# Logistics Development : Exploring the Collaborations

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## Agenda

- Background & logistics development policy
- Logistics infrastructure characteristics
- Example of Corridor Development
- Methodology
- NSEC logistics analysis
- Summary

# Background

## Logistics Development Policy

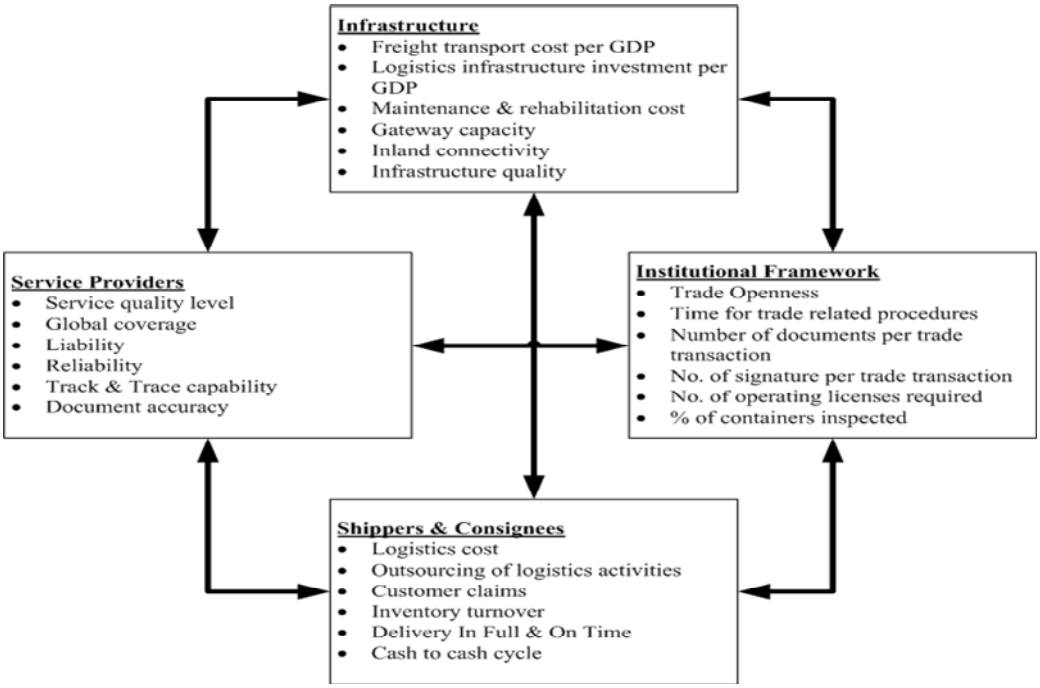
**Proposed working definition:**

"Logistics development policy is the process of planning, facilitating, implementing, integrating and controlling the efficient, effective flow and storage of freight, people and information within and between logistics systems, for the purpose of enhancing traders' competitiveness in order to increase national and/or regional competitive advantage."

## Background

- The improvement of logistics in the NSEC and EWEC can provide the foundation for further economic integration in the GMS.
- Inadequate transport infrastructure and high logistics service costs have constrained economic corridor development and integration and more.
- Adequate transport and communications facilities are considered major determinants of trade performance and of the costs and profitability of trading internationally

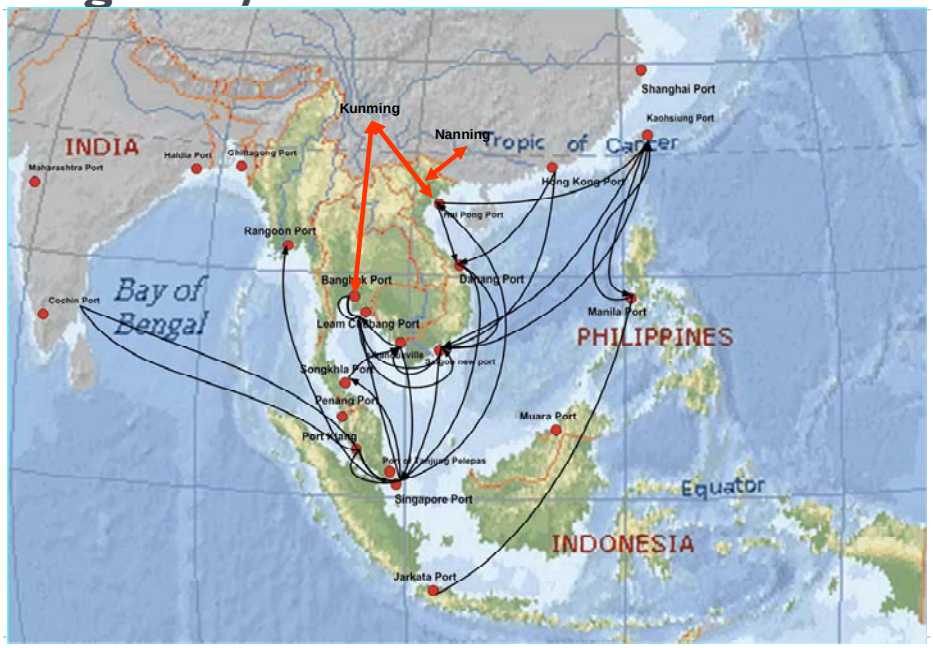
## Logistics System Indicators: A proposed macro scorecard



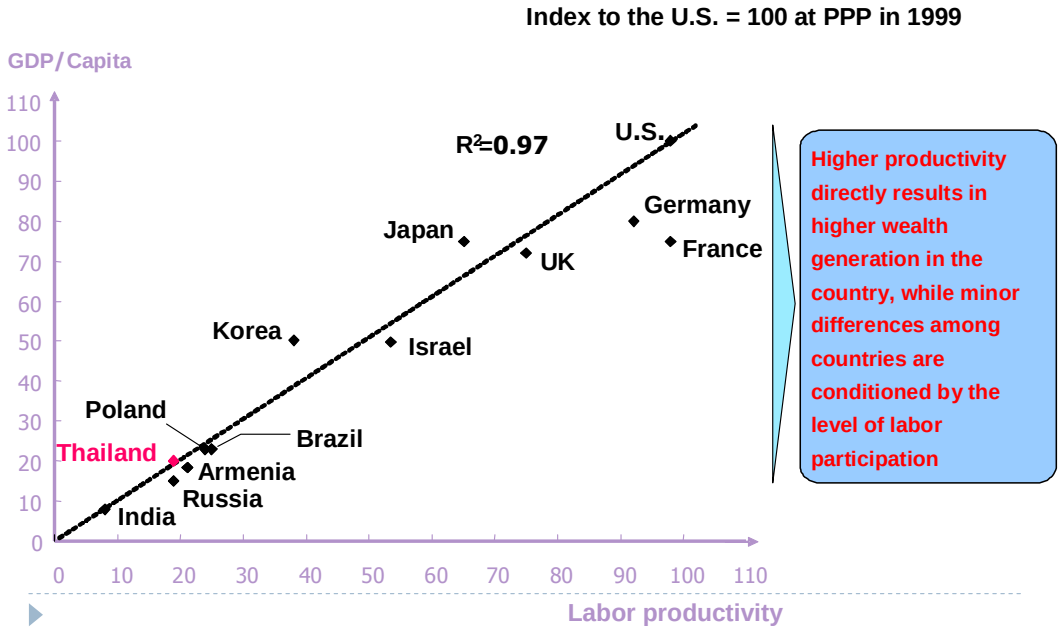
## Corridor development

| Stage | Corridor | Definition |
|---|---|---|
| **Level 1** | Transport Corridor | Corridor that physically links an area or region |
| **Level 2** | Multimodal Transport Corridor | Corridor that physically links an area or region through the integration of various modes of transport. |
| **Level3** | Logistics Corridor | Corridor that not only physically links an area or a region but also harmonise the corridor institutional framework to facilitate the efficient movement and storage of freight, people and related information. |
| **Level 4** | Economic Corridor | Corridor that is able to attract investment and generate economic activities along the less developed area or region. Physical linkages and logistics facilitation must be in place in the corridor as a prerequisite. |

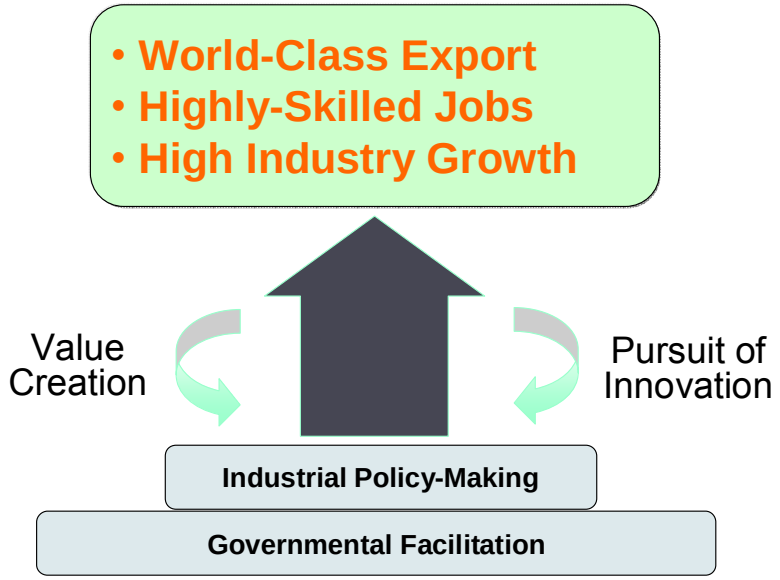
## Linking land/IWT & maritime corridors

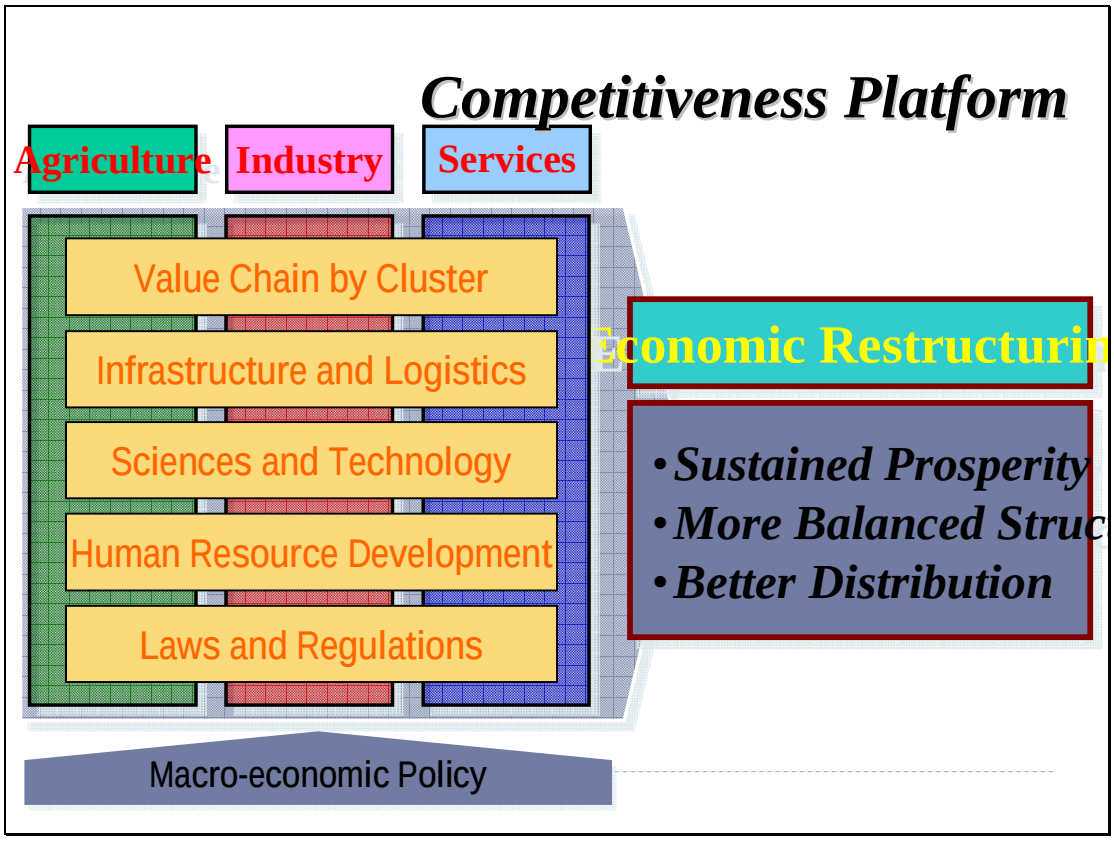


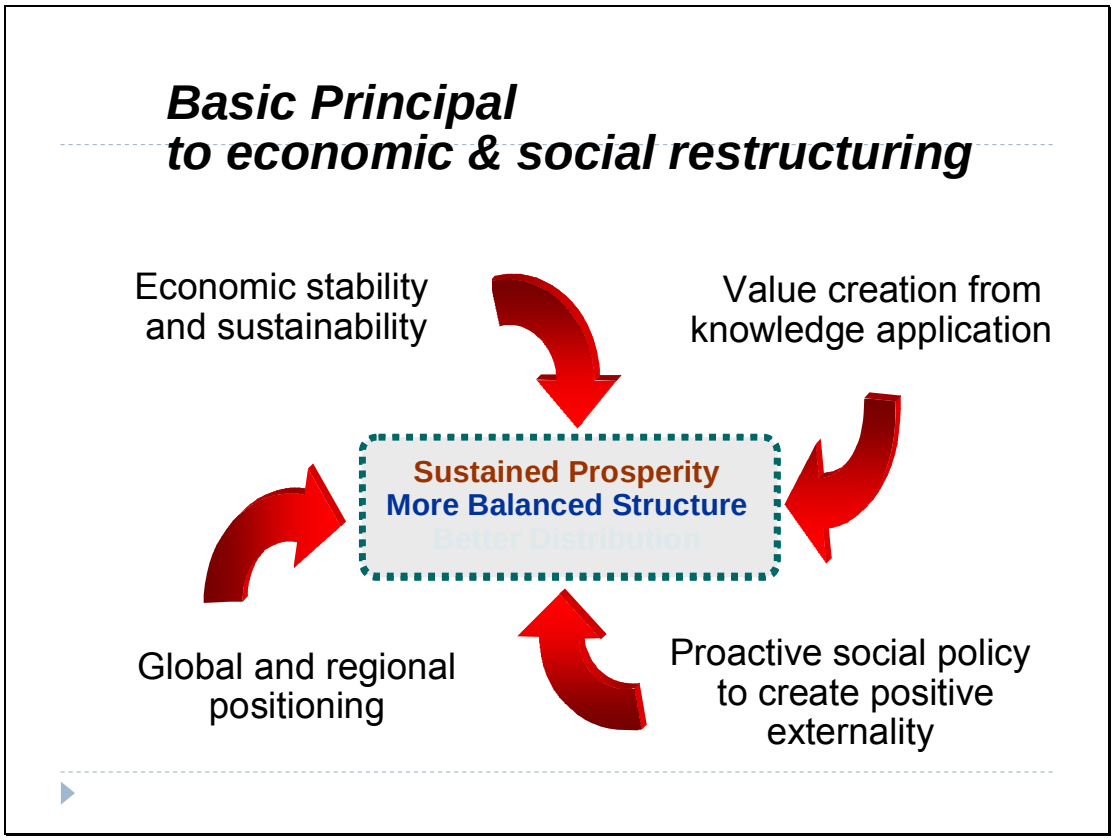
## Higher productivity results in higher total wealth




## *Innovation-Driven Economy*




Competitiveness Platform
Agriculture
Industry
Services
Value Chain by Cluster
Infrastructure and Logistics
Sciences and Technology
Human Resource Development
Laws and Regulations
Economic Restructurin
•Sustained Prosperity
•More Balanced Struc
•Better Distribution
Macro-economic Policy


Basic Principal
to economic & social restructuring
Economic stability
and sustainability
Value creation from
knowledge application
Sustained Prosperity
More Balanced Structure
Better Distribution
Global and regional
positioning
Proactive social policy
to create positive
externality

# Example of NSEC' Issues

Competition Perspectives

## NSEC/GMS Logistics Characteristics

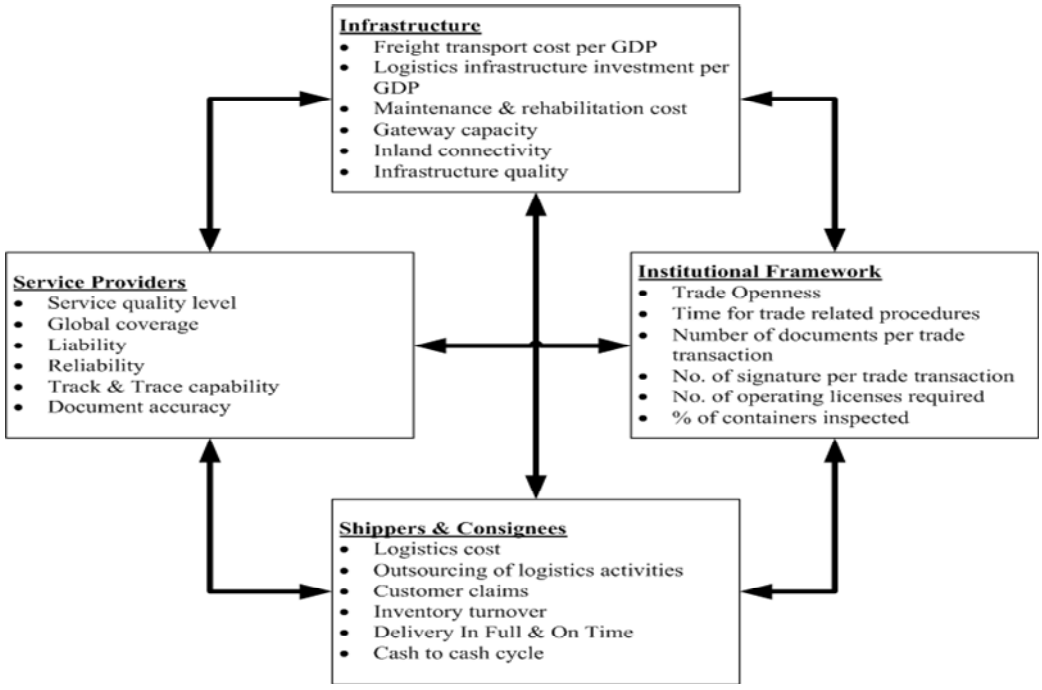
| | Road | Port | IWT | Airport | Railway |
|---|---|---|---|---|---|
| **Guangxi (PRC)** | Fair/Good | Fair | Fair | Good/Fair | Good/Fair |
| **Lao PDR** | Fair/Poor | Poor | Fair/Poor | Poor | N/A |
| **Myanmar** | Poor | Poor | Fair | Poor | Fair |
| **Thailand** | Good | Fair | Fair | Good/Fair | Fair |
| **Vietnam** | Fair/Poor | Fair | Fair | Fair | Fair |
| **Yunnan (PRC)** | Fair/Good | Fair | Fair | Good/Fair | Good/Fair |

Source: Compiled from industry

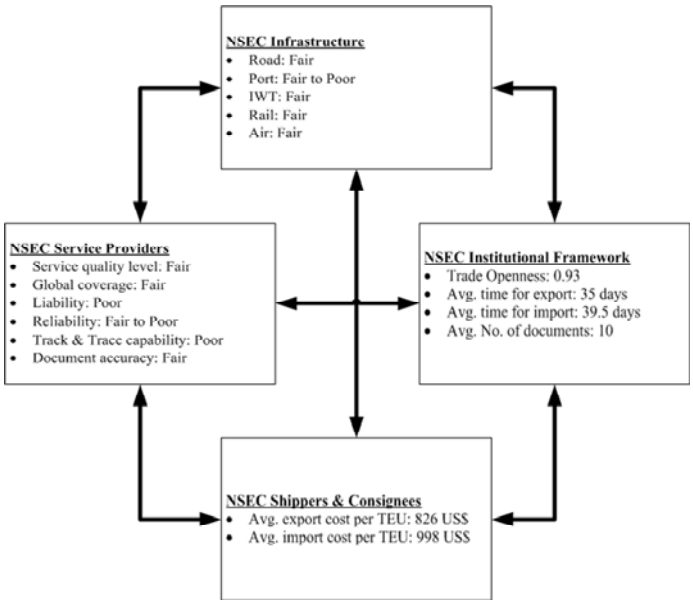
## Methodology

- Logistics Scorecard
- Logistics corridor "snapshot" assessment model
- Perception of reliability index

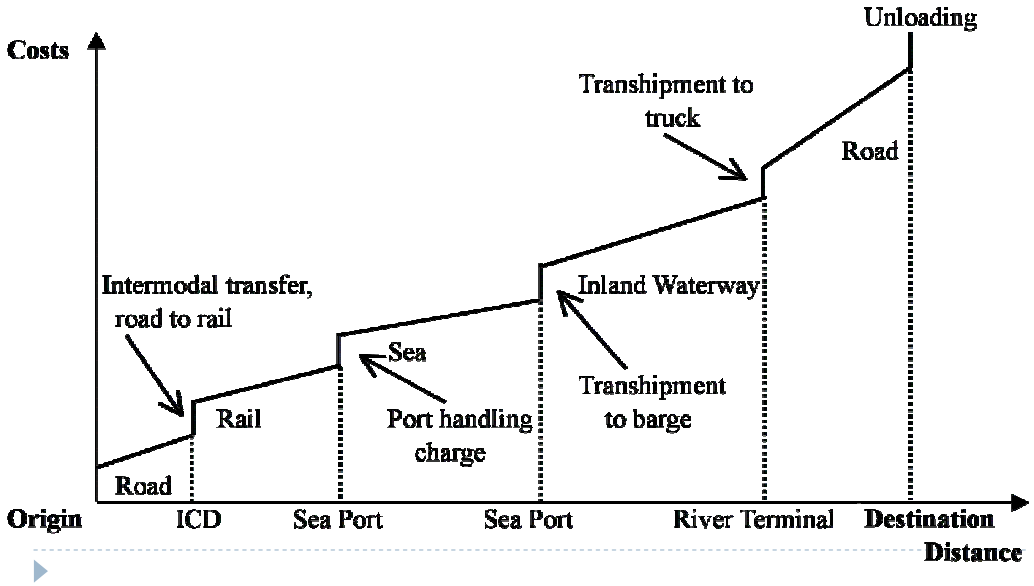
## Logistics System Indicators: A proposed macro scorecard



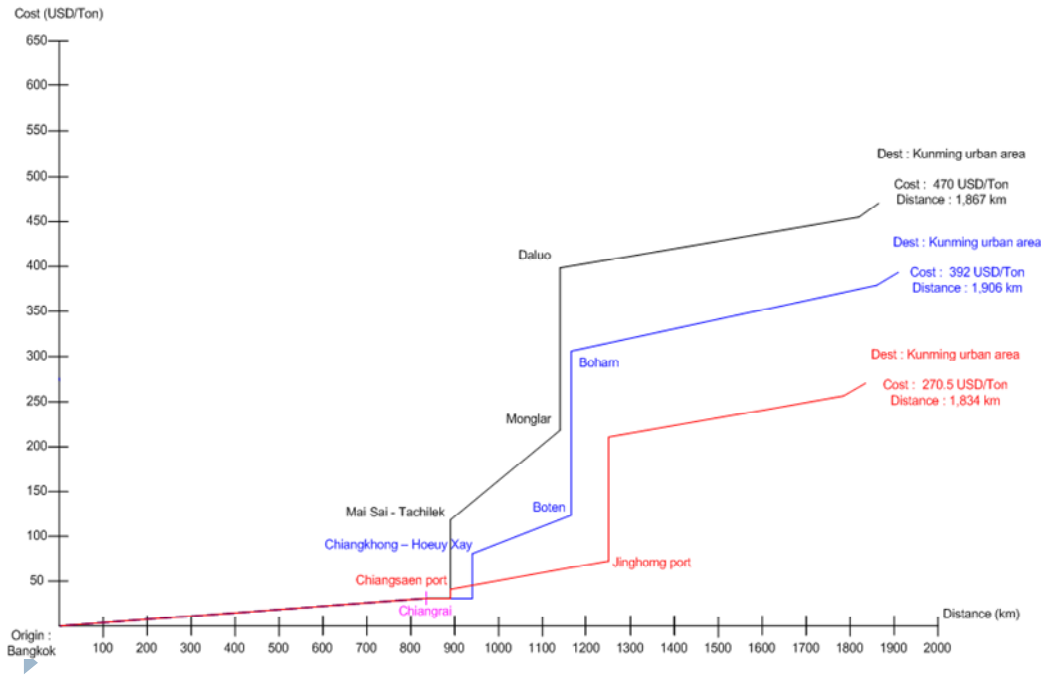
# NSEC/GMS macro logistics scorecard



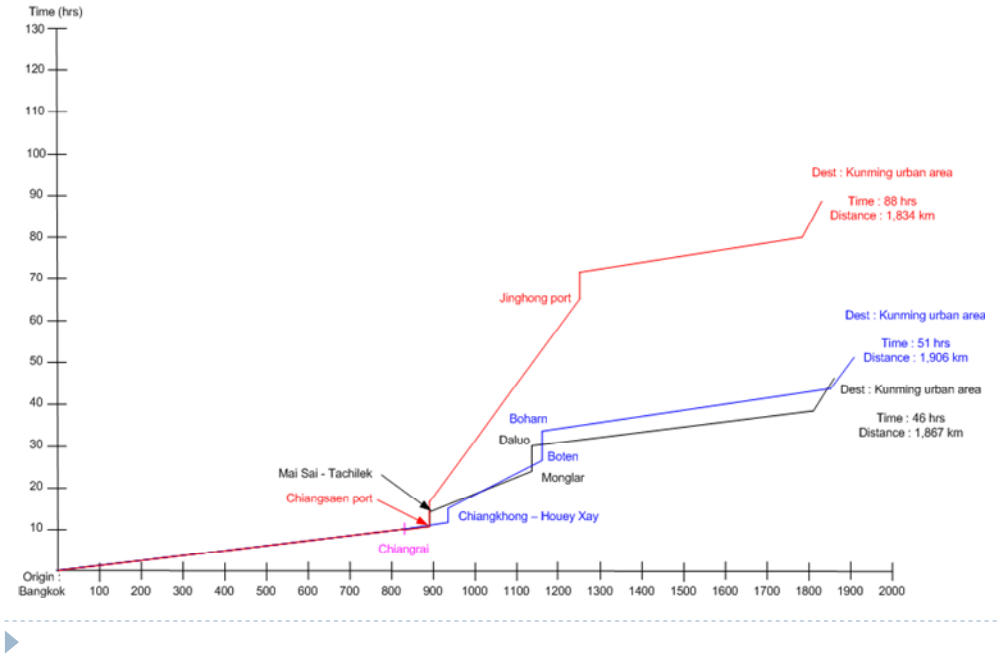

# Logistics corridor "snapshot" assessment model



# Logistics corridor modelling: cost (2006)




# Logistics corridor modelling: time (2006)



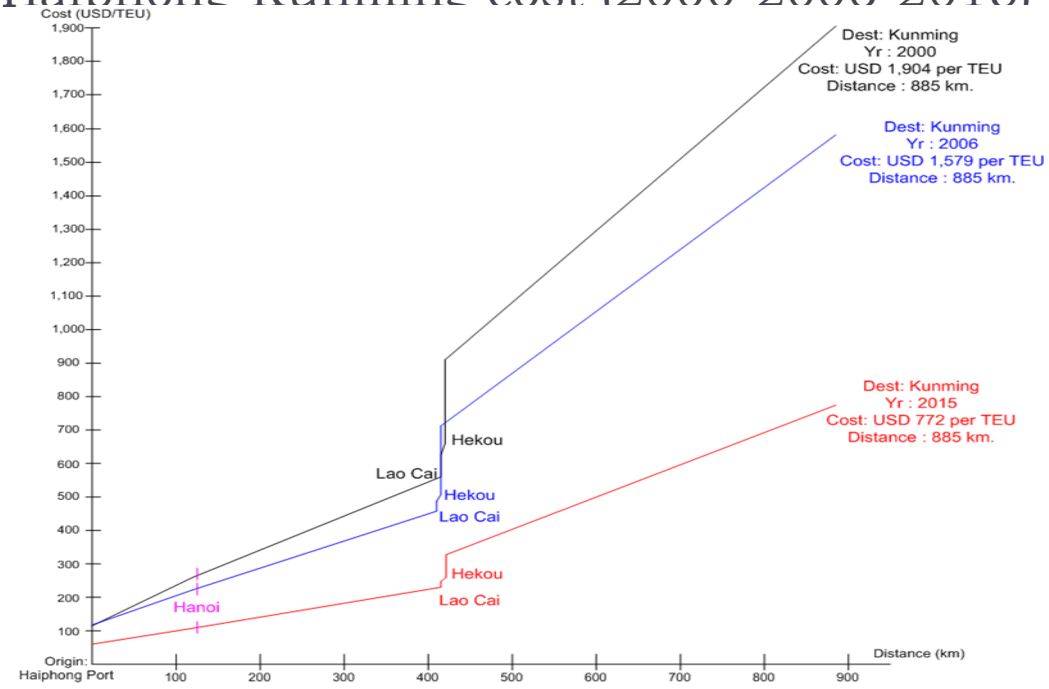
## Corridor Level Assessment: R3

| From | To | Level |
|---|---|---|
| Bangkok | Chiangrai | 3 |
| Chiangrai | Mae Sai | 3 |
| Chiangrai | Chiangsaen | 3 |
| Chiangrai | Chiangkhong | 3 |
| Mae Sai/Tachilek | Mongla/Da Luo | 1 |
| Daluo | Kunming | 3 |
| Chiangsaen | Jinhong | 2 |
| Jinhong | Kunming | 3 |
| Chiangkhong/Hoeuy Xay | Bo Ten/Bo Harn | 1 |
| Bo Harn | Kunming | 3 |
| | **Overall level** | **1** |

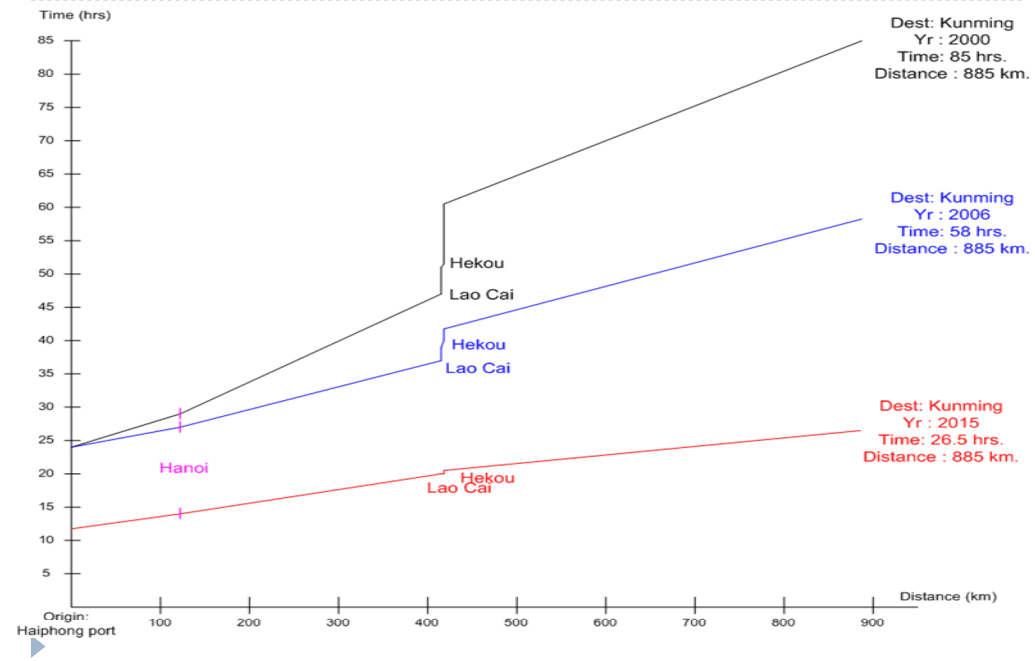
## Trends on the Bangkok-Kunming corridor

| Bangkok-Kunming | $/ton | Transit Time | Perception of reliability (based on 5 point scale) |
|---|---|---|---|
| **R3W (via Myanmar)** | | | |
| •2000 | $639 | 77 hrs | 2.2 |
| •2006 | $470 | 46 hrs | 3 |
| •2015 | $269 | 30 hrs | 3.5 |
| **R3E (via Lao PDR)** | | | |
| •2000 | $563 | 78 hrs | 2.6 |
| •2006 | $392 | 51 hrs | 3.3 |
| •2015 | $210 | 30 hrs | 4 |
| **Via (Mekong River)** | | | |
| •2000 | $406 | 128 hrs | 2.7 |
| •2006 | $270.5 | 88 hrs | 3.4 |
| •2015 | $107 | 70 hrs | 3.7 |

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




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



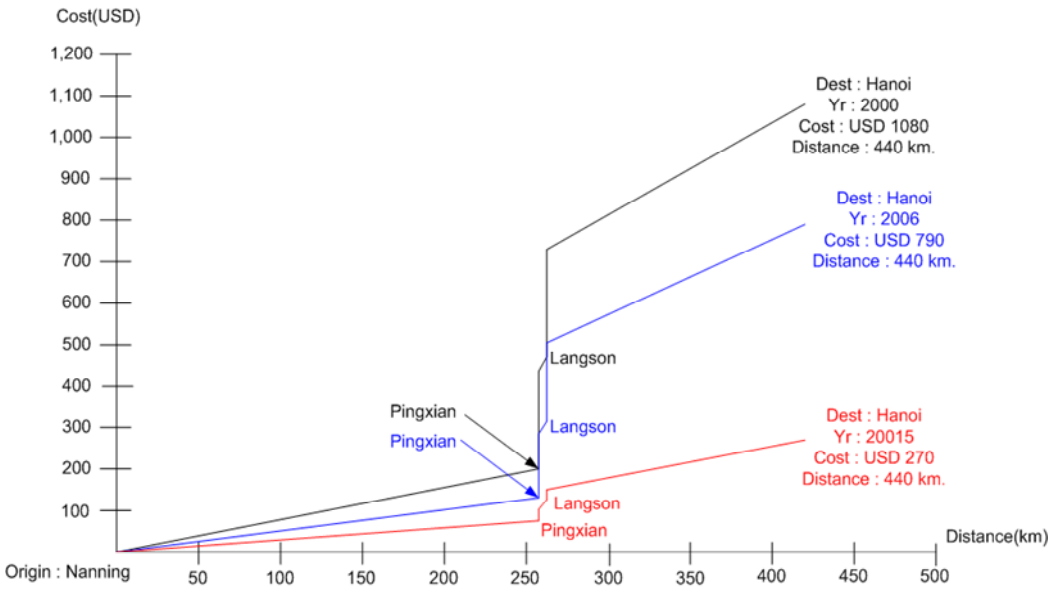
## *Haiphong-Kunming cost and time breakdown*

| Haiphong - Kunming | Transport cost | Port/ Border & Transit fees | Corridor Cost | Transport time | Port/ Border crossing time | Corridor Time |
|---|---|---|---|---|---|---|
| **2000** | 76% | 24% | 100% | 55% | 45% | 100% |
| **2006** | 77% | 23% | 100% | 50% | 50% | 100% |
| **2015** | 80% | 20% | 100% | 52% | 48% | 100% |

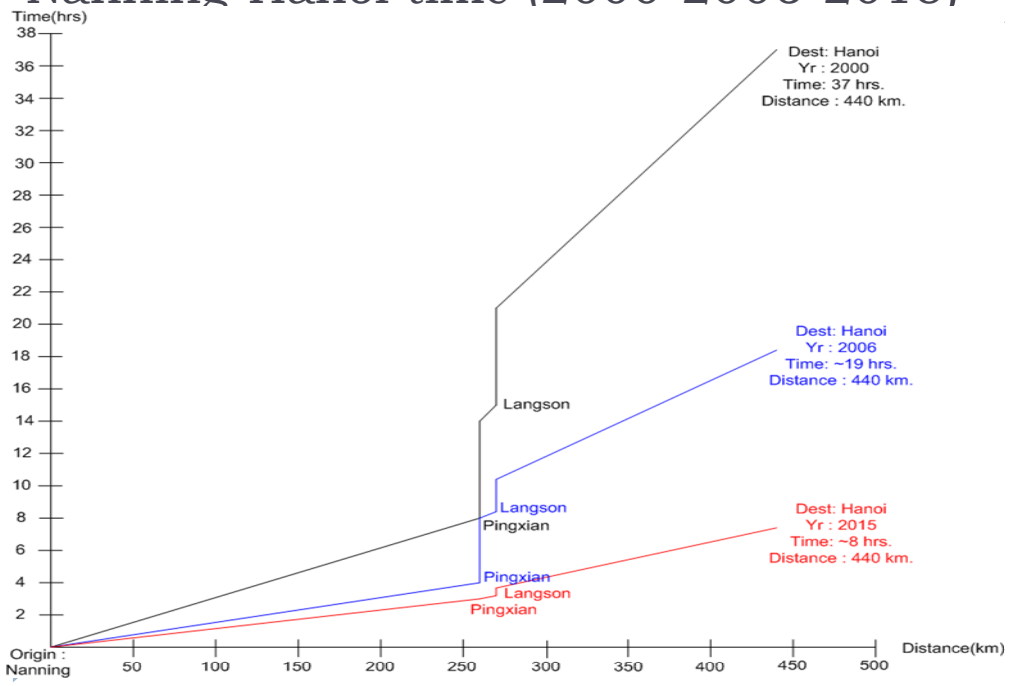
## *Trends in the Haiphong-Kunming corridor*

| Haiphong-Kunming | $/ton | Transit Time | Perception of reliability |
|---|---|---|---|
| **Year 2000** | $105 | 85 hrs | 2.4/5 |
| **Year 2006** | $87 | 58 hrs | 2.7/5 |
| **Year 2015** | $43 | 26.5 hrs | 3.8/5 |

## Nanning-Hanoi cost (2000-2006-2015)



## Nanning-Hanoi time (2000-2006-2015)




## *Nanning-Hanoi cost and time breakdown*

| Nanning-Hanoi | Transport cost | Port/ Border & Transit fees | Corridor Cost | Transport time | Port/ Border crossing time | Corridor Time |
|---|---|---|---|---|---|---|
| **2000** | 51% | 49% | 100% | 64% | 36% | 100% |
| **2006** | 52% | 48% | 100% | 63% | 37% | 100% |
| **2015** | 72% | 28% | 100% | 87% | 13% | 100% |

## *Trends in the Nanning-Hanoi corridor*

| Nanning-Hanoi | $/ton | Transit Time | Perception of reliability |
|---|---|---|---|
| **Year 2000** | $37 | 37 hrs | 2.4 |
| **Year 2006** | $27 | 19 hrs | 3 |
| **Year 2015** | $9 | 8 hrs | 3.8 |

# Corridor Level Assessment

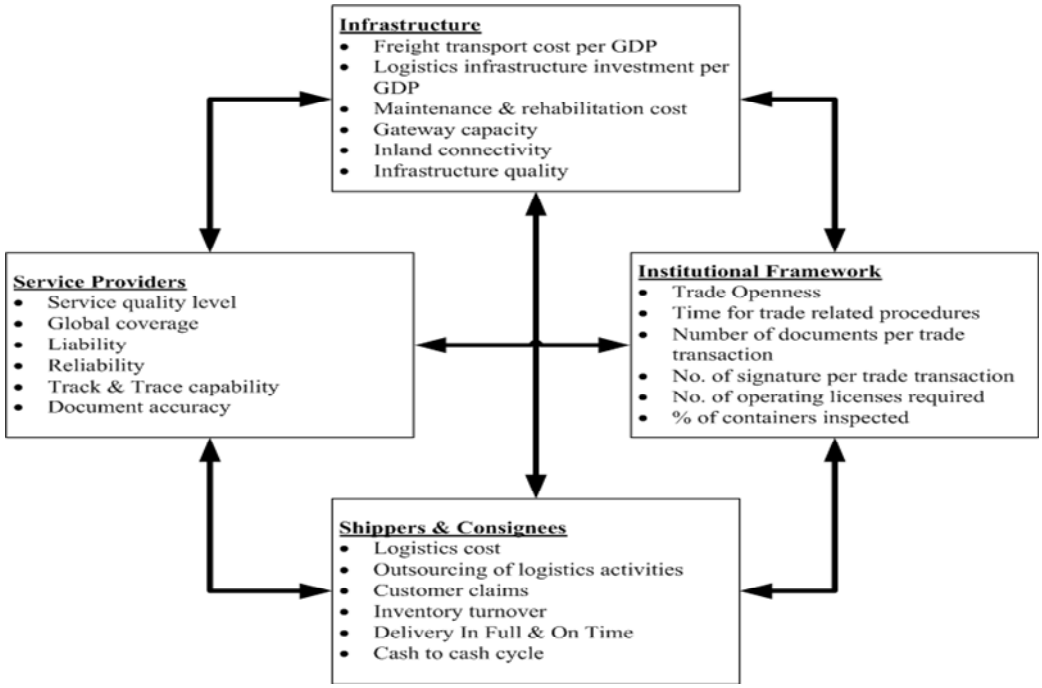
| From | To | Level |
|---|---|---|
| Haiphong | Hanoi | 3 |
| Hanoi | Lao Cai/He Kou | 1 |
| He Kou | Kunming | 3 |
| | **Overall level** | **1** |

| From | To | Level |
|---|---|---|
| Nanning | Pinxian | 3 |
| Pinxian | Lang Son | 1 |
| Lang Son | Hanoi | 3 |
| | **Overall level** | **1** |

# Summary

| Routeing | Cost/Ton | Time (hrs) | Distance (km) | Perception of Reliability |
|---|---|---|---|---|
| R3W via Myanmar | 470 US$ | 45 | 1,867 | 3 |
| R3E via Lao PDR | 392 US$ | 51 | 1,906 | 3.2 |
| R3 via Mekong River | 270.5 US$ | 112 | 1,834 | 3.4 |
| Haiphong-Kunming | 87 US$ | 58 | 885 | 2.7 |
| Nanning-Hanoi | 27 US$ | 19 | 440 | 3 |

# Logistics System Indicators: A proposed macro scorecard




# Proposed project relationship with NSEC logistics development issues

| NSEC logistics issues | Proposed Projects |
|---|---|
| **Trade & Transport Facilitation** | • Pilot implementation of trade and transport facilitation measures (SFA-TFI and CBTA) along Route 3E<br>• Inclusion of Nanning-Hanoi Corridor in the Scope of the CBTA<br>• Expansion of bilateral exchange of traffic rights arrangements along the Kunming-Hanoi-Haiphong road link<br>• Single-window inspection at selected inland ports along the , including use of ICT, and standardized inspection and documents<br>• Promotion of inter-provincial & district cooperation and coordination mechanisms (logistics facilitation)<br>• Establishment of mechanisms to improve coordination between and among central, provincial and border officials |
| **Infrastructure Development** | • Border Towns Development in NSEC Border Areas<br>• Developing road connections from Lao interior districts to Route 3 |
| **Infrastructure Maintenance** | • Provision of maintenance funds for Mekong River Navigation |
| **Capacity Building** | • Developing logistics capacity in the NSEC |
| **Further Development Studies** | • Study on the establishment of cross-border logistics centres along the NSEC routes<br>• Study on the establishment of road maintenance fund, and traffic management for the NSEC<br>• Study on the establishment of NSEC logistics standard information system |

- Rules & regulations (software) in place but not totally implemented.
- Border crossings are still the weakest link in the corridors.
- Transit trade minimal compared to border trade.
- No economic corridor (level 4) yet only transport corridors are in place

## Summary

## Summary of Corridor Development

- Assessment of Stakeholders (e.g. gov , private, etc.)
  - National/Local Development
  - International Development
- Assessment of Design Variables (e.g. policies, technology, finance, etc.) in the four dimensions
- Assessment of Constraints (e.g. culture) in all dimensions
- Risk Assessment and Benefits Evaluation
  - Cost Reduction
  - Time Reduction
  - Reliability / Quality of Service Improve

## Key Comments

- Holistic Picture is needed
- Different Value Chains
  - Direct and Indirect Benefits
  - Side effect of development
- Sharing Goals >>Trust Establishment >>
- Cooperation/Competition

Call on Synergy of Trade and Logistic Systems Development Strategies among Groups/Countries