

# Issues and Challenges for the Regional Transport Infrastructure Network Development Projects and Trade Facilitation Programs in Asia

## *The Case of the Greater Mekong Subregion*

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**Cross-Border Infrastructure Management:  
Managing Regional Public Goods Seminar-Workshop  
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# The Greater Mekong Subregion (GMS)

## Myanmar

Land area: 677 thou sq km  
 Population: 54.8 M  
 GDP per capita: US\$255 (2005)

## Thailand

Land area: 513 thou sq km  
 Population: 65.8 M  
 GDP per capita: US\$3,133

## The GMS in 2006

Land area: 2.6 M sq km  
 Population: 323 M  
 GDP per capita: US\$1,453\*  
 \* excludes Myanmar



## People's Republic of China

Land area: 633 thou sq km  
 Population: 97.3 M  
 GDP per capita: US\$1,135  
 (figures for Yunnan and Guangxi only)

## Viet Nam

Land area: 332 thou sq km  
 Population: 84.1 M  
 GDP per capita: US\$724

## Lao PDR

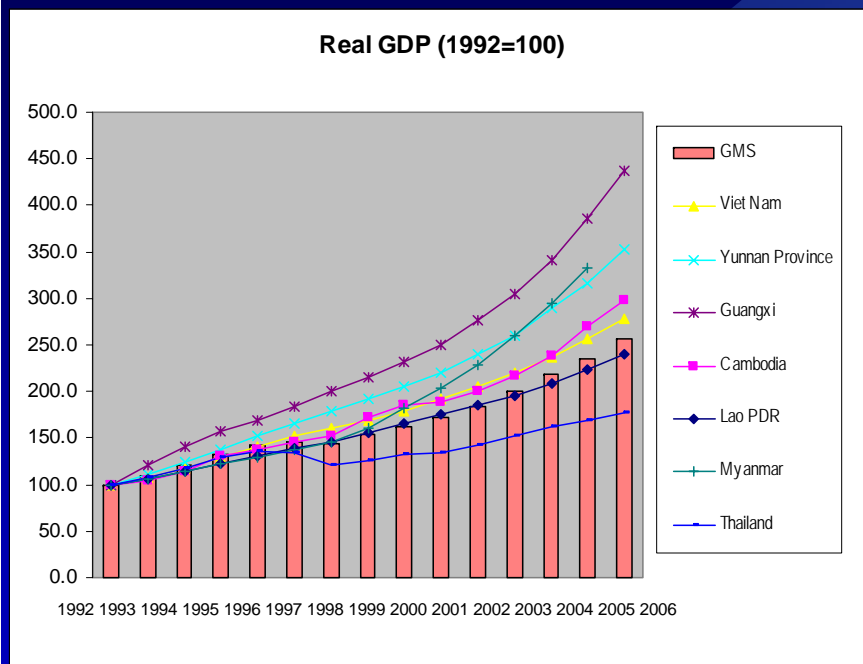
Land area: 237 thou sq km  
 Population: 5.7 M  
 GDP per capita: US\$601

## Cambodia

Land area: 181 thou sq km  
 Population: 14.1 M  
 GDP per capita: US\$510

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## GMS: Accelerated economic growth and reduced poverty incidence



	1992	2006
Total exports (US\$ million)	36,343 <sup>a/</sup>	181,761 <sup>a/</sup>
Intraregional exports (US\$ million)	2,397	35,473 (2005)
Tourist arrivals (thousands)	10,005 (1995)	22,378
Foreign direct investment (US\$ million)	2,144	6,969

a/ Excludes PRC

	Poverty Incidence (US\$1-a-Day) Headcount Ratio (in %)	
	1990	2003
CAM	46.0	33.8
PRC	33.0	13.4
LAO	52.7	28.8
THA	10.1	0.7
VIE	50.7	9.7



**GREATER MEKONG SUBREGION**  
**ENHANCING CONNECTIVITY, COMPETITIVENESS AND COMMUNITY**

**Strategic Framework**  
**2002-2012**

**Strategic Thrusts**

Strengthen  
infrastructure linkages

Facilitate cross-border  
trade, investment &  
tourism

Enhance private sector  
participation &  
competitiveness

Develop human  
resources & skills  
competencies

Protect environment &  
promote sustainable  
use of shared natural  
resources

**Action Plan**

- Transport
- Telecommunications
- Energy
- Environment
- Tourism
- Trade
- Investment
- Human Resource Development
- Agriculture

**Goals**

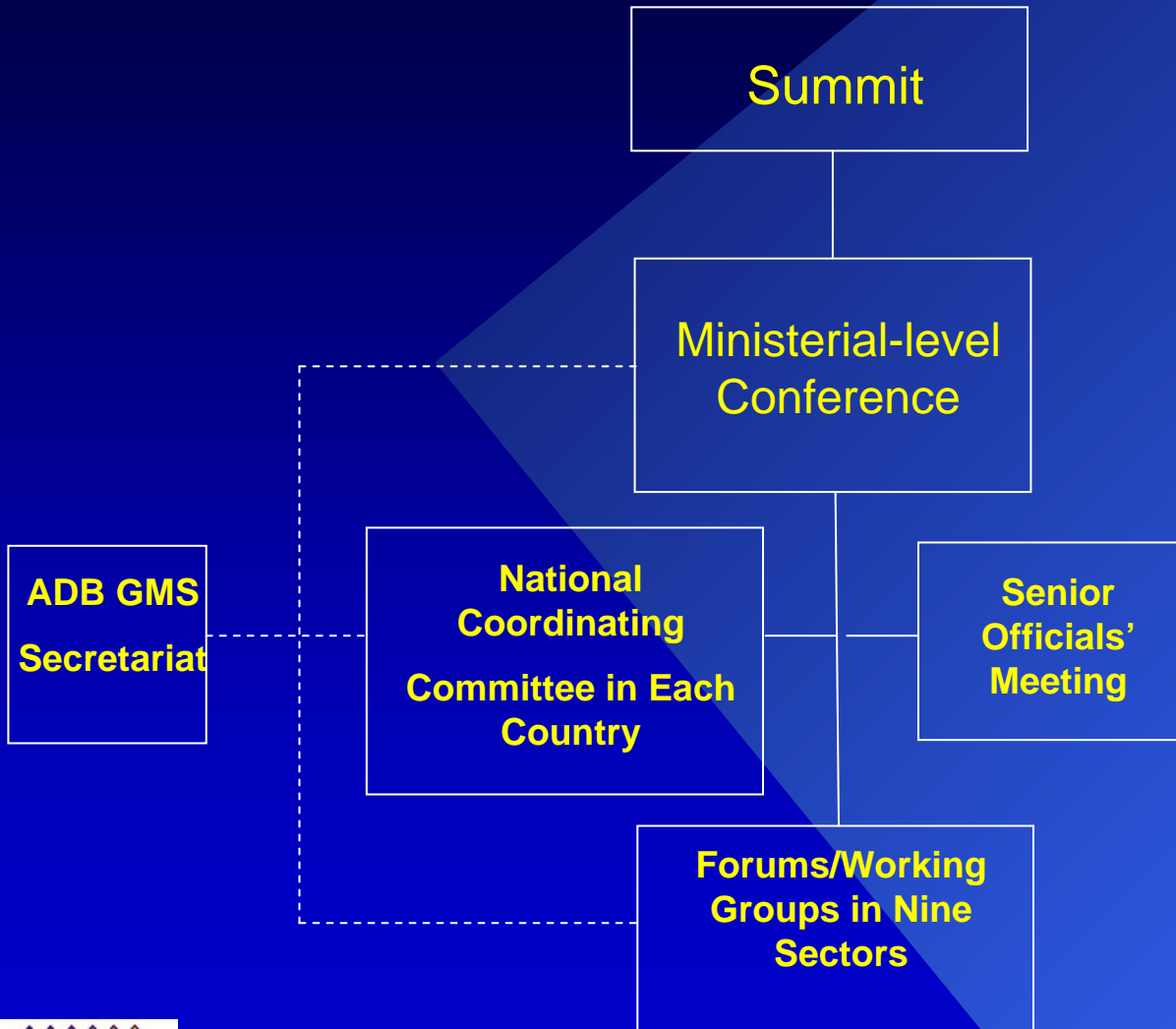
- Accelerated and sustained economic growth
- Reduced poverty & income disparities
- Improved quality of life
- Sustainable management of environment & natural resources

**Vision**

- More Integrated
- Prosperous
- Harmonious Subregion



# Institutional Structure



# Role of ADB in Regional Cooperation

## Facilitator and catalyst

- promoting/providing forum for dialogue
- identifying/preparing subregional projects
- providing technical advice
- financing/mobilizing resources



# GMS Infrastructure - why

Direct link to growth  
and poverty reduction

Essential for social and  
economic development

A region disrupted by  
conflict and political  
instability – it's time to  
rebuild and reconnect



# GMS Transport Cooperation (1992-2005)

## Strategic thrusts:

- Create cross-border access
- Facilitate cross-border traffic

## Principles of project selection, prioritization, design

- Priority to improvement over new construction
- One or more GMS member countries involved in a project
- Emphasis on trade generation
- Implementation in sections or links

## 35 GMS transport projects identified

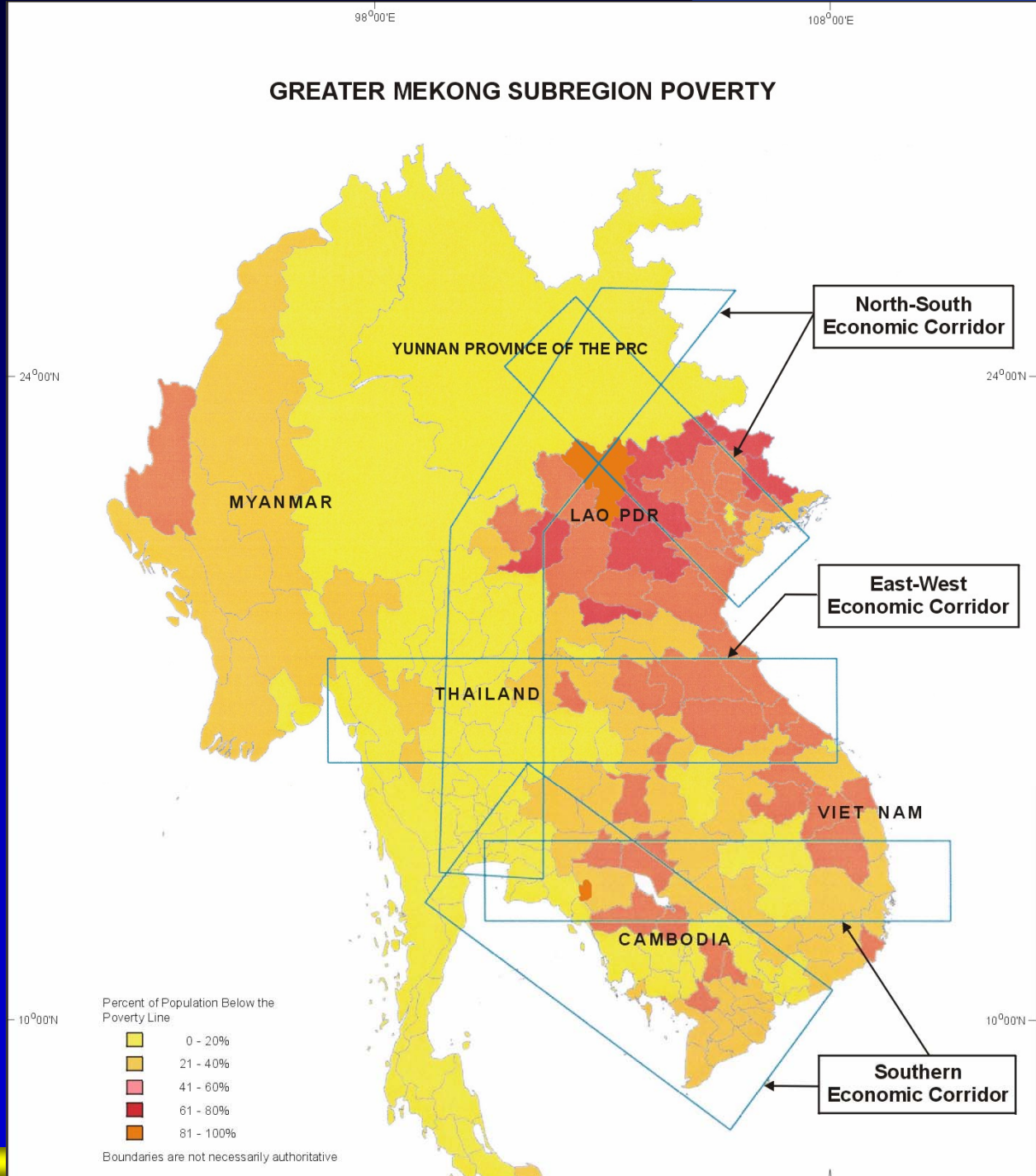
- 10 road, 8 rail, 10 water, 6 air, and 1 institutional (STF)
- Agreement for the facilitation of cross-border transport of goods and people



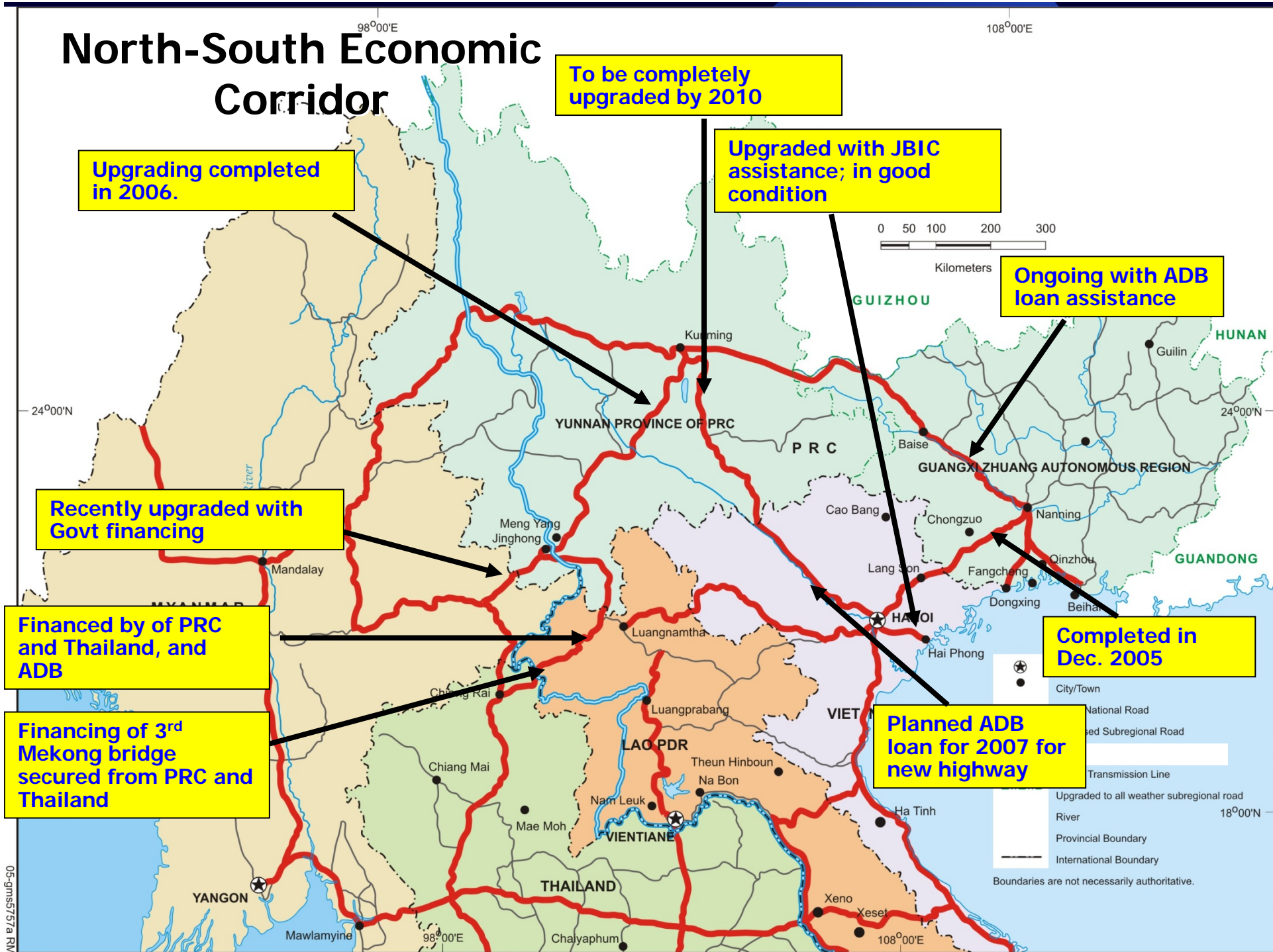
# GREATHER MEKONG SUBREGION ECONOMIC CORRIDORS



# GREATER MEKONG SUBREGION POVERTY



# North-South Economic Corridor



To be completely upgraded by 2010

Upgrading completed in 2006.

Upgraded with JBIC assistance; in good condition

Ongoing with ADB loan assistance

Recently upgraded with Govt financing

Completed in Dec. 2005

Financed by of PRC and Thailand, and ADB

Financing of 3<sup>rd</sup> Mekong bridge secured from PRC and Thailand

Planned ADB loan for 2007 for new highway



North South Economic Corridor

Lao PDR—connecting People's Republic of  
China with Thailand







East-West Economic Corridor

Bridge over the Mekong River



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# GMS Southern Economic Corridor

## Roads

Mostly 4-lane highways; not a constraint to cross-border traffic.

Upgrading to be completed by 2009 with ADB and Japan assistance.

Upgrading of a section in Cambodia (70 km) to be completed by 2010 with assistance from Viet Nam; Financing requested for remaining sections.

Upgrading to be completed by 2007 with PRC assistance.

Mostly 4-lane highways; not a constraint to cross-border traffic

In good condition

Upgrading to be completed by 2007 with Thailand, Korea, World Bank and ADB assistance.

Upgrading to be completed by 2008 with ADB and Japan assistance.

Upgrading to be completed by 2010 with possible ADB, Korean, and Australian assistance.

Bridge over Mekong to be financed by Japan





Southern Economic Corridor

Phnom Penh-Ho Chi Minh City Highway - Cambodia



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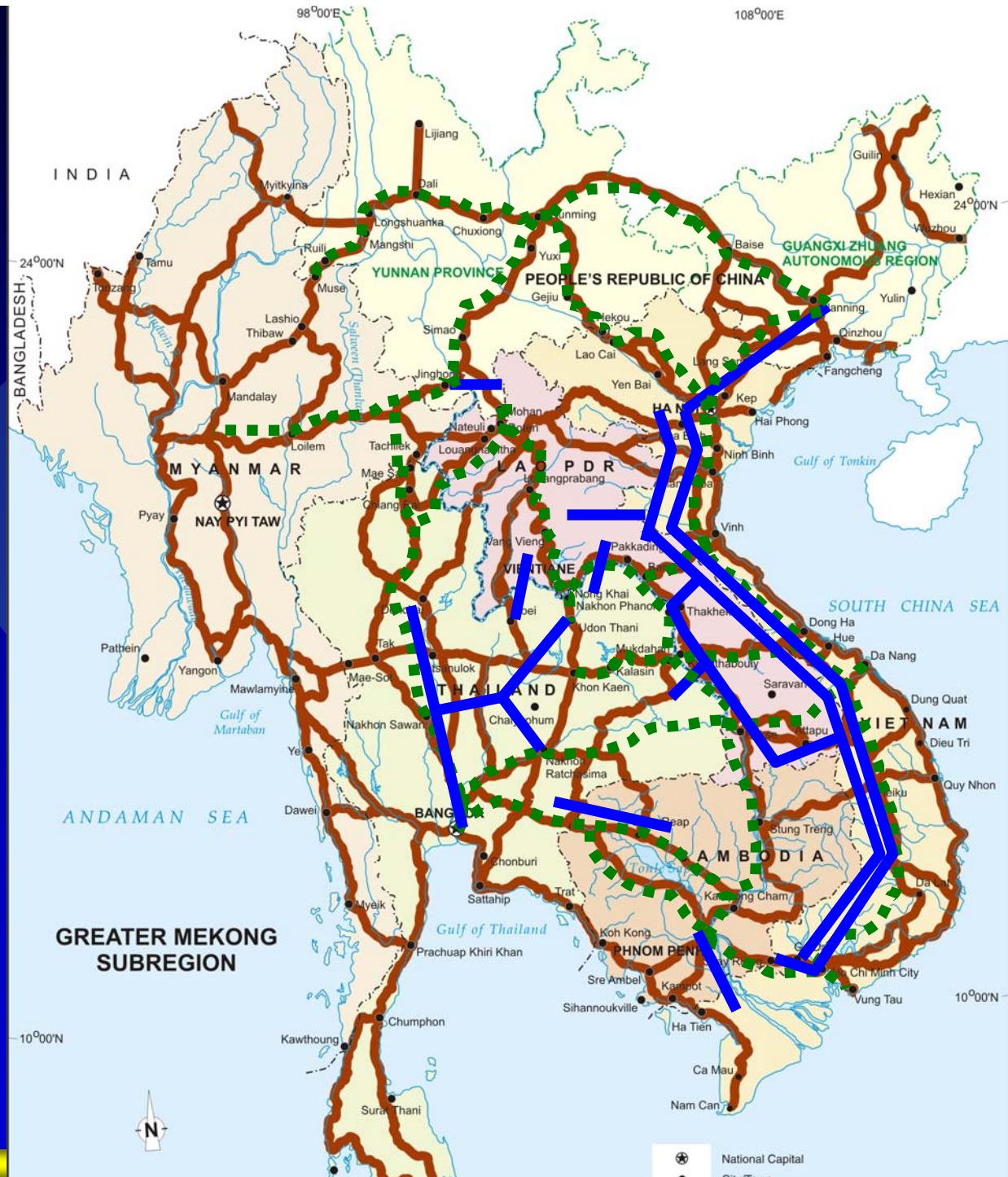
Southern Economic Corridor  
Phnom Penh-Ho Chi Minh City Highway – Viet Nam



# GMS Connectivity:

## 2015

-  Roads
-  Telecommunications
-  Power Transmission Line

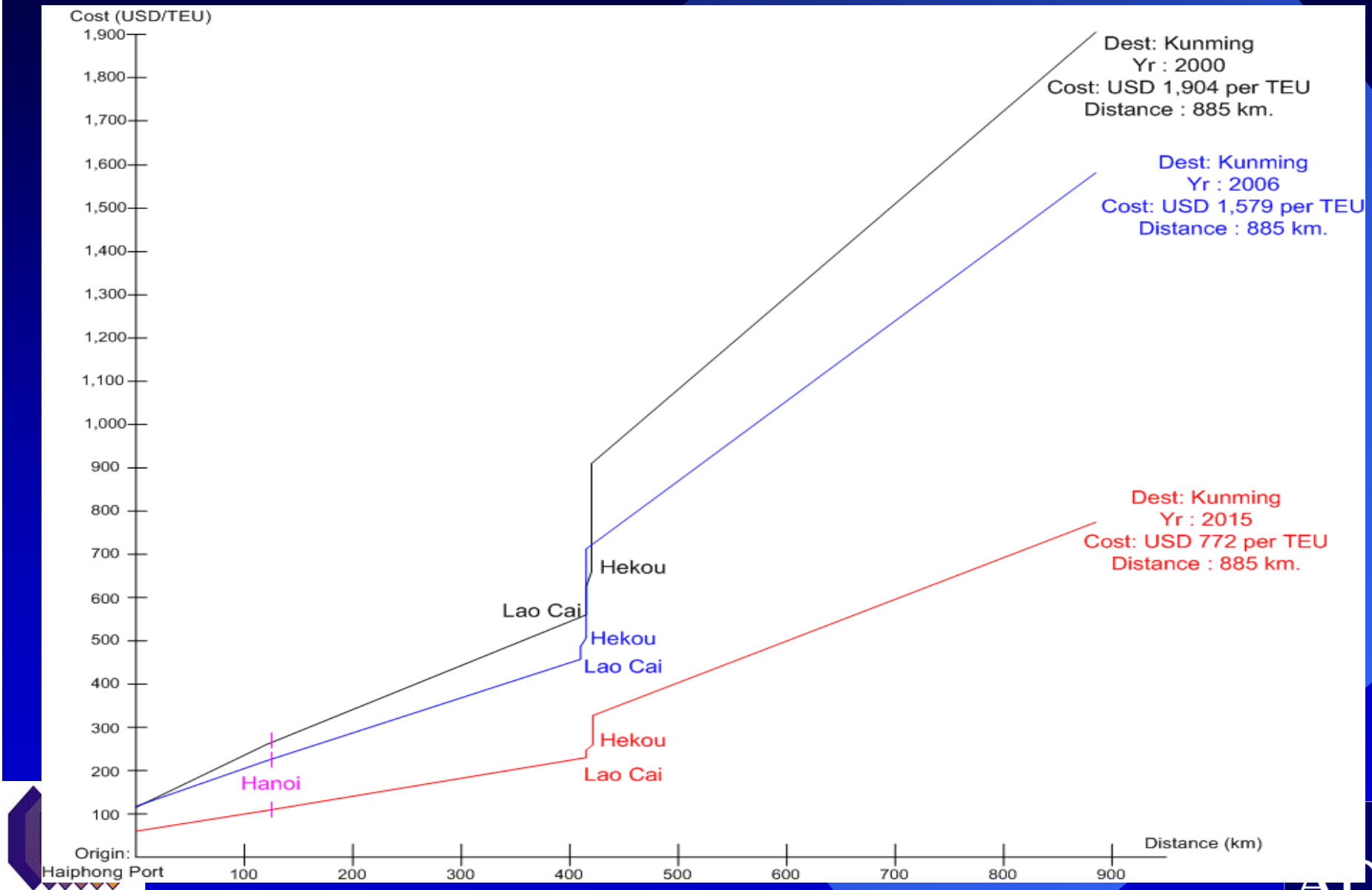


## Nonphysical Impediments to the Cross-border Movement of Goods and People

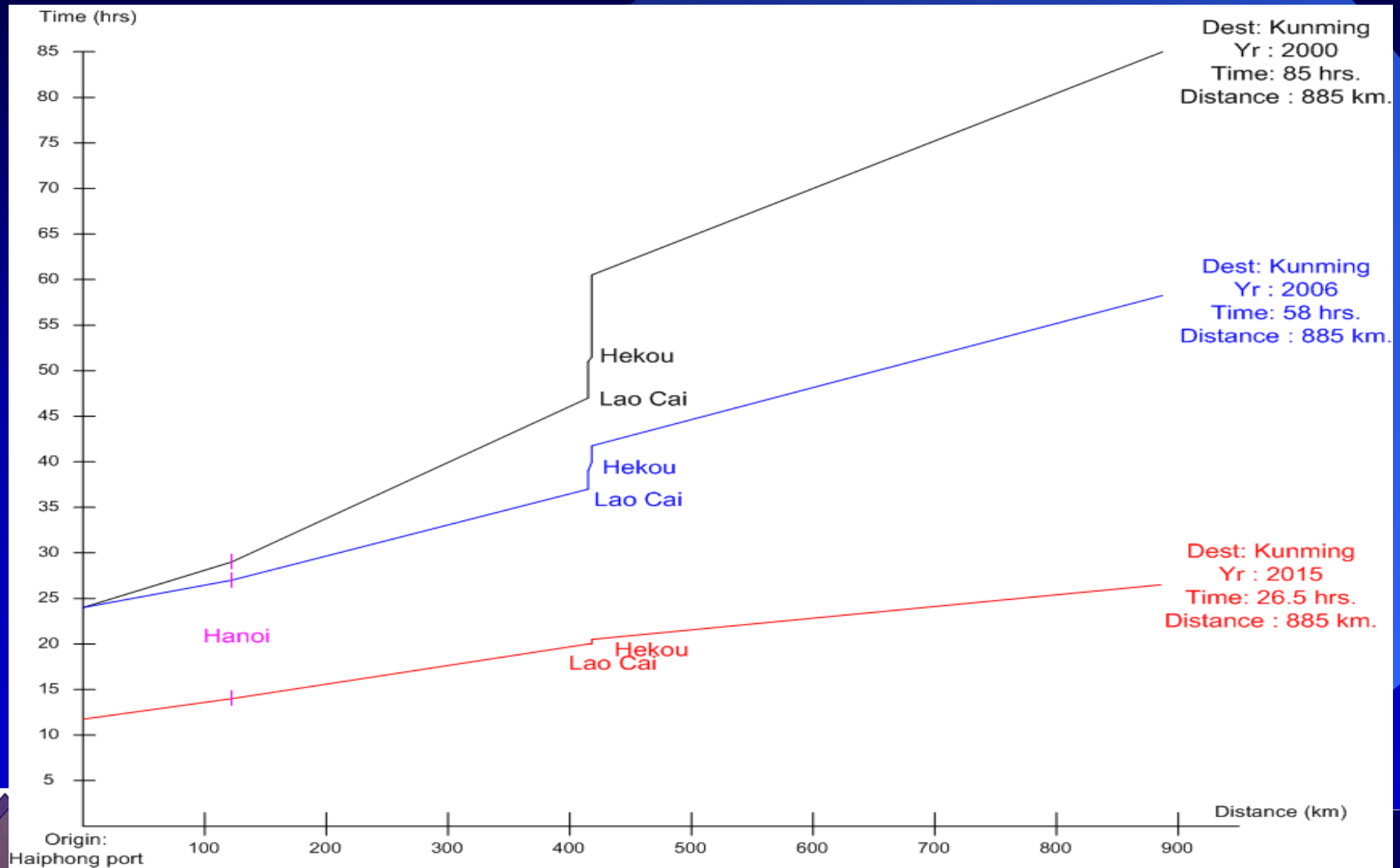
- Inconsistent and difficult border crossing formalities and procedures
- Restrictive visa requirements
- Restrictions on entry of motor vehicles
- Different standards on vehicles and drivers across countries
- Transit traffic difficult/not allowed



# Haiphong-Kunming cost (2000-2006-2015)



# Haiphong-Kunming time (2000-2006-2015)



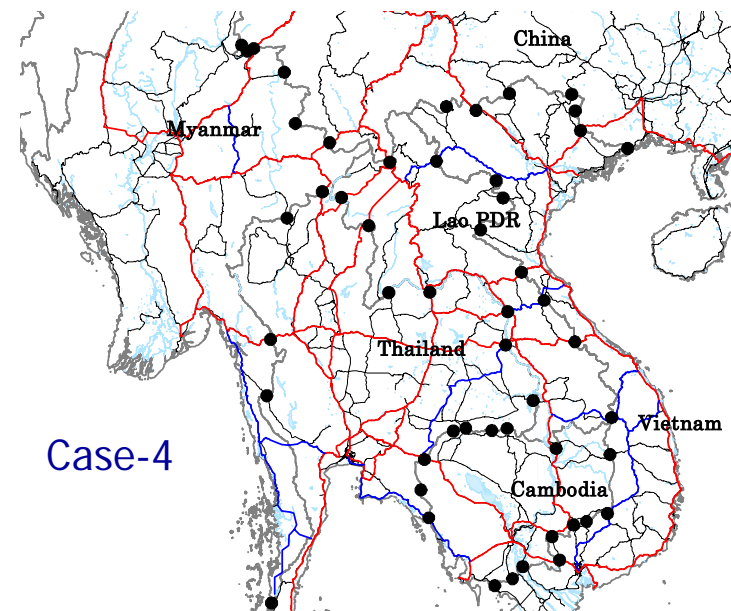
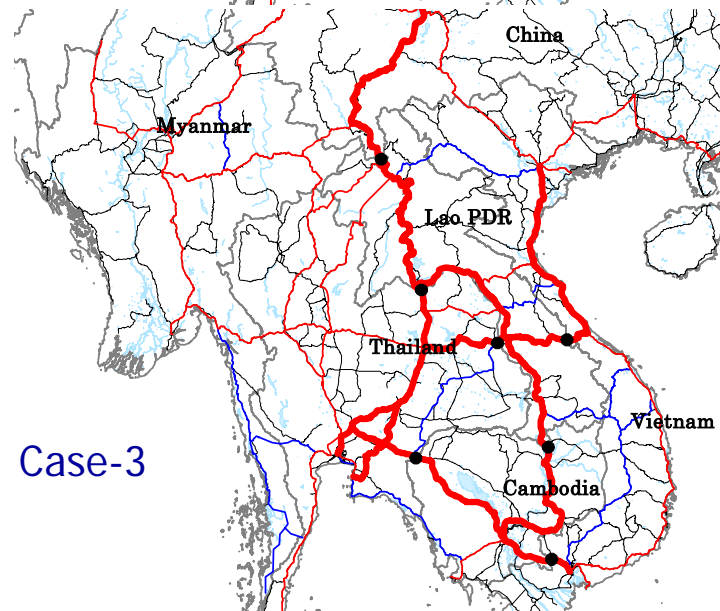
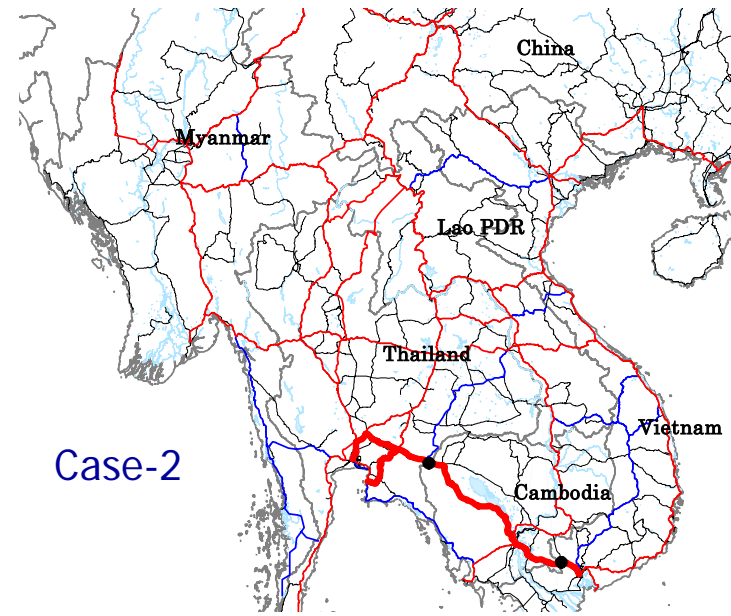
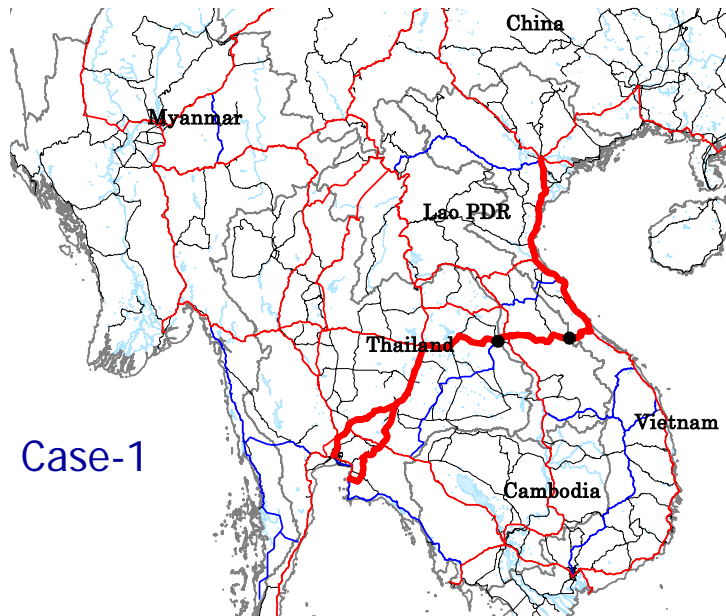
## Comparison of Time and Cost of Door-to-Door Transport Between Bangkok and Hanoi (based on trial shipment)

	<b>Volume</b>	<b>Transit Time (days)</b>	<b>Cost (\$)</b>
<b>Ocean Transport</b>	1 TEU	10-15	1,000
<b>Air Transport</b>	3,334 kg	2-3	4,000
<b>Truck Transport</b>	1 TEU	4	2,500

Source: Pilot Demonstration Project for Construction of an Advanced Trade and Investment Environment, March 2005, Japan External Trade Organization



# Cases



# Simulation Results

## GRDP

- ◆ Remarkable increase in Cambodia and Lao PDR
- ◆ Little influence in China

## Traffic Generation/Attraction

- Smaller growth in Thailand, Vietnam, and China.
- More growth in goods than in passengers.

## JICA Study



	Case-1	Case-2	Case-3	Case-4
Cambodia	102.4	<b>155.7</b>	<b>226.5</b>	<b>249.9</b>
Laos	<b>155.8</b>	100.6	<b>334.3</b>	<b>366.8</b>
Myanmar	102.8	102.8	104.5	<b>211.0</b>
Thailand	123.5	119.1	181.6	197.7
Vietnam	108.1	110.2	137.7	210.9
China	100.2	100.1	101.7	104.5

GRDP

	Case-1	Case-2	Case-3	Case-4
Cambodia	102.0	<b>160.9</b>	<b>238.0</b>	<b>266.0</b>
Laos	<b>168.4</b>	100.6	<b>365.1</b>	<b>414.7</b>
Myanmar	102.7	102.7	104.2	<b>209.0</b>
Thailand	113.3	110.7	146.1	155.4
Vietnam	104.5	106.2	122.4	164.4
China	100.1	100.1	100.9	102.2

Passenger Traffic

	Case-1	Case-2	Case-3	Case-4
Cambodia	101.5	<b>139.9</b>	<b>185.6</b>	<b>198.3</b>
Laos	<b>146.9</b>	100.5	<b>275.9</b>	<b>304.9</b>
Myanmar	102.8	102.8	104.5	<b>211.5</b>
Thailand	112.7	110.9	144.6	153.1
Vietnam	104.6	105.4	120.8	176.1
China	100.2	100.1	101.5	104.3

Goods Traffic

# History of the GMS Cross-Border Transport Agreement

- Identification of issues and review of existing international conventions (Jul-Dec 1996 under ADB SSTA)
- Sixth GMS Transport Forum mandated preparation of a Framework Agreement in lieu of near-term accession to international conventions (Dec 1996)
- Preparation of Framework Agreement (Jan-Sep 1998 under ADB RETA)
- Negotiation of Framework Agreement (Dec 1998-Nov 1999 under ADB RETA)
- Signing of the Framework Agreement by LAO, THA, and VIE (Nov 1999)
- Preparation of Annexes and Protocols (Nov 1999-Dec 2000 under ADB RETA)
- Accession by CAM, PRC, MYA (Nov 2001-Sep 2003)
- Negotiation of Annexes and Protocols (Jan 2003- 2006)
- Implementation of the CBTA at key border crossing points (2005- present)



# The GMS Cross-Border Transport Agreement

What is the GMS Cross-Border Transport Agreement (CBTA)?

- Multilateral agreement ratified by all six GMS countries
- Purpose is to eliminate non-physical barriers to cross-border transport in the GMS
- Includes references to existing international conventions



# The GMS Cross-Border Transport Agreement

Covers in one document all the relevant aspects of cross-border transport facilitation, which includes:

- Facilitation of cross border movement of goods
- Single-stop/single-window inspection
- Harmonization/integration of systems
- Exchange of traffic rights
- Provision for transit traffic
- Cross-border movement of persons



## The GMS Cross-Border Transport Agreement

- Has 20 implementing annexes and protocols
- Applies to selected and mutually agreed routes and points of entry and exit in the six countries.



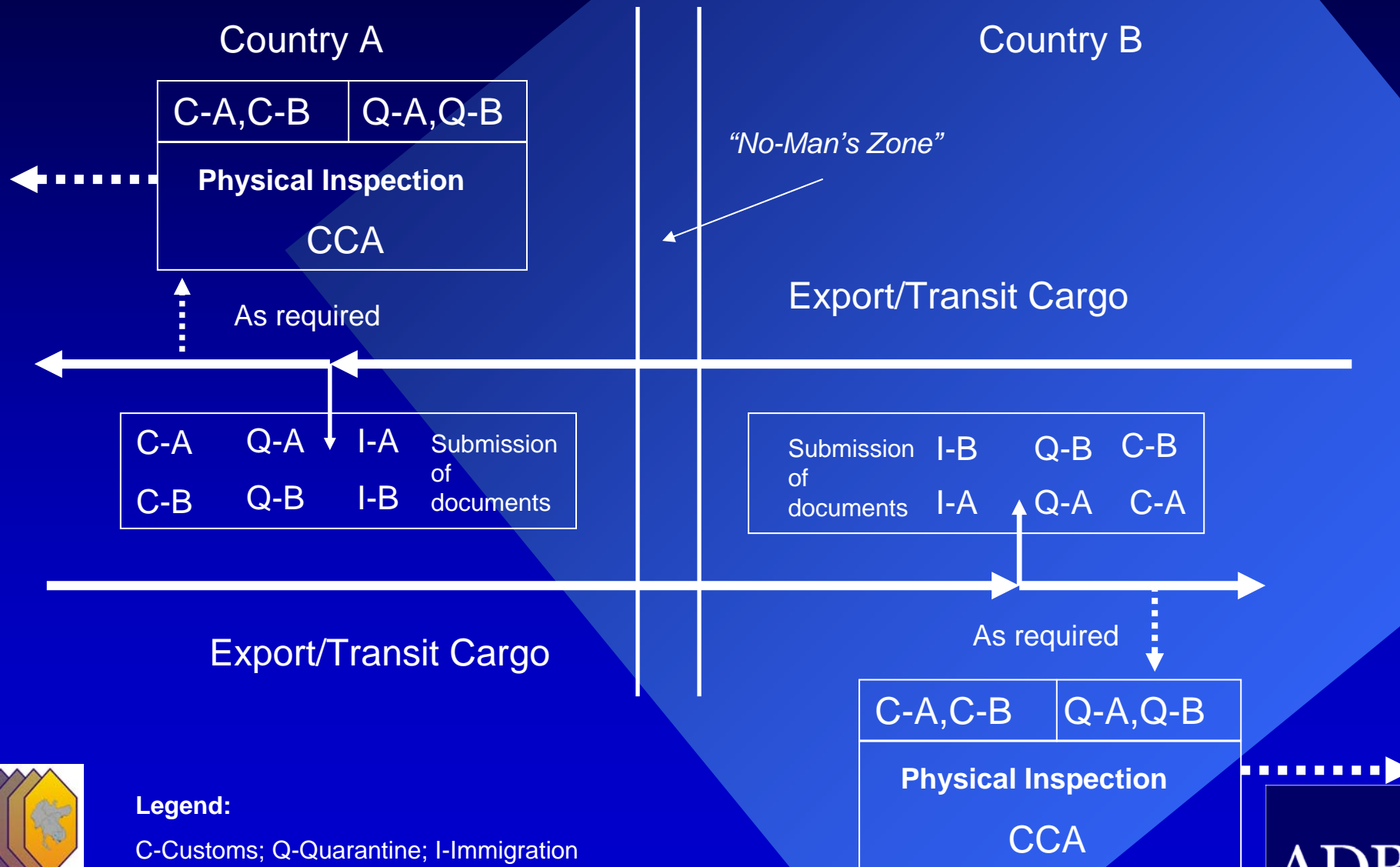
**CROSS-BORDER TRANSPORT AGREEMENT  
GEOGRAPHIC COVERAGE**



**CBTA:**

**Routes and  
Border  
Crossings**

# Single Window and Single Stop: Joint Customs and Quarantine Inspection in Common Control Area (CCA) and Clearance/Processing of Customs, Quarantine, and Immigration Documents at Country of Entry



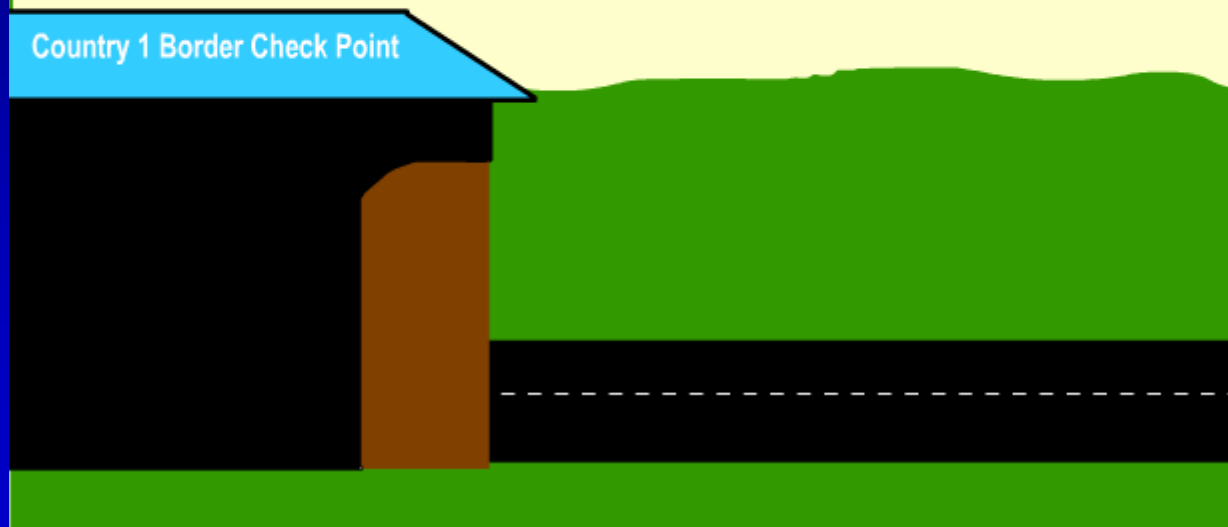
Legend:

C-Customs; Q-Quarantine; I-Immigration

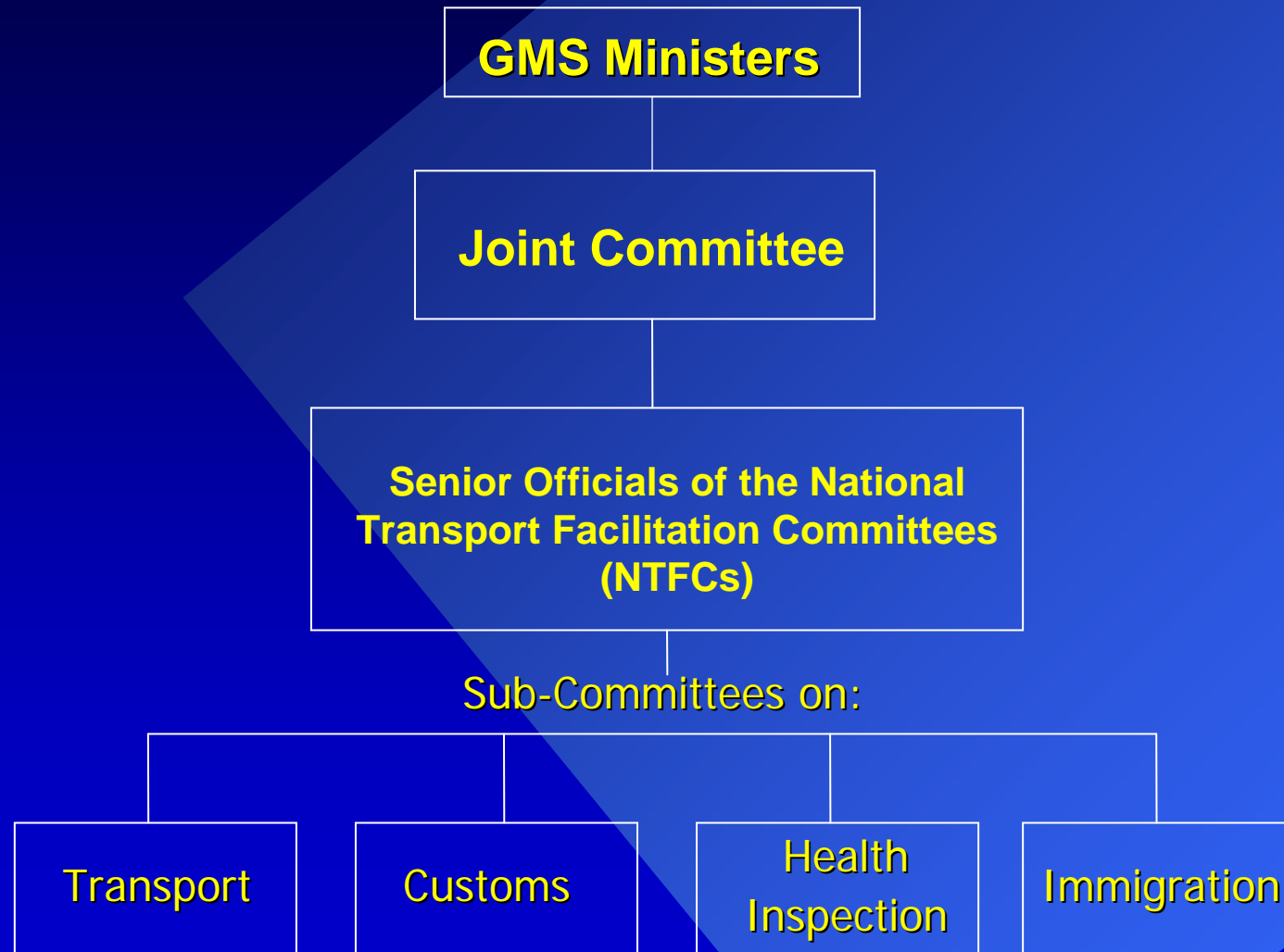
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After the GMS Cross Border Agreement

Country 1 Border Check Point



# Institutional Framework for the CBTA



# Key Challenges in CBTA Implementation

- Ratification of the annexes and protocols to the CBTA
- Capacity building at national and border levels
- Establishment of required border infrastructure
- Development of ICT/MIS for efficient border management
- Continue to strengthen goodwill and trust among GMS countries



# Moving Forward

## GMS Transport Sector Strategy (2006-2015)

**Goal:** “a well-built, seamless, multi-modal infrastructure is essential to the facilitation of trade, movement of people and the provision of basic services throughout the whole region.” – GMS Leaders’ Kunming Declaration





# GMS Transport Sector Strategy

## 1995 Objectives

Create Cross Border Access

Facilitate Cross Border Traffic

## 2005 Additional Objectives

Accommodate Traffic Demand

Connect to GMS Neighbors (BIMSTEC, ASEAN)

Enable Multi-modal Traffic

Encourage Private Sector Participation



# GMS Transport Sector Strategy

Forecast Traffic Growth 2004-15, develops around

- Seaports
- Main trunk routes in Thailand
- Hanoi and Ho Chi Minh City in Viet Nam
- Coastal China





# Strategic Framework for Action on Trade Facilitation and Investment

## Priority Areas:

- Simplify and harmonize **customs procedures**
- Enhance cooperation/harmonization of sanitary and phytosanitary procedures, to reduce the need for **inspection and quarantine measures** at the borders
- Improve **trade logistics**
- Simplify arrangement for better **mobility of business travelers**



# GMS Transport Sector Strategy - Action Plan

- Recommends 31 investment projects covering road, railway, ports and airports:
- Recommends TA projects:
  - Full implementation of Cross-border Transport Agreement
  - Improve management of infrastructure
  - Encourage private sector financing of infrastructure
  - Improve transport logistics
  - Training
- Develop and jump-start new services and facilities such as short sea shipping



# Findings of Recent ADB Research on Reviewing the Poverty Impact of Regional Economic Integration in the GMS

Key Benefits include:

1. Cross Border Work
2. At border work (transport, porters, etc.)
3. Informal Cross-border trade
4. Transport Infrastructure
5. Access to Health and Education Services
6. Cheaper Goods
7. Transfer of knowledge and information
8. Social and cultural exchange



# Findings of Recent ADB Research on Reviewing the Poverty Impact of Regional Economic Integration in the GMS

## Key Costs of REI:

1. Labor exploitation and trafficking
2. Smuggling
3. Drug and alcohol addiction
4. HIV/AIDS risk
5. Competition from migrant workers
6. 'Crowding out' by formal traders
7. Land disputes and landlessness
8. Natural Resource depletion (especially logging)
9. Social evils and crime
10. Child Labor



# Overall Assessment of Midterm Review of the GMS Strategic Framework

- Significant progress achieved in pursuing strategic thrusts of GMS-SF during 2002-2007.
- GMS Program accelerated, delivering concrete results and contributing to shared vision and goals of GMS countries.
- GMS-SF remains valid and serves as good basis for moving forward in the next 5 years.
- Enhanced efforts needed in:
  - Trade facilitation
  - Investment promotion
  - Skills development
  - Labor migration
  - Surveillance and control of communicable diseases



# 'Economic Corridor' Initiatives

- Establishing other related infrastructure (e.g., power supply, water supply and sanitation, rural roads)
- Facilitating trade, investment, and tourism
- Improving trade logistics
- Achieving sustainable use and conservation of natural resources
- Developing biodiversity conservation corridors
- Mitigating negative externalities associated with increased connectivity



# GMS Projects

## Supported by ADB (as of Dec. 2006)

- 28 infrastructure projects amounting to US\$6.8 billion
  - Transport corridors, airports, railway upgrading
  - Hydropower projects for power exports
  - Tourism infrastructure
  - Communicable disease control
- 133 technical assistance projects amounting to US\$155 million
  - Project preparation
  - Economic, thematic and sector work
  - Coordination/secretariat support
- Partnerships with governments, donors, academia, civil society, and private sector



# ADB's GMS Experience

## Pre-2002 reorganization:

- 1994-96: sector studies [e.g., transport, power]
- 1996 onward: project implementation
- No separate programming for regional projects
- Financing from country allocations
- Sector Working Groups/Forums identified priority programs



# The Regional Cooperation Strategy and Program

Started in 2002 as part of ADB's New Business Processes.

Linked, consistent, complementary with Country Partnership Strategies (CPSs).

## Some Principles:

- *ADB assistance to focus on strategic subregional cooperation objectives*
- *Linkages with the CPS process to ensure complementarities*
- *Consultation and consensus-building among member countries through subregional consultation mechanisms*

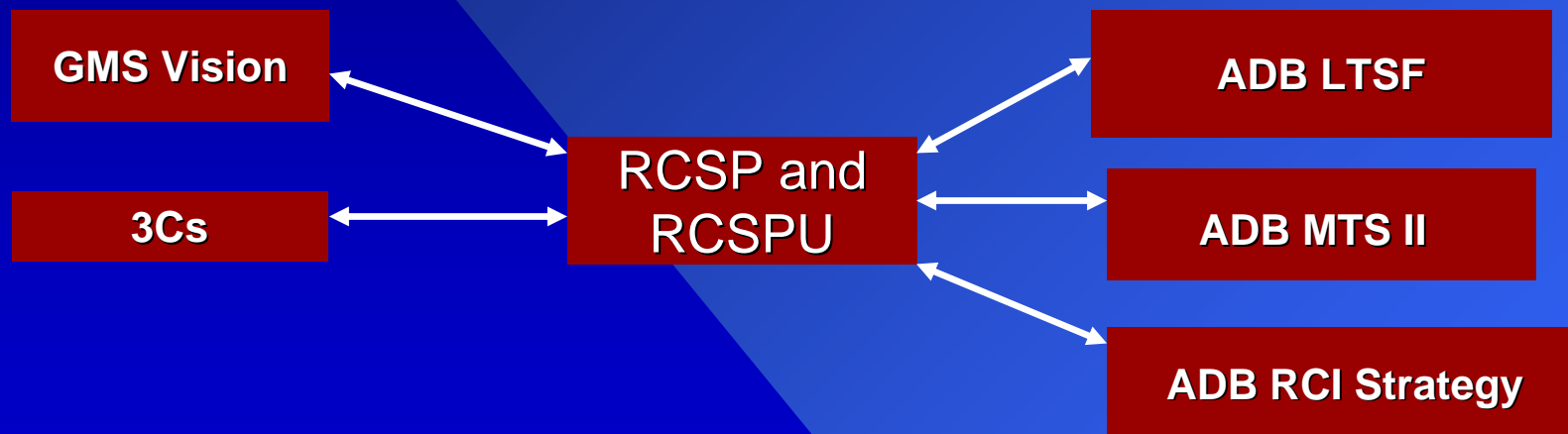
Separate/additional allocations for subregional projects



## ADB's RCSP for the GMS

- GMS Beyond Borders- The Regional Cooperation Strategy and Program (RCSP) 2004-2008 & Updates (RCSPU)
- ADB's motto for GMS operations:

**"Think Regionally, Invest Nationally"**



# Requirements and Priorities Moving Forward

- Transformation of infrastructure corridors into economic corridors
- Enhanced focus on “soft aspects”
- Capacity building – institutional and human resource development
- Resource mobilization



# Capacity Building and Institutional Strengthening

## Broad Initiatives:

- Strengthen the GMS institutional Framework – the SOM, the sector Forums/Working Groups
- Strengthen the planning/monitoring processes
- Strengthen and expand the scope of the Phnom Penh Plan for Development Management

## Capacity building for countries and sectors:

- Capacity building for CBTA implementation
- Strengthening of GMS national secretariats



# Resource Mobilization Initiatives

- Continued and intensified development partner coordination,
  - Mekong Development Forums and Development Partners' Meetings
  - Regular consultations with bilateral/multilateral development partners
- Increased engagement of the private sector, particularly through the GMS Business Forum
- Assistance in the packaging of Public-Private Partnerships



## ADB'S 2007 Investment Program

- CAM-VIE Southern Coastal Road Corridor
- VIE: Noi Bai-Lao Cai Highway
- LAO: Northern Transport Network Improvement
- PRC: Western Guangxi Road Development

5 projects worth \$2.9B

\$0.3B (ADF), \$1.2B (OCR)

## ADB's 2007 TA Program

- Project preparatory technical assistance projects
- Continuing support to the Phnom Penh Plan, power transmission, and overall program coordination
- Assistance to implementing the Core Agriculture Sector Program and preparing the HRD strategic framework

**Total = 13 projects worth \$21 million**



## ADB'S Indicative Investment Program (2008-2010)

- Upgrading of sections of transport corridors
- Power transmission links
- Sustainable tourism development
- Flood and drought risk management and mitigation
- Biodiversity conservation corridors
- Communicable disease control and HIV/AIDS
- Water supply and sanitation
- Trade facilitation and logistics development

29 projects worth \$2.2B  
\$0.5B (ADF), \$1.0B (OCR)



## ADB's Indicative TA Program (2008-2010)

- Project preparatory technical assistance projects
- Continuing support to the Phnom Penh Plan, Core Environment Program, trade and transport facilitation, power transmission, and overall program coordination
- Assistance to implementing the Core Agriculture Sector Program
- Assistance to implementing the HRD Strategic Framework

Total = 21 projects worth \$26 million

# Example of Public-Private Partnership in a Subregional Project

## Theun Hinboun Hydropower Project

- 210MW hydropower plant - Nam Theun River
- Commissioned in April 1998
- Power exported to Thailand



# Financial Arrangements

Source	Amount	%	% of Total
Equity			
Govt/EdL	66.0	60.0	24.5
NH	22.0	20.0	8.1
MDXL	22.0	20.0	8.1
SubTotal	<u>110.0</u>	<u>100.0</u>	<u>40.7</u>
Debt			
Govt	8.5	5.3	3.1
Commercial Loan	81.5	50.9	30.3
Export Credit	70.0	43.8	25.9
Subtotal	160.0	<u>100.0</u>	59.3
<b>TOTAL</b>	<b><u>270.0</u></b>		<b><u>100.0</u></b>



# Lessons from the GMS

- Physical infrastructure is necessary but not sufficient
- Adopt a holistic approach
- Ownership and strong political will-ingredients to success
- National and subregional priorities must be aligned



# Thank you

For more information:  
on the GMS Program –  
visit

<http://www.adb.org/gms>



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