January 2015. This law is composed of 12 chapters and 92 articles:

Chapter 1: General Provisions (Articles 1–4): Describes the objective, scope, and terminology of the law;

Chapter 2: Traffic Signs (Articles 5–6): Describes the traffic signs and priority signs;

Chapter 3: Drivers (Articles 7–26): Describes driving conditions, use of roads, and regulations regarding turning, lane crossing, and parking;

Chapter 4: Vehicle Lights and Horns (Articles 27-30): Describes the use of lights and horns;

Chapter 5: Pedestrians and Animal Riders/Herders (Articles 31–33): Describes regulations regarding pedestrians, animal riders, and crossing/walking;

Chapter 6: Traffic Accidents (Articles 34–38): Describes the competency of the traffic police, road accidents, and hit-and-run cases;

Chapter 7: Vehicle Management and Transportation (Articles 39–58): Describes driving licence issues, demerit points, vehicle inspections, overloading, and fines;

Chapter 8: Law Enforcement Agency of the Road Traffic Law (Article 59): Describes the roles and responsibilities of the National Road Safety Committee;

Chapter 9: Law Enforcement Personnel on Road Traffic Law (Articles 60–70): Describes detention rights, additional competencies of the traffic police, small fines, and right of complaint;

Chapter 10: Penalties (Articles 71–87): Describes the crimes punishable by small fines, civil and criminal responses by drivers, and other fines;

Chapter 11: Inter-provisions (Articles 88–90): Describes the validity and implementation of the law; and

Chapter 12: Final provisions (Articles 91–92): Describes the abolishment of Road Traffic Law of 2007.

Although Cambodia has yet to adopt any transportation laws, some transportation management stipulations related to the overloading of commercial and passenger vehicles have been mentioned in various articles and chapters of the Road Law and Road Traffic Law. For example, load weight limits were mentioned in Articles 25 and 26 of Chapter 6 in the Road Law dated April 2014 as follows:

Article 25:

Truck transportation companies must respect the load weight limits as hereunder specified in Article 26 of the Law, cooperate in the weighing procedures carried out at the weigh stations along each road, and conform to all technical standards and limits for road dimensions.

Article 26:

Regarding compliance with load weight limits on the road networks:

1) Drivers must comply with the following load weight limits on expressways, national roads, provincial roads, city streets, and rural roads:

a. The maximum permitted weight allowed on the load-sustaining axle of automobiles, trailers, or semitrailers is as follows:

- **6 tons for single-axle suspensions with two wheels under the steering wheel**
- **11 tons for twin-axle suspensions with four wheels under the steering wheel**
- **10 tons for single-axle suspensions with four wheels**
- **19 tons for twin-axle suspensions with eight wheels**
- **24 tons for triple-axle suspensions with adjacent axle spacing and 12 wheels**

b. The maximum permitted total weight of automobiles is as follows:

- **16 tons for twin-axle suspensions where one axle is located at the front of the automobile with two wheels, and the other one is located at the rear with four wheels**
- **25 tons for triple-axle suspensions where one axle is located at the front of the automobile with two wheels, and a twin axle is located at the rear of the automobile with eight wheels**
- **30 tons for four-axle suspensions with twin axles at the front of the automobile with four wheels, and twin axles at the rear of the automobile with eight wheels**

c. The maximum permitted total weight of automobiles with trailers is as follows:

- **35 tons for automobiles with trailers that have four axles total, in which a single axle is located at the front of the automobile with two wheels, and another single axle at the rear of the automobile with four wheels and two single axles of the trailers with eight wheels**
- **40 tons for automobile with trailers having five axles or more**

d. The maximum permitted total weight of automobiles with semi-trailers is as follows:

- **35 tons for automobiles with semi-trailers that have four axles total, wherein a single axle is located at the front of the automobile with two wheels and another single axle at the rear of the vehicle with four wheels, and twin semi-trailer axles with eight wheels**
- **40 tons for automobiles with semi-trailers that have five axles or more total. For automobiles and trailers or semi-trailers whose total weight is not described in the points above, a special permission letter is required from relevant road management authorities.**

2) All vehicle axle loads as specified in Point 1 above shall bear a pressure on the road of no more than 5 kg/sq. cm.

In addition to the articles and chapters in the Road Law mentioned above, Article 57 of the Road Traffic Law dated 6 January 2015 states:

Article 57:

Loads of goods in motor vehicles, trailers, or semi-trailers shall not exceed the maximum vehicle weight as indicated by the manufacturers, the weight concentrated on the vehicle axis, or the maximum weight permitted by the Road Law. When crossing a bridge, drivers of vehicles and of vehicles with trailers or semi-trailers must observe the maximum weight limit displayed on the sign located in front of the bridge. The maximum permitted size of vehicles and vehicles with trailers or semi-trailers shall be defined as follows:

- **The maximum vehicle width shall not exceed 2.5 m, except for vehicles equipped with tools, in which case vehicle width shall not exceed 3 m**
- **The maximum length of each vehicle shall not exceed 12.2 m**
- **The maximum length of each vehicle with a semi-trailer shall not exceed 16 m**

- **The maximum length of each vehicle with a trailer shall not exceed 18 m. Sizes of vehicles and vehicles with trailers or semi-trailers that are not stipulated above must obtain a special approval from the MPWT. Technical specifications on vehicles size and weight shall be defined by a Prakas ('proclamation') from the MPWT.**

Chapter 7 of the Road Traffic Law on vehicle transport management also stipulates the roles and responsibilities of the MPWT in the issuance of technical inspection certificates, licenses to national and international drivers who wish to use Cambodia's roads, and commercial licenses for domestic or international road transportation of goods and passengers. It also defines the MPWT's role in ensuring that loading procedures for goods on a vehicle are properly organised and that transport passengers are secure and comfortable (Article 45 to 56).

2.2 Regulations on Technical Requirements

According to the Road Law and Road Traffic Law, all transportation operators must comply with the technical standards on road weight limits as defined in the Prakas from the MPWT, the body that controls all national and provincial roads in Cambodia. These technical requirements are found to be consistent with those stipulated in the ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT).

Accordingly, Table 3.5 compares the standards in the AFAFGIT with the nation's technical requirements for vehicles traveling in Cambodia via NR1 (Phnom Penh–Bavet), NR4 (Phnom Penh–Sihanoukville), NR5 (Phnom Penh–Poipet), NR6 (Phnom Penh–Sisophon), NR7 (Phnom Penh–Trapeang Kriel), NR48 (Koh Kong–Sre Ambel), NR33 (Kampot–Prek Chak) and NR64 (Siem Reap–Stung Treng).

Table 3.5. Technical Requirements for Vehicles Traveling on National and Provincial Roads in Cambodia

Technical Requirements	AFAFGIT	Cambodia
Maximum Length (Rigid Motor Vehicle)	12.2 m	12.2 m
(Articulated Vehicle)	16.0 m	16.0 m
Maximum Width	2.5 m	2.5 m
Maximum Height	4.2 m	4.2 m
Maximum Number of Axles		
Maximum Axle Load		
Maximum Rear Axle Load	ROH<60% of WB	ROH<60% of WB

Maximum Permissible Gross Vehicle Weight	AFAFGIT	Cambodia
3-Axle Rigid Vehicle	21.0 ton	21.0 ton
4-Axle Rigid Vehicle	25.0 ton	25.0 ton
5-Axle Articulated Vehicle	32.0 ton	32.0 ton
6-Axle Articulated Vehicle	36.0 ton	36.0 ton
7-Axle Articulated Vehicle	38.0 ton	38.0 ton

AFAFGIT = ASEAN Framework Agreement on the Facilitation of Goods in Transit; ROH = Rear Overhang; WB = World Bank.
Source: Ministry of Public Works and Transport (2015).

3. Road Traffic Signs in Cambodia

3.1 Background

The Cambodian Civil War in 1970–1979 resulted in a loss of nearly all documents on the standards for traffic control devices. This, in turn, led to drivers' lack of awareness of and low compliance with traffic laws and regulations, frequent traffic accidents, and a social crisis.

In 1995, the MPWT's General Department of Public Works prepared annexes on Land Traffic Signs and circulated these for official use under Regulation No. 599 PRK.SK.DCH dated 22 August 1995. Since then, road infrastructure in Cambodia has undergone numerous changes. In 2002, the MPWT set up a working group that would study how to improve the existing annexes on Land Traffic Signs, and subsequently announced new Annex No. 130 PR.SK.DD dated 15 October 2002 (MPWT, 2005).

To lessen traffic accidents and allow expert officials to easily conduct studies on the compliance with new road requirements, the MPWT developed Land Traffic Signs Standards to replace the existing Land Traffic Sign annexes.

3.2 The Basic Foundation of Road Traffic Signs

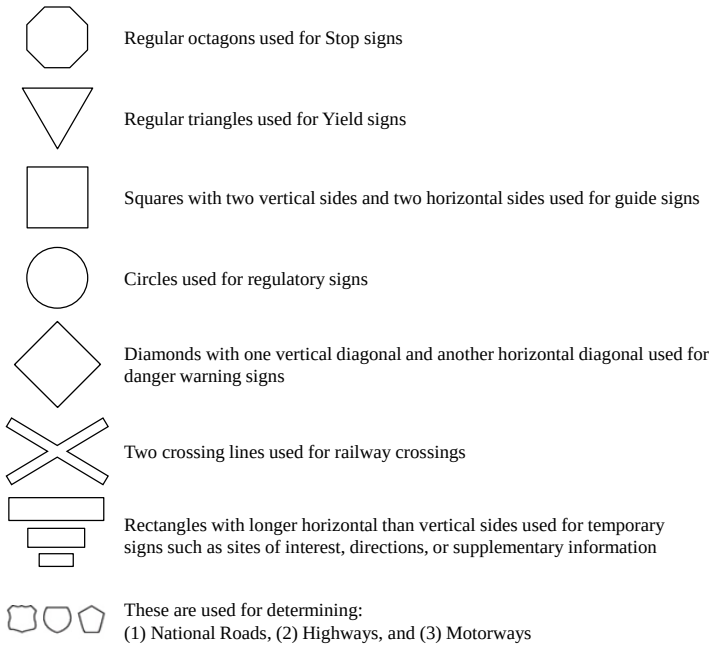
Road traffic signs are divided into different types, such as those that provide instructions that must be followed by road users, those that warn road users of potential dangers, and those that inform road users of or provide directions to locations of interest and major sites. All signs have predetermined shapes and colours.

Traffic signs, as an integral part of traffic systems, must be easily seen and understood, and thus their shapes and colours must be standardised, and their deployment must be based on geographical research.

3.3 The Shapes

Figure 3.2 indicates the meanings of the various shapes used for road signs in Cambodia.

Figure 3.2. Shapes and Meanings of Road Traffic Signs



Source: Ministry of Public Works and Transport, Cambodia.

3.4 Classification of Traffic Signs

There are four classifications of road signs: traffic signs, road marker signs, traffic signals, and traffic police signals.

3.4.1. Traffic Signs

a) Regulatory signs

Regulatory traffic signs convey traffic rules and regulations for intersections, weight limits, speed limits, one-way streets, and parking, amongst others. These signs are generally rectangular in shape and use white, black, and red as their main colours. Regulatory signs are divided into three basic groups: prohibitory, mandatory, and priority signs.

- **Prohibitory Signs**

  Prohibitory traffic signs prohibit certain types of manoeuvres or traffic. As shown in Figure 3.3, there are 45 types of prohibitory signs (Code Nos. PW03-R1-01 to PW03-R1-45).

Figure 3.3. Index of Prohibitory Signs

Source: Ministry of Public Works and Transport.

- **Mandatory Signs**

Mandatory traffic signs display rules that need to be followed when using a specific stretch of road. Unlike prohibitory signs, which tell drivers what they cannot do, mandatory signs tell drivers what they must do. Most mandatory road signs are circular in shape and tend to use white symbols on a blue background and a white border, or black symbols on a white background with a red border. As shown in Figure 3.4, there are 24 types of mandatory signs (Code Nos. PW03-R2-01 to PW03-R2-24).

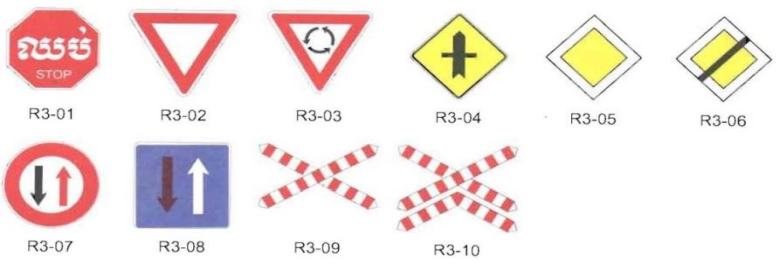
Figure 3.4. Index of Mandatory Signs

Source: Ministry of Public Works and Transport.

- **Priority Signs**

Priority traffic signs indicate the order in which vehicles should pass intersection points. A common example is the 'Yield' sign. As shown in Figure 3.5, there are 10 types of priority signs (Code Nos. PW03-R3-01 to PW03-R3-10).

Figure 3.5. Index of Priority Signs



Source: Ministry of Public Works and Transport.

b) Warning signs

Warning signs caution road users about potential dangers and are divided into two groups: danger warning signs and temporary warning signs.

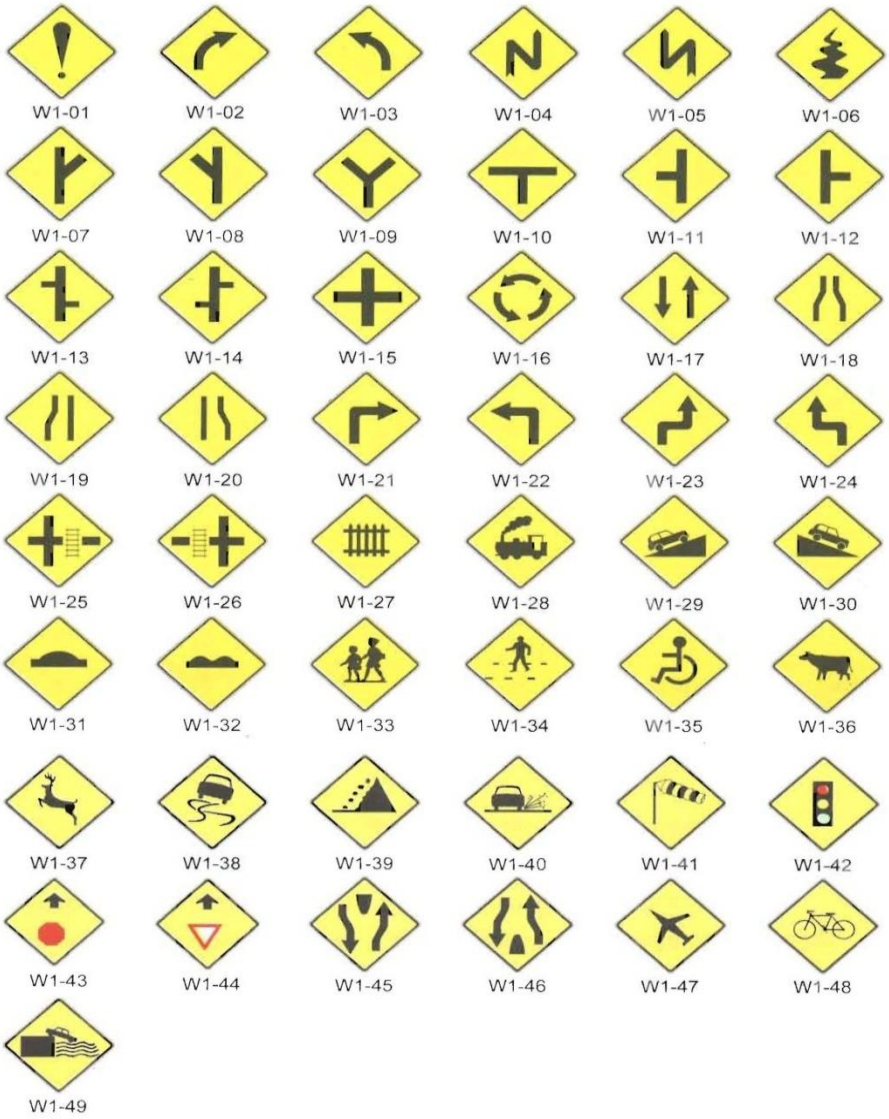
- **Danger Warning Signs**

A traffic warning sign indicates an upcoming road hazard that may not be readily apparent to the driver. These signs are diamond-shaped with a black border and a yellow background. Warning signs usually contain a symbol. As shown in Figure 3.6, there are 49 types of danger warning signs (Code Nos. PW03-W1-01 to PW03-W1-49).

- **Temporary Warning Signs**

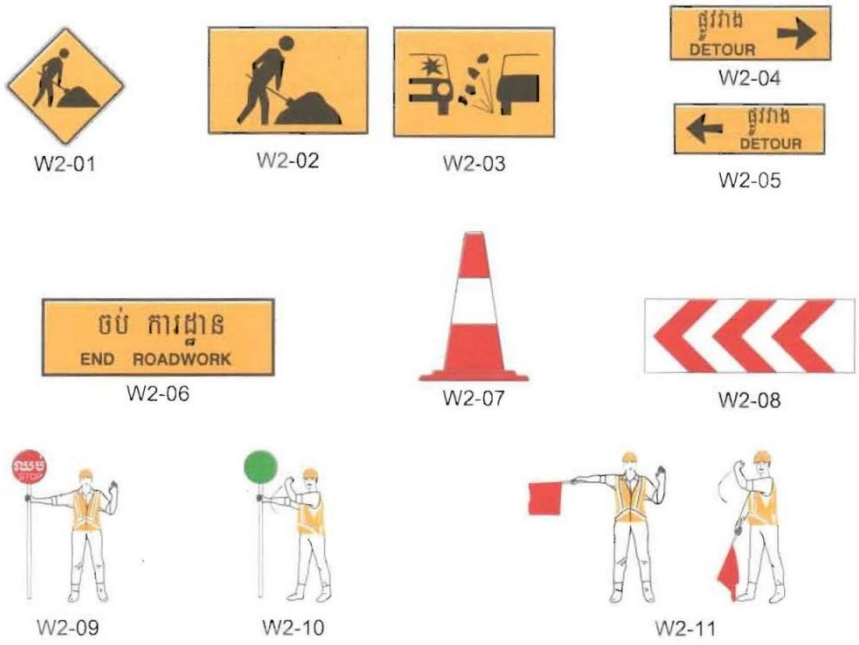
As the name suggests, these signs are often temporary in nature and used to indicate road maintenance or construction, poor conditions, or temporary conditions ahead, including flaggers, survey or utility crew, zipper merges, detours, bridge-outs, blasting areas, bumps, dips, frost heaves, flooding (with signs labelled 'High water'), soft shoulders, uneven pavement, freshly paved roads, loose gravel, smoke, and trucks entering. When a warning sign provides temporary guidance through a work zone, it will have an orange background with a black legend and border. As shown in Figure 3.7, there are 11 types of temporary warning signs (Code Nos. PW03-W2-01 to PW03-W2-11).

Figure 3.6. Index of Warning Signs



Source: Ministry of Public Works and Transport.

Figure 3.7. Index of Temporary Warning Signs



Source: Ministry of Public Works and Transport.

c) Guide signs

Guide signs help road users navigate to their destination. These signs are generally rectangular and have white text on green backgrounds. Guide signs are divided into four groups: directions, place identification, street names, and services or information.

- **Direction Signs**

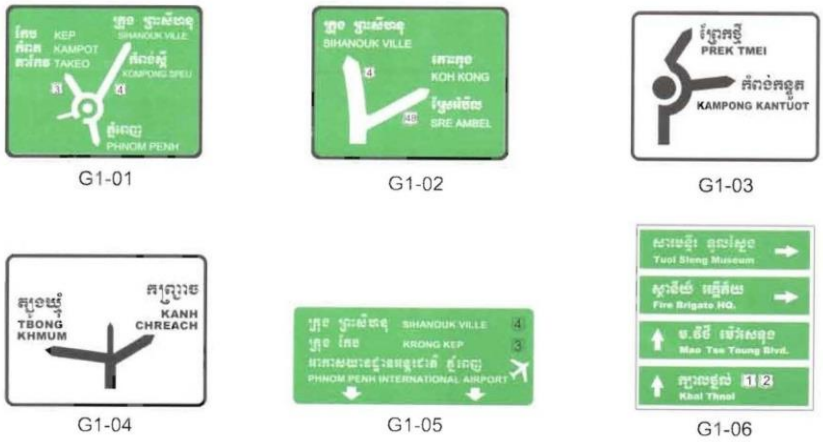
  Direction signs inform drivers about places, businesses, routes, lane choices, road choices, and distances to destinations. Direction signs with a yellow background (blue on motorways) show geographical destinations. Those with a white background (or white fields on yellow and blue signs) show local destinations. Meanwhile, direction signs with a brown background show destinations of special interest for tourists, while those with an orange background denote temporary detours.

  As shown in Figure 3.8, there are six types of direction signs (Code Nos. PW03-G1-01 to PW03-G1-06).

- **Place Identification Signs**

Direction signs are far more varied internationally than other classes of signs that

Figure 3.8. Index of Direction Signs



G1-01 G1-02 G1-03

G1-04 G1-05 G1-06

Source: Ministry of Public Works and Transport.

Repeat the name or number of the road, such as place identification signs. Place Agglomeration Indication signs shall be usually shaped as rectangular, with the longer side horizontal. Surrounded white external frame and red internal frame, white background on which shall be black inscriptions of agglomeration names. These signs inform drivers of beginning point of agglomeration or end point of agglomeration in the case of place indication signs with red line crossing from left bottom to right top. Boundary Indication Signs shall be shaped as rectangular, with the longer side horizontal, surrounded white external frame and blue background on which shall be white internal inscriptions of village, commune, district or provincial boundary names. These signs have been informing drivers about place of arrival or departure in case of place indication signs with red line crossing from left bottom to right top. As shown in Figure 3.9, there are four types of place identification signs (Code Nos. PW03-G2-01 to PW03-G2-04).

Figure 3.9. Index of Place Indication Signs

Source: Ministry of Public Works and Transport.

- **Street Name Signs**

Street name signs identify named roads, generally those that do not qualify as expressways or highways. Street name signs are most often found posted at intersections and usually in perpendicularly oriented pairs identifying each of the crossing streets. As shown in Figure 3.10, there are five types of street name signs (Code Nos. PW03-G3-01 to PW03-G3-05).

Figure 3.10. Index of Street Name Signs

Source: Ministry of Public Works and Transport.

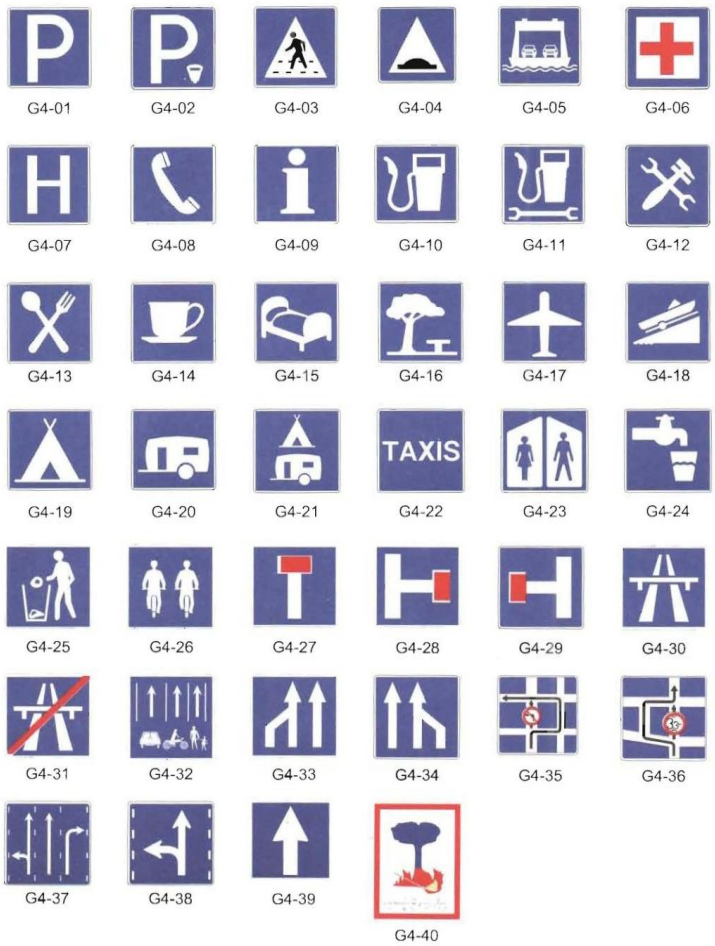
- **Service or Information Signs**

An information sign is an extremely legibly printed and noticeable placard that informs drivers of the purpose of an object, or provides instructions on the use of something. As shown in Figure 3.11, there are 40 types of service or information signs (Code Nos. PW03-G4-01 to PW03-G4-40).

Supplementary Signs

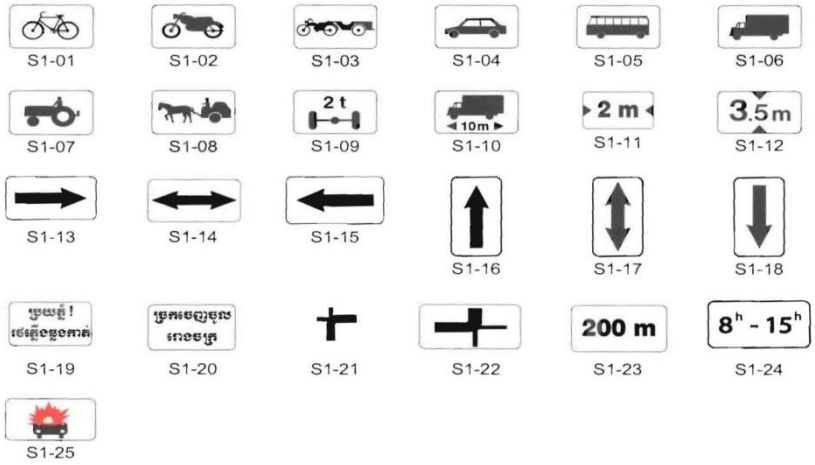
Supplementary Signs shall be shaped as rectangular with black frame and white background on which shall be black colour of image and any signs inside, except semi red- yellow colour signs of vehicle transported inflammable products (PW03-S1-25). This supplementary signs use to additionally help placing under traffic signs to confirm more clearly the meaning of things such as types of vehicles, distance, direction, time, images or words as required. There are 25 different types of supplementary signs which are being shaped and coloured as briefed above to confirm more clearly the meaning of words, of type of vehicles, its size, width, height, direction, and inflammable products transported (Figure 3.12).

Figure 3.11. Index of Service or Information Signs



Source: Ministry of Public Works and Transport.

Figure 3.12. Index of Supplementary Signs



Source: Ministry of Public Works and Transport.

- **Guide Posts**

There are ten different guide posts with different name and function such as

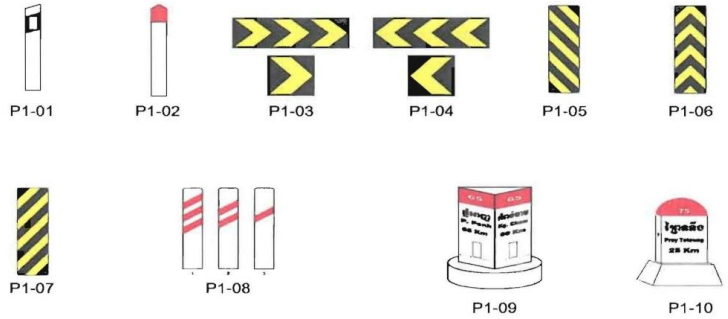
1) Delineator post use for showing the drivers to aware the road curve or use to straight line driving do not deviate from middle of the road;
2) Guide Post at Dangerous Curve uses to show the drivers to aware the dangerous curve with down or up inclination or bank of crevasse;
3) Lateral shift marker (to right): this sign use to show the drivers to be attention on curve to right;
4) Lateral shift marker to left: this sign use to show the drivers to be attention on curve road to left;
5) Object marker (on the right): use to show the drivers to be attention on obstacle on the right such as poles of bridge or other poles;
6) Object marker (at centre): this sign use to show the drivers to be attention on obstacle on middle road such as terrace or gardens;
7) Object marker (on the left): this sign uses to show the drivers to be attention on obstacle to the left such as poles of bridge or other poles;
8) Railway Crossing Post: this sign is used to inform the drivers to be attention on train crossing 150 m in front (figure 3.1), 100m in front (figure 3.2) and 50m in front (figure 3);

9) Kilometre Post (for 10 km INTERVAL): this guide post is used to inform the road users about a road distance to further significant regions;

This guide posts have an interval of 10km per each;

10) Kilometre Post (for 1 km INTERVAL): Kilometre Post (for 10 km INTERVAL): this guide post is used to inform the road users about a road distance to further significant regions. This guide posts have an interval of 1km per each;

Figure 3.13. Index of Guide Posts



Source: Ministry of Public Works and Transport.

3.4.2. Road marker signs

Road marker signs provide information regarding a road's onward course, or warn drivers about upcoming obstacles. Temporary road marker signs such as those indicating road maintenance must have a red background and be less than 6 mm off the ground, with cat's eye reflectors no more than 15 mm above the road surface.

Road markers must be white or yellow. The length and width of the markings vary according to their purpose; no specific sizes are indicated. Roads in developed areas should use a broken line for lane division. The use of continuous lines is reserved for special cases such as narrow undivided highways or roads with reduced visibility.

All words painted on the road surface should be either place names or words recognisable in most languages, such as ‘Stop’ or ‘Taxi.’

a. Transverse markings

Transverse Markings are single or double white lines that indicate a centre line or a no-passing zone. Transverse markings are placed near intersections or roundabouts with traffic signs such

as ‘Stop’ or ‘Yield’ to inform drivers that they must stop or yield to higher priority traffic before entering a road or roundabout (Code Nos. PW03-M1-01 to PW03-M1-04) (Figure 3.14).

Figure 3.14. Index of Traverse Markings

Source: Ministry of Public Works and Transport.

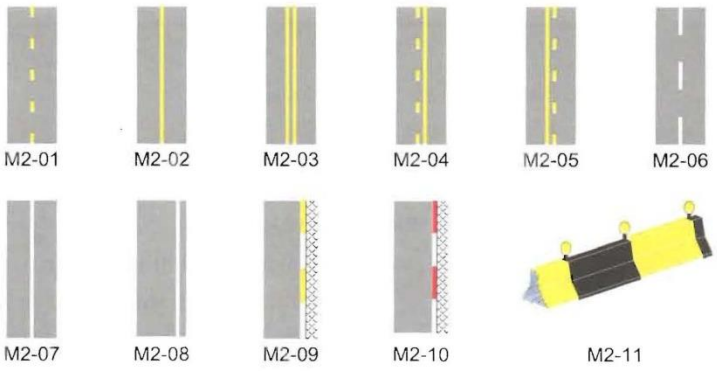
b) Longitudinal markings

Longitudinal markings are single or double white, yellow, or red lines, depending on whether a driver must stop or yield. Driving across longitudinal markings is prohibited (Code No.: PW03-M2-01 to PW03-M2-11) (Figure 3.15).

c) Arrow markings

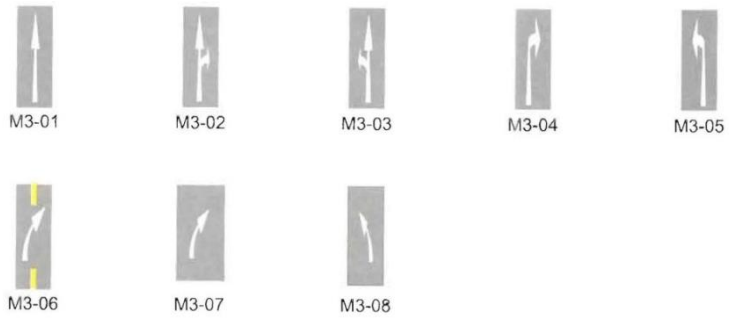
Arrow markings are typically used on undivided highways. They are white and indicate a direction that drivers must follow. Arrow markings inform the driver that they are approaching an intersection or a turning lane in advance so that they can easily alter their position according to their intended destination (Code Nos. PW03-M3-01 to PW03-M3-08) (Figure 3.16).

Figure 3.15. Index of Longitudinal Markings



Source: Ministry of Public Works and Transport.

Figure 3.16. Index of Arrow Markings



Source: Ministry of Public Works and Transport.

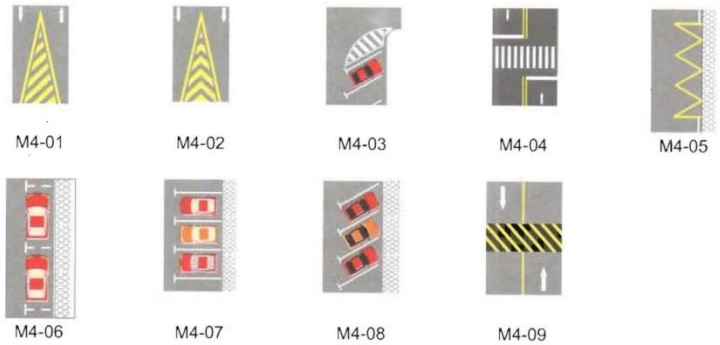
d) Other road markings

Road markings other than those stipulated above include diagonal hatched markings (two-way road), chevron markings (one-way road), diagonal hatched markings (road edges), crosswalk markings, bus stop markings, parking bay markings (parallel or vertical parking), and road hump markings (Code Nos. PW03-M4-01 to PW03-M4-09).

3.4.3. Traffic signals

Traffic signals are used to manage and facilitate traffic flow, reduce traffic congestion, and prevent traffic accidents amongst both drivers and pedestrians. These are typically installed at intersections and roads with crosswalk signs and markings.

Figure 3.17. Index of Other Road Markings

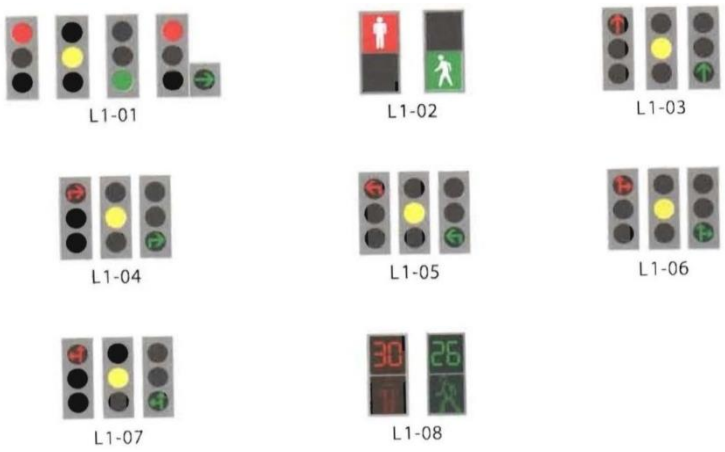


Source: Ministry of Public Works and Transport.

a) Three-colour traffic signals

There are three types of traffic signals: three-colour traffic signals, two-colour traffic signals, and one-colour flashing traffic signals (Code Nos. PW03-L1-01 to PW03-L1-08) (Figure 3.18).

Figure 3.18. Index of Three-colour Traffic Signals



Source: Ministry of Public Works and Transport.

b) Two-colour traffic signals

Two-colour-traffic signals intend to show pedestrians whether to stop or to walk. Code Nos. PW03-L2-01 to PW03-L2-01.

c) One-colour flashing traffic signals

One-colour flashing traffic signals intend to show pedestrians remaining time for crossing. Code No. PW03-L3-02.

3.4.4. Traffic police signals

Traffic police signals are used to help improve traffic flow under the following circumstances:

- **During traffic congestion;**
- **When there are no traffic lights;**
- **When ordering motor vehicles to slow down or stop; and**
- **When managing traffic ahead of convoys.**

Not counting the Traffic Police Signals, Cambodia already has a total of 272 road traffic signs, most of which were designed in accordance with the Convention on Road Traffic signed in Vienna

on 8 November 1968 although the country has not yet become a signatory (UN Treaty Collection, 2016).

4. Facilitation of Transport

4.1 ASEAN Framework Agreements

According to the MPWT, Cambodia is an active signatory member of key ASEAN framework agreements. Cambodia signed the ASEAN Framework Agreement on Multimodal Transport on 17 November 2005, the ASEAN Framework Agreement on the Facilitation of the Inter-state Transport on 10 December 2009, and AFAFGIT on 16 December 1998; however, two AFAFGIT protocols (Protocols 2 and 7) have not been signed yet.

4.2 Cambodia's Implementation of GMS CBTA

After the six GMS countries signed all 17 annexes and three protocols of the CBTA in March 2007,all the countries ratified in 2015.

As of January 2009, Cambodia had signed and ratified (via the Parliament, Senate, and Royal Palace) 20 protocols and annexes, but only 12 could be implemented (by the Ministry of Foreign Affairs) (MPWT, 2015).

Thereafter, Cambodia entered into bilateral MoUs for the initial implementation of the GMS CBTA with Thailand and Viet Nam.

4.2.1 Cambodia-Thailand traffic rights exchange

The legal documents mainly referred to are as follows:

- **Memorandum of understanding signed at Kunming on 4 July 2005 on the initial implementation at Aranyaprathet (Thailand) and Poipet (Cambodia) of the agreement to facilitate cross-border transport of goods and people between and amongst Cambodia, China, Lao PDR, Myanmar, Thailand, and Viet Nam;**

- **Memorandum of understanding between the Cambodia and Thailand on the exchange of traffic rights for cross-border transport through the Aranyaprathet-Poipet border crossing points signed on 30 March 2008 in Vientiane;**
- **Addendum to the memorandum of understanding between Cambodia and Thailand on the exchange of traffic rights for cross-border transport through the Aranyaprathet–Poipet border crossing points signed in Phnom Penh on 17 September 2009.**

The MPWT has requested a quota of 500 vehicles including buses, vans and trucks for approval from Cambodia and is prepared to negotiate a future bilateral CBTA between Cambodia and Thailand. At present, only a few transport companies that are in operation offer tourist packages from Cambodia to Thailand using hired buses and vans; Nattakan, a Cambodian bus operator, and Thai Transport Companies have operated scheduled passenger bus tours using four Cambodian buses and four Thai buses with daily departures in the Siem Reap–Bangkok and Phnom Penh–Bangkok routes.

4.2.2 Cambodia–Viet Nam traffic rights exchange

The exchange of traffic rights between Cambodia and Viet Nam is being implemented at Bavet–Moc Bai and other border crossing points between the two countries.

The legal bases for the implementation of the exchange of traffic rights between Cambodia and Viet Nam include: (i) the Agreement on Road Transportation signed in 1998; (ii) a protocol signed in Hanoi on 10 October 2005 that stipulated an initial quota of 40 vehicles; (iii) an MoU signed in Phnom Penh on 17 March 2009 that increased the quota to 150 vehicles; (iv) an amendment to the MoU signed in Phnom Penh on 15 September 2010 that brought up the quota to 300; (v) and an amendment to the MoU in Bali on 30 November 2012 that stipulated another increase in the quota to 500.

One can observe that the quotas in these bilateral CBTA have been rising from the initial quota of 40 trucks, to 150 in 2009, 300 in 2010, and finally, 500 plus a planned increase of 100 vehicles annually thereafter.

4.2.3 Cambodia–Lao PDR traffic rights exchange

The legal bases for the implementation of the exchange of traffic rights between Cambodia and Lao PDR include:

- **Agreement on Road Transportation between Cambodia and Lao PDR, signed in Vientiane, Lao PDR, on 21 October 1999;**
- **Protocol for the implementation of a road transport agreement between Cambodia and Lao PDR, signed in Siem Reap, Cambodia on 14 December 2007.**

The transport cooperation between Cambodia and Lao PDR started in 2009 (i.e., the Trapeang Kriel–Nong Nokkhien border crossing points). However, the implementation of contractual cross-border passenger transport operations between the two nations remains limited.

The Agreement on the Facilitation of Goods in Transit. (AFFAGIT) (discussed since 1990s) have yet to be finalized. The GMS Cross-Border Transport Agreement (discussed since 1994) have been ratified including annexes and protocols since 2015 but single stop inspections have been implemented only at Lao – Vietnamese border along the East-West Economic Corridor. The content of the agreements has been translated into Khmer language (MPWT, 2015).

An MoU on land transport amongst Cambodia, Lao PDR, and Viet Nam was signed on 17 January 2013 in Pakse, Champasak Province, Lao PDR. This MoU allows 150 commercial vehicles of each of these nations to transport goods and/or passengers into these three countries. Although the MoU went into effect in April 2013, it has not been implemented.

4.3 Condition of Cross-Border Transport

In May 2014 – a year ahead of the ASEAN Economic Community's 2015 deadline – the Cambodian National Assembly approved a draft law aimed at simplifying, modernising and aligning customs procedures with those of neighbouring nations. On September 9, the Ministry of Commerce announced that it would implement a simplified and automated Certificate of Origin service by March 2015.

Particularly within ASEAN countries, the single window initiative would help benefit Cambodia's exports and improve its business climate and trade, which currently stands at less than the trade

with outside the bloc and would also encourage foreign direct investment which might enable Cambodia to achieve the development goal of increasing foreign investment (MPWT, 2015).

4.4 National Transit Transport Coordinating Committee

The National Transit Transport Coordinating Committee was established in Cambodia by Sub-decree No. 115 A.N.KR. BK. dated 21 November 2001 to comply with the requirements of the ASEAN Transit Transport Agreement. Some countries in the GMS have used the National Transit Transport Coordinating Committee as a mechanism to either coordinate the GMS CBTA or to transform into the National Transport Facilitation Committee, as required by the GMS CBTA.

The National Transport Facilitation Committee is the body that will issue the agreed-upon number of permits annually.

4.5 Customs Procedures

4.5.1 Modernization of customs procedures

Cambodia has made significantly reformed and modernised its external transport activities by streamlining and harmonising customs procedures with international standards.

Major reforms include

- **development and implementation of the Automated System for Customs Data (ASYCUDA) World System and the extensive application of information technology;**
- **simplification of customs procedures to bring them within the standards of the Revised Kyoto Convention, such as the creation of special procedures for special economic zones and highest-compliant traders and investors;**
- **implementation of customs valuation procedures consistent with the World Trade Organization Valuation Agreement;**
- **implementation of risk management concepts and an automated risk management system at major customs posts to identify high-risk cargo and provide guidance to officers in addressing the risks;**
- **implementation of post-clearance audit, an important mechanism in fostering and promoting voluntary compliance, at company premises;**

- **provision of a mechanism to support the effective implementation of trade facilitation principles and valuation agreements;**
- **establishment of a strong foundation for the implementation of international trade facilitation standards and initiatives such as the Authorized Economic Operators Programme (to date, eight companies have been certified as Best Trader Group Members);**
- **introduction of the Advance Ruling System on Tariff Classifications, Rules of Origin and Custom Valuation; and**
- **development of the Cambodia National Single Window that will eventually connect with the ASEAN Single Window.**

Based on report of Strategy and Work Programs on Reform and Modernization of the General Department of Customs and Exercise of Cambodia (2014-2018), with financial and technical support from development partners, the ASYCUDA World System has been implemented in 22 major customs offices, including the Port of Sihanoukville and various border posts around the countries that cover almost 95% of the Single Administrative Declaration and approximately 85% of trade volume (JICA, 2015).

The ASYCUDA World Programme contributed to better logistics, making it easier for exporters to integrate into regional production networks. Customs clearance times with physical inspection fell from 5.9 days in 2010 to 1.4 days in 2014, while the share of consignments selected for physical inspection fell from 29% to 17% in the same period, confirming that the capabilities of customs risk management have improved (World Bank, 2012).

More than 120 laws, royal decrees, sub-decrees, and regulations containing formal non-tariff measures have been identified in the World Bank Group (2014), including various import- or export-related permits, licenses, and approvals required for trade.

Through the financial support of the World Bank, the government is automating the application and issuance of certificates of origin and improving transparency through a trade information website where all rules, regulations, fees, and procedures will be made available. Other initiatives include the development of a guide on the implementation of a national single window where traders can conduct all of their regulatory requirements; expansion of the use of electronic transactions such as e-payment of duties and taxes; and the acceptance of electronic copies of attached documents such as invoices and transportation documents (GDCE–MOEF,

2015). These will allow data to be submitted only once, and coordinate the processing, risk assessment, and inspection steps.

4.5.2 Customs transit procedures

The Ministry of Economy and Finance's issuance of Instruction No. 508 MEF.BRK on Customs Transit Procedures on 1 July 2008 played a crucial role in Cambodia's cross-border transport facilitation. For one, it allowed transit cargo to be exempted from regular physical inspections, bond deposits, and custom escorts. It is expected to reduce the time spent in cross-border formalities for land transport between international border crossing points, as well as to facilitate regional interaction and help create new logistics routes.

If no irregularities are suspected after checking the authenticity of documents, means of transportation, and containers, the competent customs officers shall stamp and certify that the goods/passengers have undergone customs transit procedures (which define a number of conditions, especially the legal routes and time limits for the transit) and affix customs stamps or seals to the transit vehicle or containers.

According to *Business* 2010, 2011, 2012, 2013 and 2015, the numbers of required documents on were reduced from 11 in 2010 to eight in 2015 for exports, and from 11 to nine in 2015 for imports (Table 3.6). The required documents for trading across borders in Cambodia according to World Bank, Doing Business, Cambodia Profile is shown in Table 3.7. Therefore, trade is facilitated by the number of formalities and procedures reduced.

Table 3.6. Trading Across Cambodian Borders in the period between 2010 and 2015

	Doing Business in Cambodia			
	2010	2012	2014	2015
Documents to export (number)	11	9	8	8
Time to export (days)	22	22	22	22
Cost to export (USD per container)	732	732	795	795
Documents to import (number)	11	10	9	9
Time to import (days)	30	26	24	24
Cost to import (USD per container)	872	872	930	930

Source: *Doing Business* 2015, 2014, 2012, and 2010 Reports & Cambodia Profile.

5. Challenges Associated with the Facilitation of Road Transport

Despite the substantial progress in its road infrastructure and assigned institutions, Cambodia still faces a number of challenges in cross-border transport.

5.1 Infrastructure Challenges

5.1.1 Inadequate Physical Infrastructure

On the overall, Cambodia's transport network cannot yet meet the rapidly growing demand for transport facilities and services. This includes the lack of paved provincial roads, and the low durability of unpaved roads, especially in rural networks. In addition, there is still a lack of cargo terminals (for trans-shipments).

Table 3.7. The Required Documents for Trading across Borders in Cambodia according to World Bank, Doing Business, Cambodia Profile

	The required documents to Import	2010	2012	2014	2015
1	Bill of Lading	-	yes	Yes	yes
2	Certificate of Origin	-	yes	No	No
3	Commercial Invoice	-	yes	Yes	yes
4	Cargo Release Order	-	yes	Yes	yes
5	Company Registration	-	No	No	No
6	Customs Import Declaration	-	yes	yes	yes
7	Import Permit	-	yes	yes	yes
8	Insurance Certificate	-	yes	yes	Yes
9	Packing List	-	yes	yes	Yes
10	Road Transport Document	-	No	No	No
11	Tax Certificate	-	yes	yes	Yes
12	Terminal Handling Receipt	-	yes	yes	Yes
Total Documents to Import		11	10	9	9

Source: World Bank, Doing Business 2010; and Doing Business, Cambodia Economic Profile for 2012, 2014 and 2015 while for 2010 was not Cambodia Econ.Profile Publication by WB.

5.1.2 Insufficient maintenance of rehabilitated roads

Cambodia's road network has significantly improved since the mid-1990s and is generally in fair and good condition. However, the road quality is not always optimal, with some new roads not meeting international standards and therefore deteriorating quickly (MOC, 2014). Most of the national road networks have been rehabilitated and are now in good condition. However, the provincial and rural road networks are in disrepair due to years of limited investment and neglect.

5.1.3 Traffic safety and overloaded transport

Road traffic safety is getting problematic, with crashes, casualties, and fatalities all rising at a faster rate than the population and volume of road traffic. Inadequate and improper implementation of traffic safety devices, hardware, and measures; poor enforcement of traffic laws and regulations; increasing number of road vehicles; poor transport infrastructure; lack of awareness amongst road users; poor driving licensing and vehicle inspection processes; poor driver and pedestrian behaviour; limited education; and the proliferation of alcohol advertising all contribute to Cambodia's high rate of road fatalities.

Overloaded transport is also a primary cause of damage to roads. The MPWT has made great efforts to improve its monitoring and control of axle loads, constructing nine new weighing stations at major national roads and acquiring 36 portable weighing scales, 34 of which were funded by the ADB, to be distributed to several provinces (MPWT, 2015); however, overloading remains prevalent.

5.1.4 Underdeveloped urban transport

In the past decade, urban traffic has steadily worsened in major cities. Urban transport relies overwhelmingly on motorcycles that, due to lax enforcement of traffic rules, are the cause of most accidents in urban areas.

Traffic congestion and accidents have risen because public mass transport system has not yet been introduced. Due to a lack of government subsidies and public interest, the first trial of bus services in 2001 failed. The second trial of bus services, which was supported by the Japan International Cooperation Agency, launched 10 buses between February and March 2014. The bus services started during this round of trial gained a degree of public trust and support, and are still running today (MPWT, 2015).

5.1.5 Vulnerability to climate change

Sustainable infrastructure development is now being challenged by the effects of climate change, including heavy rains, floods, and typhoons. A single catastrophic event that results from and/or worsened by climate change can undermine decades of growth and development. Therefore, it is necessary to assess the vulnerability of the transport network to climate change and to create guidelines on how to adapt to these issues.

5.2 Institutional Challenges

5.2.1 Inadequate transport logistics

Cambodia is a small international freight market with a relatively small flow of bulk commodities. However, if the growth in container transport continues at its current rate, the transfer of containers to and from Sihanoukville will likely put a strain on the capacity of NR4, the national highway that links the port city to Phnom Penh. This outlook is one of the justifications for investing in the rehabilitation of the railway system.

The main constraints to efficient and competitive trade logistics emanate from operational, procedural, and organisational causes. Despite the significant leap in its ranking in the World Bank's Logistics Performance Index from the years 2010 to 2014, Cambodia still placed poorly when compared with other ASEAN countries.

5.2.2 Legislation

The ASEAN Agreement on Transit Transport was signed in 1998, but its protocols have not been fully finalised until recently. Most importantly, as these agreements often require reforms and adjustment in domestic legislations, many were signed but never fully ratified and/or implemented by signatory countries.

In addition to actual bilateral agreements, the GMS CBTA was set up as a multiple agreement on the cross-border transport of people and goods. In March 2007, all six member countries signed the annexes and protocols. These annexes and protocols have been ratified only recently.

The implementation of trade facilitation in Cambodia has not been fully effective due to the ongoing operation of existing laws and regulations that allow a duplication of other agency (Camcontrol of ministry of Commerce) activities at the border gates with the duty and responsibility also officially supported by Sub Decree to control and inspect imports and exports jointly with Customs. This would be expressed some degree of concerns relating to Cambodia's customs legislation that allows overlapping controls of agency operations at the border posts that could be also reflected a challenge in legislation sector to achieve successfully the implementation of border management. That is why this issue is fit to this legislation sub- title (Seng, 2014).

However, the disadvantage of sub-regional transport agreements is that it often takes years to conclude negotiations and complete the domestic legal processes required before they can go

into effect.

5.2.3 Lack of private sector participation

The key driver of socioeconomic development is the private sector. However, the challenges that impede the private sector's involvement need to be addressed.

Currently, the transport investment required cannot be met by funding coming from the government and development partners. The participation of development partners in rural road development needs to be reinforced by private sector involvement. However, private sector organisations have little or no awareness of the CBTA itself and are therefore not attracted to infrastructure development. To secure their long-term commitment and participation, there is a need to create a favourable environment that will attract the private sector towards public transport investment.

5.2.4 Finance

Financing requirements for the transport infrastructure are exceeding the capacity of the state budget. For the Public Investment Projects for 2015–2017, a total of US$4.9 billion (of which the total transport infrastructure investment is US$588 million) – or around US$1.6 billion per year – is required.

In addition to the government's budget allocations of KHR4,883.4 billion (US$1.191 billion) for public sector investment, the balance (total amount minus the government allocation) over the three-year period 2015–2017 amounts to KHR14,985.3 billion (US$3.709 billion) – or KHR4,995.1 billion (US$1.236.3 billion) per year. Such will need to be financed through:

- **Grants-in-aid from traditional external development partners (bilateral, multilateral, and nongovernmental organisations);**
- **Concessional term loans from external development cooperation partners (mainly, multilateral financial institutions and bilateral development partners);**
- **Resources from nontraditional sources, including nontraditional partners (both grants and semi-concessional loans);**
- **Potential new income from the development of extractive industries (oil, gas, and minerals) when commercial production in these sectors commences. In particular, Cambodia is in the process of increasing rice exports and production through agricultural diversification to garner higher budget revenues (MOP, 2016).**

From 2005 to 2013, 14 multilateral or bilateral development partners provided funds totalling about US$1.619 billion. Nine of these have funded transport infrastructure development or/and maintenance since 1992.

At present, the rural roads subsector's active development partners are the ADB, German Development Cooperation through the Kreditanstalt für Wiederaufbau, the government of the Republic of Korea through KEXIM Bank, the government of Australia, and the World Bank (ADB, 2014). A marked slowdown in the participation of development partners in national and provincial networks has been noted.

5.2.5 Customs procedures

Cambodia has made great strides recently in reforming and modernising its import, export, and transit operations, including streamlining and harmonising customs procedures with international standards. However, there remains a need (i) to implement further reforms in border management, particularly on physical inspection; and (ii) to disseminate information on customs' procedures. The time required to clear goods through customs is a relatively small fraction of the total import time, but that time increases significantly whenever goods are subjected to physical inspection.

The customs department is not the only agency involved in border management; the other agencies are those that handle quality/standards inspections, health/sanitary and phytosanitary measures, and immigration.

Cambodia requires a higher number of import and export documents, has higher import and export costs, and experiences longer export times than all ASEAN member countries except Lao PDR, which is a landlocked country similar to Myanmar (Table 3.8). Furthermore, Cambodia requires longer import times than all ASEAN member countries except Lao PDR and Indonesia.

In addition, Cambodia has some remarkably unsupportive institutional arrangements: Some barriers exist at the cross-border points, while others are found along transport routes, or spread randomly throughout the country. The impacts of these barriers are also varied (JICA, 2009). Institutional bottlenecks remain prevalent in the form of border-crossing formalities, which are rife with all forms of problems.

Table 3.8. Trading Across Borders of ASEAN Member Countries

Items	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Documents to export (number)	5	8	4	10	4	8	6	3	5	5
Time to export (days)	19	22	17	23	11	20	15	6	14	21
Cost to export (US$ per container)	705	795	572	1,950	525	620	755	460	595	610
Documents to import (number)	5	9	8	10	4	8	7	3	5	8
Time to import (days)	15	24	26	26	8	22	15	4	13	21
Cost to import (US$ per container)	770	930	647	1,910	560	610	915	440	760	600

Source: *Doing Business 2015*.

At present, cross-border formalities exist at both sides of the border, and customs, quarantine, and immigration formalities are handled through separate avenues. The simplification of formalities could shorten the time required at physical border-crossing facilities (JICA, 2007).

Cambodia also faces other challenges. It currently has difficulties in establishing a representative office/branch office in Viet Nam. Other operational constraints include a lack of parking areas, unavailability of issuing a third-party insurance; a ineffective guarantor system for international cargo[1]; either congestion in common control areas or a lack of common control areas at border-crossing points; and a lack of mutual agreements between Cambodia and Viet Nam regarding cross-border transportation by Cambodian trucks.

6. Recommendations

To overcome the existing challenges in infrastructure development for cross-border transport facilitation, well-planned and well-coordinated policy measures and actions are urgently needed. The following recommendations must be considered:

- **The transport infrastructure network for internal and sub-regional connectivity should be strengthened;**

[1] A guarantor of a country of a consigner is needed to guarantee the import tariff for transit country, for instance, when a truck loaded with transit cargoes is hijacked in the transit country and goods in the truck are imported to the country unintentionally.

- **Roads should be upgraded to a level that can guarantee a seamless transport infrastructure network;**
- **The physical road infrastructure should be improved. This includes the installation of road safety devices, increased education for road users, improved driving behaviour, stricter and stronger law enforcement, and more accurate vehicle inspections to reduce traffic accidents;**
- **Non-physical constraints, including the cost, time, and paperwork associated with customs procedures, should be reduced or eliminated;**
- **Current policies, laws, regulations, procedures, and guidelines related to transport and trade facilitation should be comprehensively reviewed and amended, and border management should ensure that they are simplified and harmonised in line with international standards. The aim is to reduce unnecessary duplication and overlapping of agencies' responsibilities;**
- **A new bilateral agreement should be negotiated and signed to ensure conformity with CBTA initiatives and protocols;**
- **Capacity building of human resources working in the field of transport and trade facilitation and at border crossings should be strengthened;**
- **Technical issues such as common control areas for joint inspection or transshipment of goods should be negotiated;**
- **Transport facilitation should be enhanced by eliminating provincial checkpoints and institutional cross-border barriers; and**
- **The role of private sector participation through approaches such as public-private partnership mechanisms should be increased to mobilise sufficient capital resources for public infrastructure.**

Before entering into any bilateral or multilateral regional transport agreements, signatory countries should consider the required reforms and adjustments to domestic legislation that need to be enforced.

7. Conclusion

Although there is a marked progress in physical infrastructure, reforms and modernisation of cross-border transport facilities, and customs procedures, the facilitation of transport and trade has not been completely successful.

To further improve the facilitation of road transport and trade, institutional cross-border barriers will need to be eliminated or reduced through close collaboration and coordination between customs institutions and other relevant border management agencies. Such barriers include documentations and other formal requirements that are excessive or do not serve any specific purpose.

Once implemented, such reform could lead to lower costs, shorter time required for customs clearance and export/import procedures, stronger international competitiveness, and better economic diversification. These are key factors for growing the economy and reducing poverty.

To address current shortfalls in infrastructure and meet new financing requirements, Cambodia will need to seek funding and loans from international institutions and development partners, in addition to approaches such as public-private partnerships.

Furthermore, campaigns on improving road users' awareness and education on road traffic laws, road laws, and road safety devices are urgently needed to help reduce the number of traffic accidents.

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