

Unlocking seamless Trade Facilitation using Strategic Logistics



Ruth Banomyong (PhD)

Dept. of International Business, Logistics & Transport

ruth@tbs.tu.ac.th

Agenda

- The importance of Trade Facilitation
- Trade Facilitation & Logistics Development
- Strategic Logistics Development Policy
- Logistics Institutional issues
 - Holland/Malaysia/Thailand
- Niche logistics policies
 - Food supply chain
 - Indonesia's logistics
- Lessons learned...

Why is Trade Facilitation Important?

- Large increase in international trade
 - Trade represents 30% of world GDP
 - Estimated to grow to 50% by 2020
- Rapid development of information technologies
- Increase in bilateral and regional trade agreements
- Changing nature of internationally traded goods
- Increased cost of cumbersome and unnecessary trade procedures

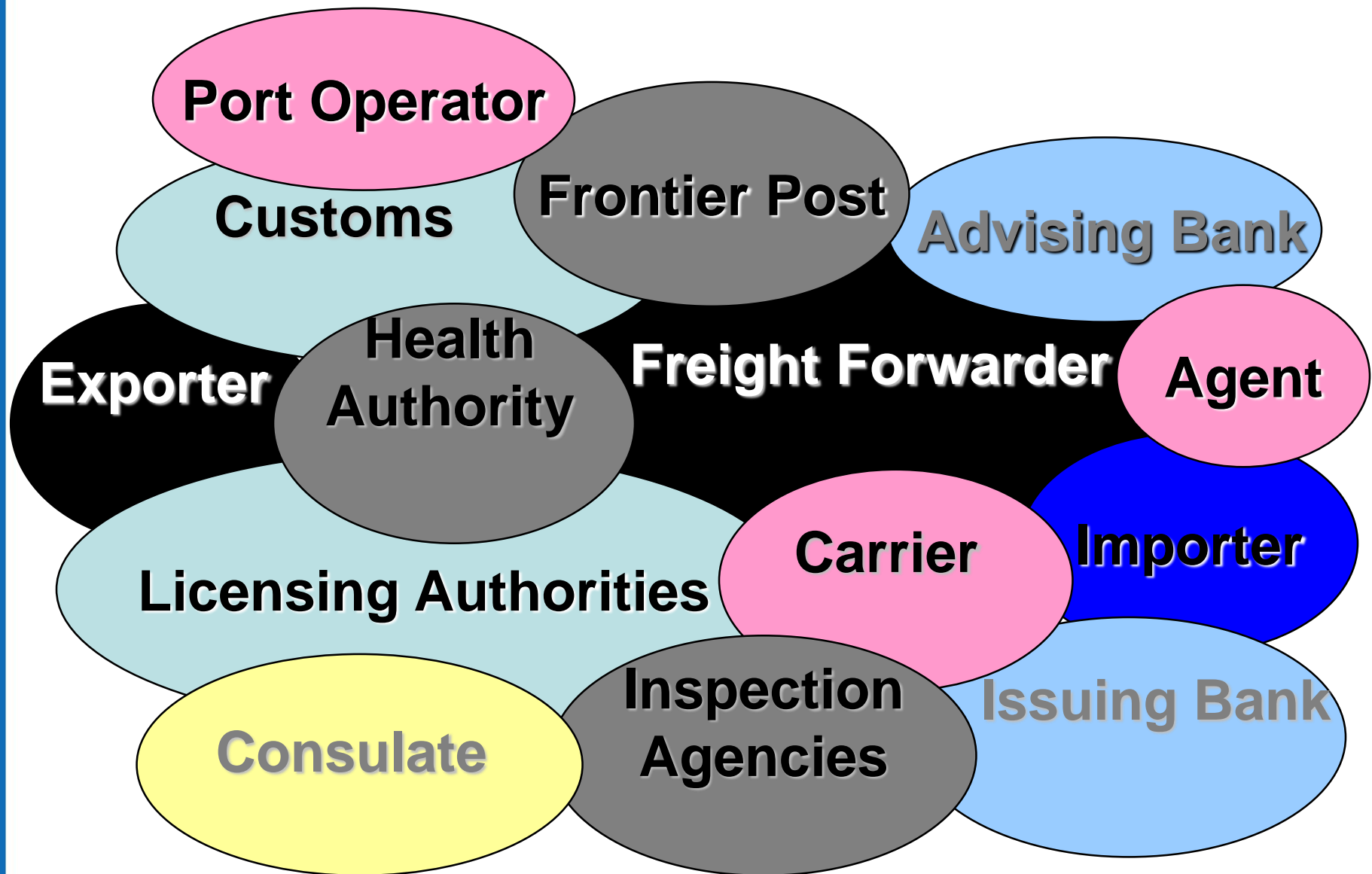
Why is Trade Facilitation Important?

- The United Nations has estimated the preparation of trade documentation represents between 2% and 10% of the value of a typical international trade transaction.
- The OECD has estimated potential annual worldwide gains of \$40 billion from just a 1% reduction in trade transaction costs.
- The World Bank and UN estimates potential savings at US \$490,000,000,000!!!

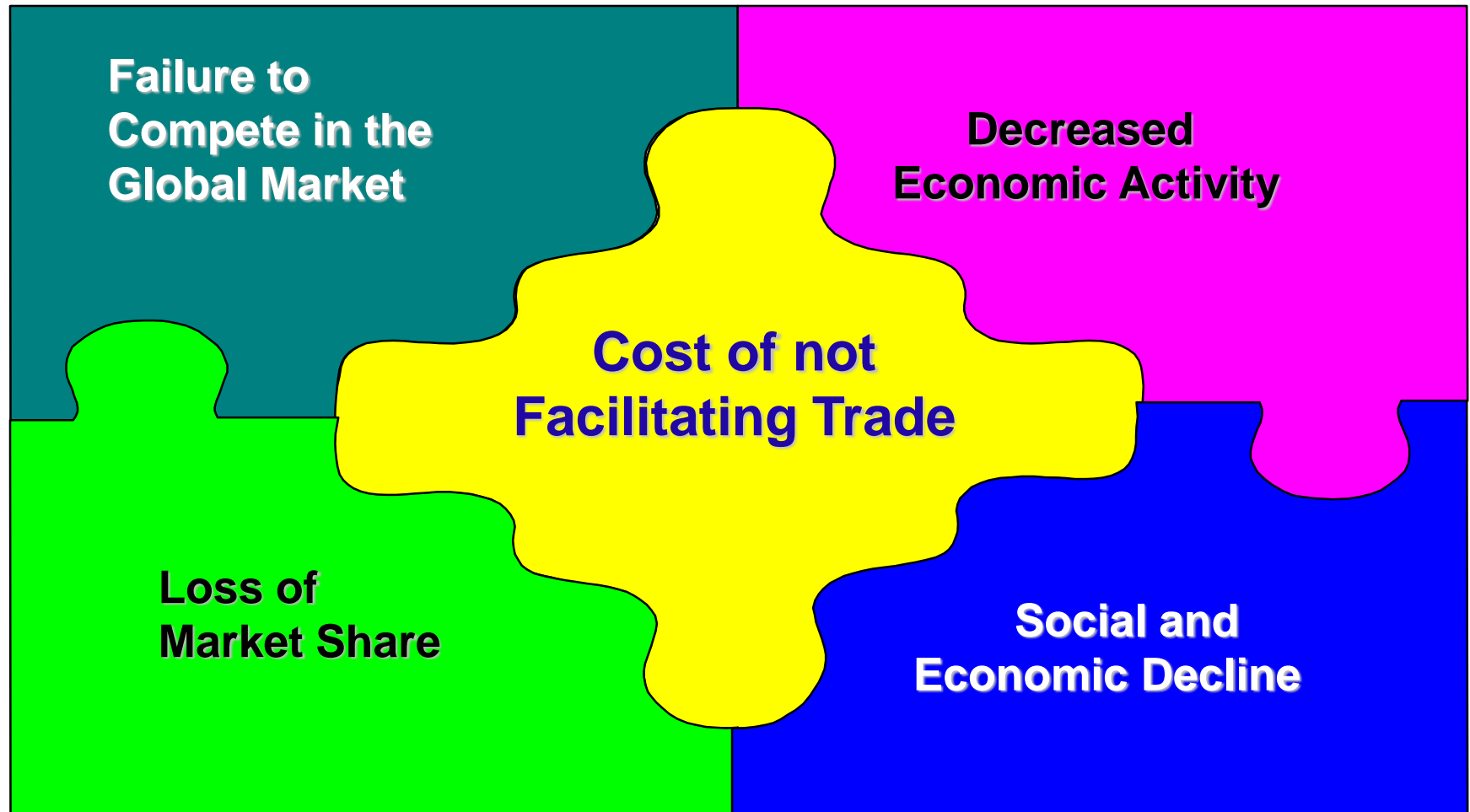
Trade Facilitation Issues

- Excessive data and documentation requirements;
- Lack of transparency and use of pre-ruling systems
- Unclear and unspecified import and export requirements;
- Inadequate procedures and a lack of especially audit-based controls and risk assessment techniques;
- High degree of unpredictability
- Lack of automation and insignificant use of information-technology
- Lack of modernization and co-operation among, Customs and other governmental agencies

International Trade is Complex



What can occur without Trade Facilitation



AND THE BOTTOM LINE IS THE EFFECTS FALL ON BOTH BUSINESS AND GOVERNMENT

Key Elements of Trade Facilitation

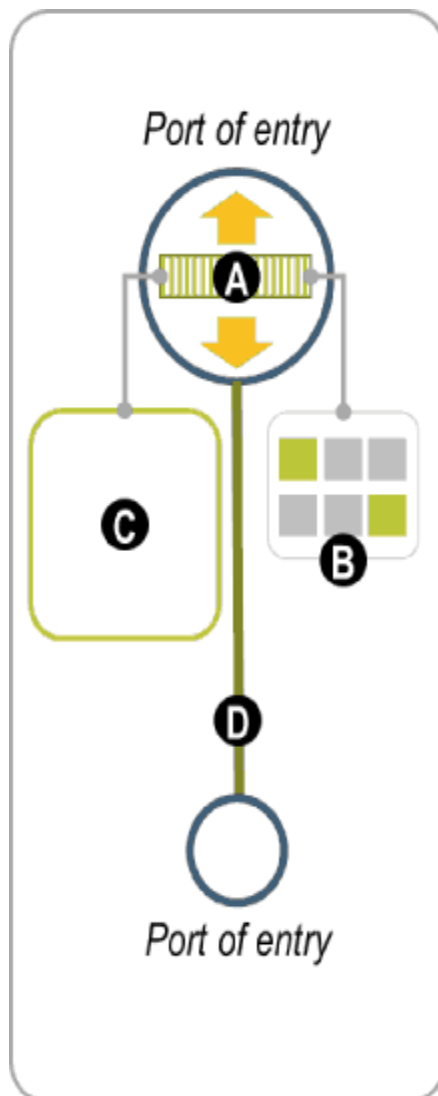


- Trade and customs legislation and regulations
- Trade documentation and procedures
- Customs clearance
- Trade and customs enforcement practices
- Trade finance infrastructure development
- Use of information and communication technology

Results of Trade Facilitation

- Increase transparency and predictability of trade rules;
- Reduce risk and uncertainty in trade;
- Effectively implementing trade-related laws and regulations;
- Effectively moving goods and associated services and information across borders

Trade Facilitation Logistics....



A Customs and cross-border management

- Faster customs clearance and improved time performance of supply chains.
- Improving supply chain security, such as with the use of scanning technologies.
- Cross-border agreements to develop cross-border logistics (land border).

B Trusted trader program

- Reduction in the number of inspections for imported cargo and faster clearance.
- Exemptions from random non-intrusive inspections.
- Improved level of service for customs.

C Free zones (Foreign trade zones)

- Promotion of exports.
- Flexibility in the use of national customs regulations.
- Attract internationally focused logistics activities.

D Customs corridors

- Better integration between major gateways such as ports and airports.
- Additional flexibility in supply chain management.

Customs Clearance: Performance Across Countries

	Green Lane		Yellow Lane and Red Lane		
	Size of Imports	Processing Time	Yellow Lane: Size of Imports	Red Lane: Size of Imports	Processing Time
Singapore	90-95%	5-15 minutes; less than 1 hour	4-10%	0-1%	n.a.
Philippines	10-25%	5-6 hours; 3 days	15-90%	15-75%	5-6 hours; 3-5 days
Indonesia	50-90%	2-3 hours	5-20%	10-30%; 90%	2-5 days
Thailand ¹	60%	5 hours	40%		4-6 hours;
Brunei Darussalam ²	35-95%	2 days	5-55%	n.a.	n.a.
Viet Nam	40-85%	2-5 hours	10-40%	5-30%	0.5-5 days
Cambodia	70%	3 days	20%	10%	n.a.
Myanmar ³	0-5%		95-100%		1-5 days

Import clearance outside customs: Agencies involve and document processing time

	Sector/products	Number of agencies	Processing time (days)
Singapore	Agricultural, fishery, processed food garment/textiles, pharmaceuticals, automotive, sanitary and phyto sanitary	1-3	1-2
Philippines	Automotive and automotive parts Agricultural, fishery, processed food Garment/textiles	3 1 1	2-10 1-3 1-2
Brunei Darussalam	Agricultural, fishery, processed food Garment/textiles Pharmaceuticals Automotive and automotive parts Sanitary and phyto sanitary	1-4 3-4 2-8 13-14 1-2	2-5 2 4 6 3
Viet Nam	Agricultural, fishery, processed food Garment/textiles Pharmaceuticals Automotive and automotive parts Sanitary and phyto sanitary	2-4 1 2-3 2 3	15-20 7-15 15-30 5-10 15-30
Cambodia	Agricultural, fishery, processed food Garment/textiles Pharmaceuticals Automotive and automotive parts Sanitary and phyto sanitary	3-5 2 4 1 3	20 10 7 7 10
Lao PDR	Agricultural, fishery, processed food Garment/textiles Pharmaceuticals Automotive and automotive parts Sanitary and phyto sanitary	4-5 3 4 4 4	n.a 2-3 n.a 3-4 5
Myanmar	Agricultural, fishery, processed food Garment/textiles Pharmaceuticals Automotive and automotive parts Sanitary and phyto sanitary	4 4 5 4 3	20-23 15 24 23 7

Source: ERIA Custom and Cargo Clearance Survey

Export clearance process

	Certificate of Origin	Export Permit	From lodgment to loading to ship	From custom release to actual loading
Singapore	1-2 days	1-5 days	1 day	1-3 days
Philippines	4 hours - 1 day	4 hours; 1 week	1 week	1-2 days
Indonesia	1-5 days	1-7 days	1-3 days	1-2 days
Thailand¹	3 days	1 day	3 days	2 days
Brunei Darussalam	> 10 days	6 days	5 days	8 days
Viet Nam	0.5-2 days	n.a.	0.5-1 days	0.5-1 days
Cambodia	9 days	2 days	5 days	2 hours
Lao PDR	1-3 days	1 day	7 days	n.a.
Myanmar	1-5 days	1-5 days	1-5 days	6-10 days

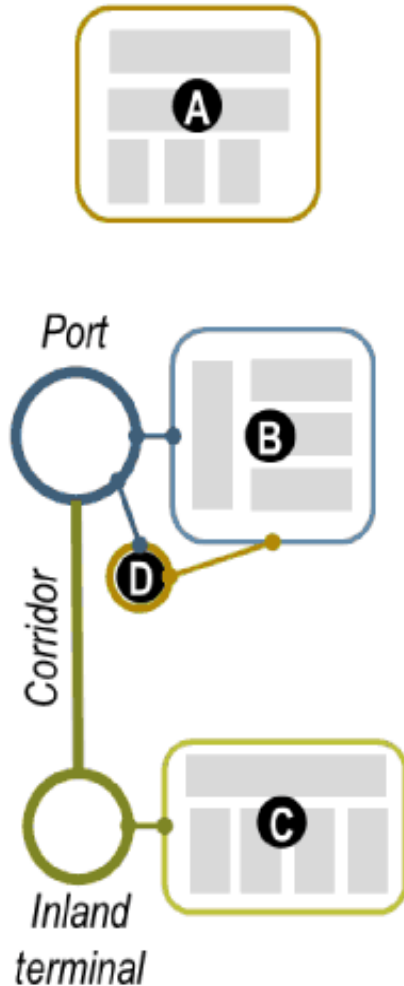
Source: ERIA Custom and Cargo Clearance Survey

Notes:

n.a.: not available.

1. Preliminary results. There is only one firm return the questionnaire.

Land base logistics focus...



A Logistics park / zone

- Achieves economies of agglomeration for freight activities.
- Lowers operational costs (e.g. joint infrastructures and utilities).
- Promotes the setting of logistics services firms.

B Port-centric logistics zone

- Uses port real estate more effectively.
- Facilitates imports and exports (direct access to port terminal).
- Reduces local congestion.

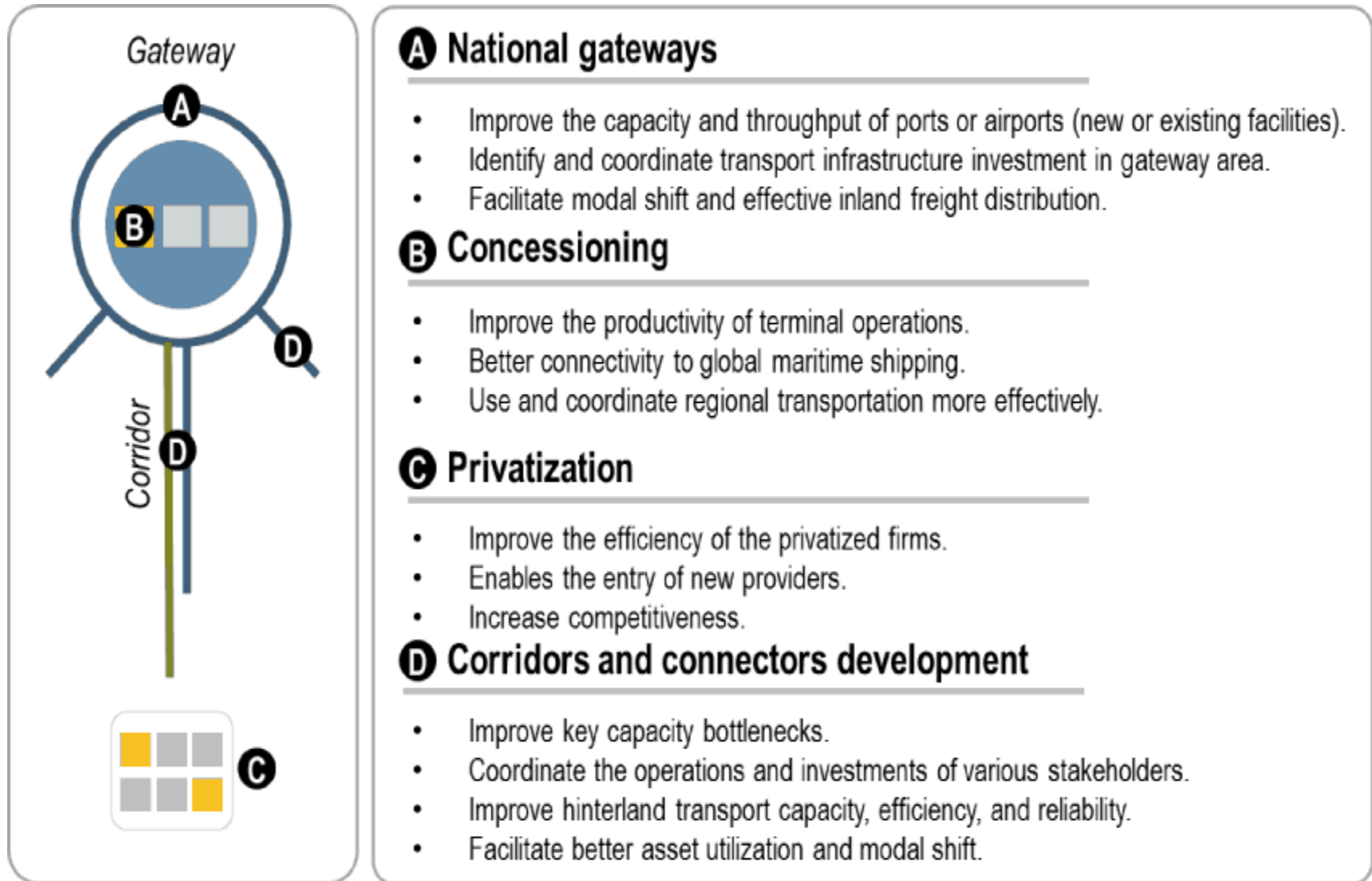
C Inland / dry port

- Promotes modal shift (if connected by rail or barge).
- Reduces port congestion (relocation of some port activities).
- Facilitates economies of scale in inland distribution (corridors).
- Lowers last mile transport costs (co-location).

D Inland container depot

- Ensures availability of containers for exporters.
- Reduces port congestion.
- Lowers drayage costs.

Logistics interface is critical...



What is a Strategic logistics policy?

- Logistics is basically a management concept that is implemented and managed at the firm (micro) level.
- Governments in the ESCAP region have now started to recognise the general importance of logistics in supporting and sustaining competitive advantage.
- Comprehensive logistics development policies exist in certain countries
- Other countries pursue segmented policies with a heavy emphasis on infrastructure development policies.

Strategic Logistics Policy

Definition:

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

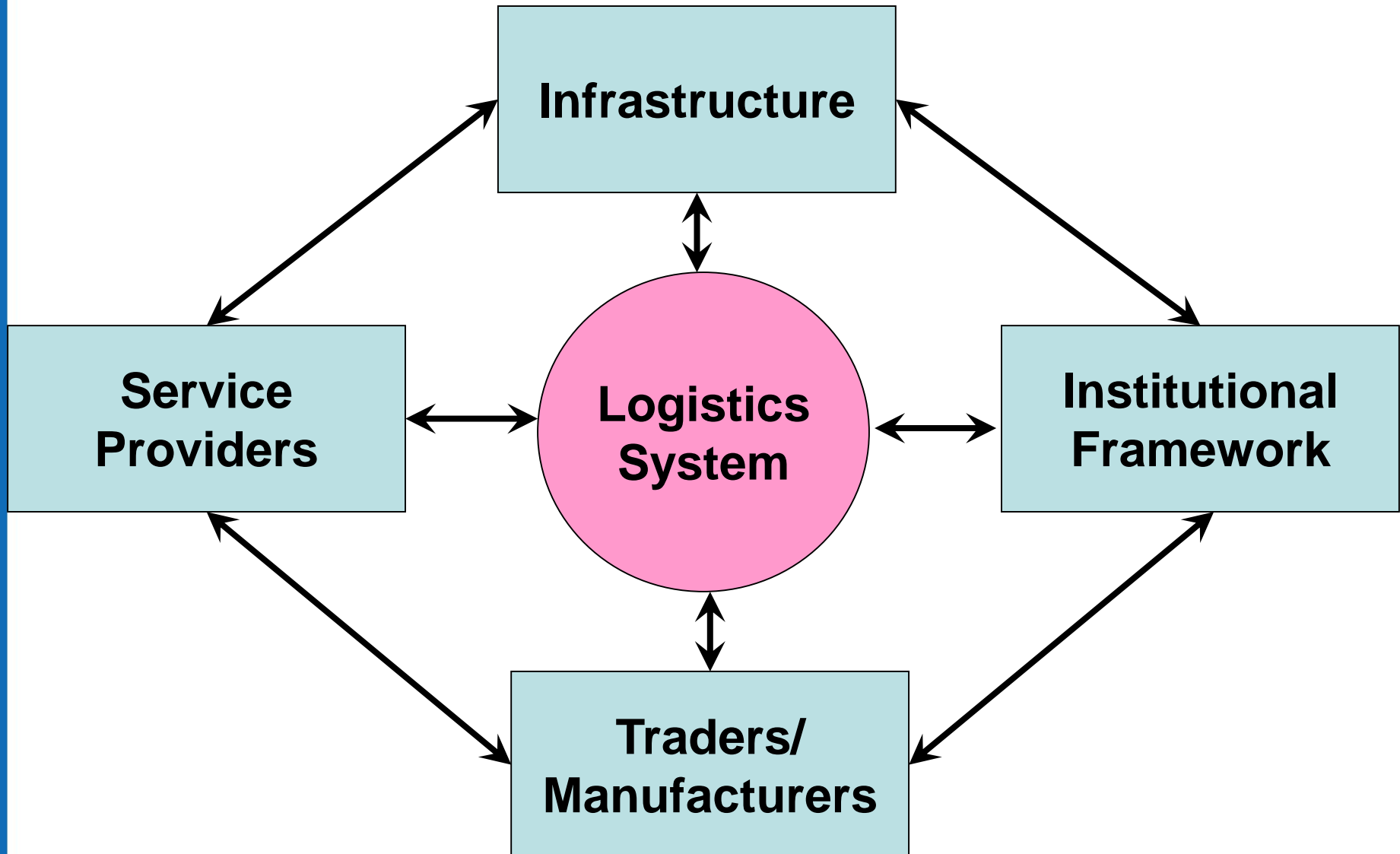
Banomyong, 2008

Scope of logistics policy...

- A logistics development policy can be conceptualised as:
 - The formal national or regional framework (i.e. plan)
 - With authority over logistics related agency
 - For the purpose of meeting customers' requirements.
- Question:

Who are the customers?

Strategic Logistics Framework



Logistics Institutional Issues

- Domestic Logistics Activities
 - Private sector driven
 - Key role played by Ministry of Trade & Ministry of Transport
 - Some overlapping jurisdiction related to warehouse/distribution centre establishment
- International Logistics Activities
 - State Agencies such as Customs, Trade and Transport play a key facilitating role
 - Documents need to be processed by almost all related agencies
 - There exist authority overlaps in the provision of international logistics related services

Logistics information requirements



A Freight portal

- Improves the interactions between the providers and consumers of logistics services.
- Promotes a better usage of transport assets and facilities.
- Enables the participation of small and medium-sized firms.



B Port community system

- Promotes competitiveness in port-related services.
- Promotes coordination between freight actors to improve port area efficiency.
- Improves the tracking of freight and transport assets.



C Logistics observatory

- Collects information about logistics activities.
- Reports key performance indicators benchmarking the industry.
- Assesses the effectiveness of logistics policies.

Logistics capabilities...



A Labor training and certification

- Provide a labor pool to address expected demand.
- Increases labor productivity.
- Develops diversified skills.
- Attracts logistics firms.



B Research centres

- Identify trends, gaps and opportunities.
- Provide innovations suitable for the national market.
- Train researchers, consultants and managers.
- Collaborate with logistics firms.

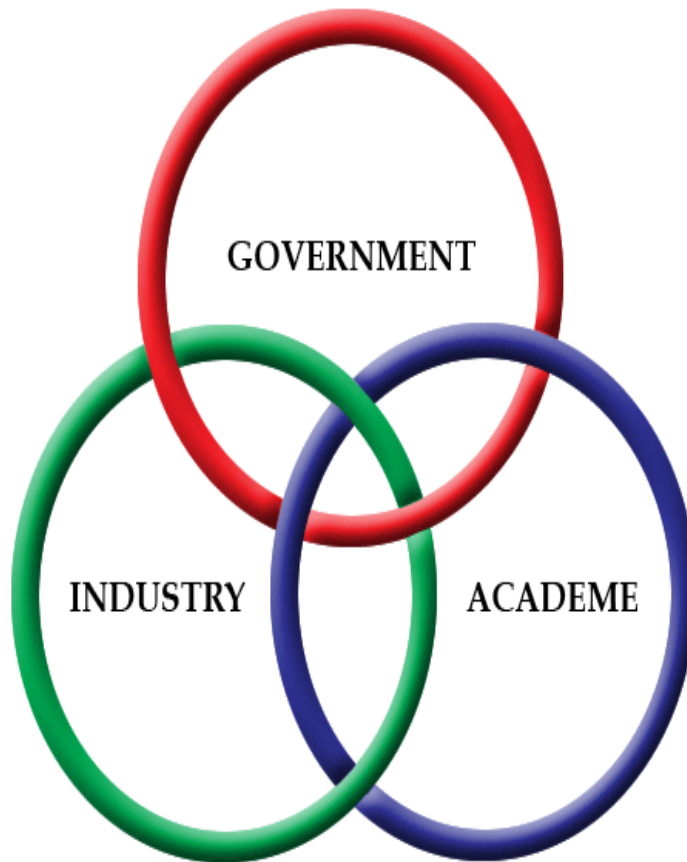


C Logistics firms incubator

- Develop entrepreneurial capabilities, particularly for new firms.
- Improve the provision of specialized logistics services, such as 3PLs and 4PLs.
- Improve the competitiveness of the logistics market.

The Netherlands model

THE TRIPLE-HELIX MODEL



- Topsector Logistics (Priority)
- Goals:
 - Global leader in logistics expertise & knowledge
 - Leading in sustainable logistics
 - Global data & information hub of cargo flow
 - Europe's most accessible & sustainable gateway
- LPI No. 1 by 2020
 - Led by the private sector
 - Academia provides research/innovation/partnership
 - Government enables the logistics environment

Source: Henry Etzkowitz and Loet Leydesdorff, 2000

Diagram: www.techpinoytrend.blogspot.com (03 March 2011)

The Netherlands policy

From 2016	To 2050
Transport modes are focus within supply chain	Cargo is focus within supply chain
Supply driven	Demand driven (consumer/customer)
Working with a transport oriented perspective	Work from logistics system perspective
Big data	Smart information
Government facilitating cargo flows	Partnership government, industry and academia to achieve shared goals of international attractiveness, mobility and sustainability
Impact of cargo and freight transport on spatial development, mobility and environment	Logistical innovation as driver to sustainable growth

Source: Ambition document Topsector Logistics 2050 (2016)

Malaysia's Logistics Council (MLC)



- Co-chaired by the Secretary-general of the Ministry of International Trade and Industry and the Transport Ministry (since 2013)
- Strategic
- Provides **structured platform** for private sector and government agencies to work together in address challenges
- **4 focused working groups** were formed
 1. Transport & infrastructure
 2. Institutional framework & regulatory
 3. Industry, best practices and development initiatives;
 4. Trade facilitation

The role of the MLC



Provides leadership in overall development of the logistics industry, coordination and implementation of policies and programmes



Monitor the implementation of programmes and activities of the respective ministries, state governments and authorities involved in the development and promotion of the industry



Ensure the development of the industry in line with the overall strategic thrust of the IMP3

Thailand's National Logistics Council



Chaired by the

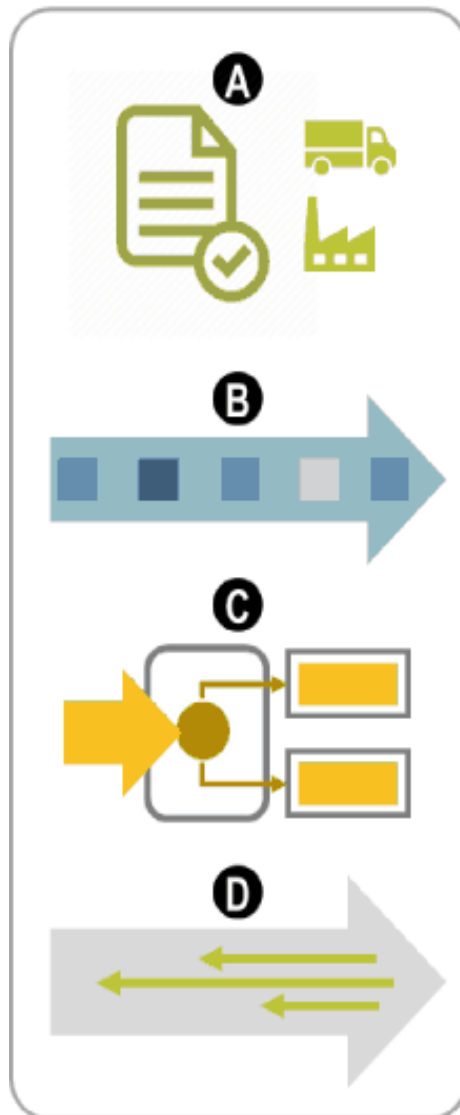
Key economic related agencies
ministers are members

Permanent Secretaries of supporting
ministries are members

Private Sector represented by Thai
bankers' association, Federation of
Thai Industries, Thailand's Board of
Trade, Thai National Shippers' Council

NESDC is the Secretariat

Niche logistics policies...



A Certification to green logistics standards

- Improve environmental impacts of logistics.
- Certified carriers (less emissions; energy efficiency).
- Certified distribution facilities (energy efficiency; lower footprint).
- Reduces material losses.

B Cold chain logistics

- Promotes high-value reefers exports of perishables on global markets.
- Ensures higher quality exports and less waste.

C Transloading facility / Platform


- Promotes specialized commodity exports.
- Expand market opportunities for small and medium-sized producers.

D Reverse logistics

- Improves efficient recovery of recycled materials.
- Develop and expand the national recycling industry.
- Help meet sustainability goals.



Made by Japan



What are the main drivers behind the integration of Thai food export supply chain to Japan??

Japan
Population 126 Mill.
Area 377,915 sq/m
GDP \$4.31 trillion
GDP per capita
\$39,738

What are the key food supply chain issues??

Thailand
Population 66 Mill.
Area 513,120 sq/m
GDP \$586.9 billion
GDP per capita \$3,893

SUCCESS

FAILURE

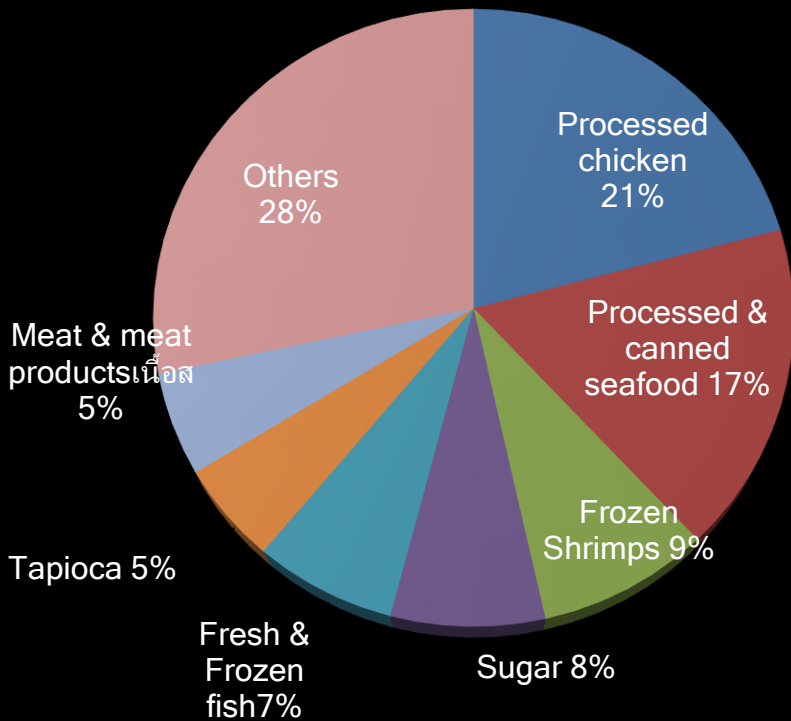
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2011 MapLink/Tele Atlas
© 2011 Europa Technologies
US Dept of State Geographer

21°34'27.76" N 116°03'26.66" E elev -2092 ft

©2010 Google

Eye alt 4758.05 mi

Case studies



Export ratio of Thai food produce to Japan
Source: Department of Export Promotion



Frozen processed chicken



Processed & canned seafood



Fruits & vegetables

Supply Chain Integration Model

Infrastructure

Transport & Communication

Warehouses & Distribution centers

Information network

Institutional

Government policy

Rules & regulations

Bilateral cooperation

Trade facilitation

Food safety standards

Business

Quality standards

Cost

Reliability & Reputation

Inter-firm information flow

People

Consumer behavior

Channel relationship

Acceptance of Thai produce



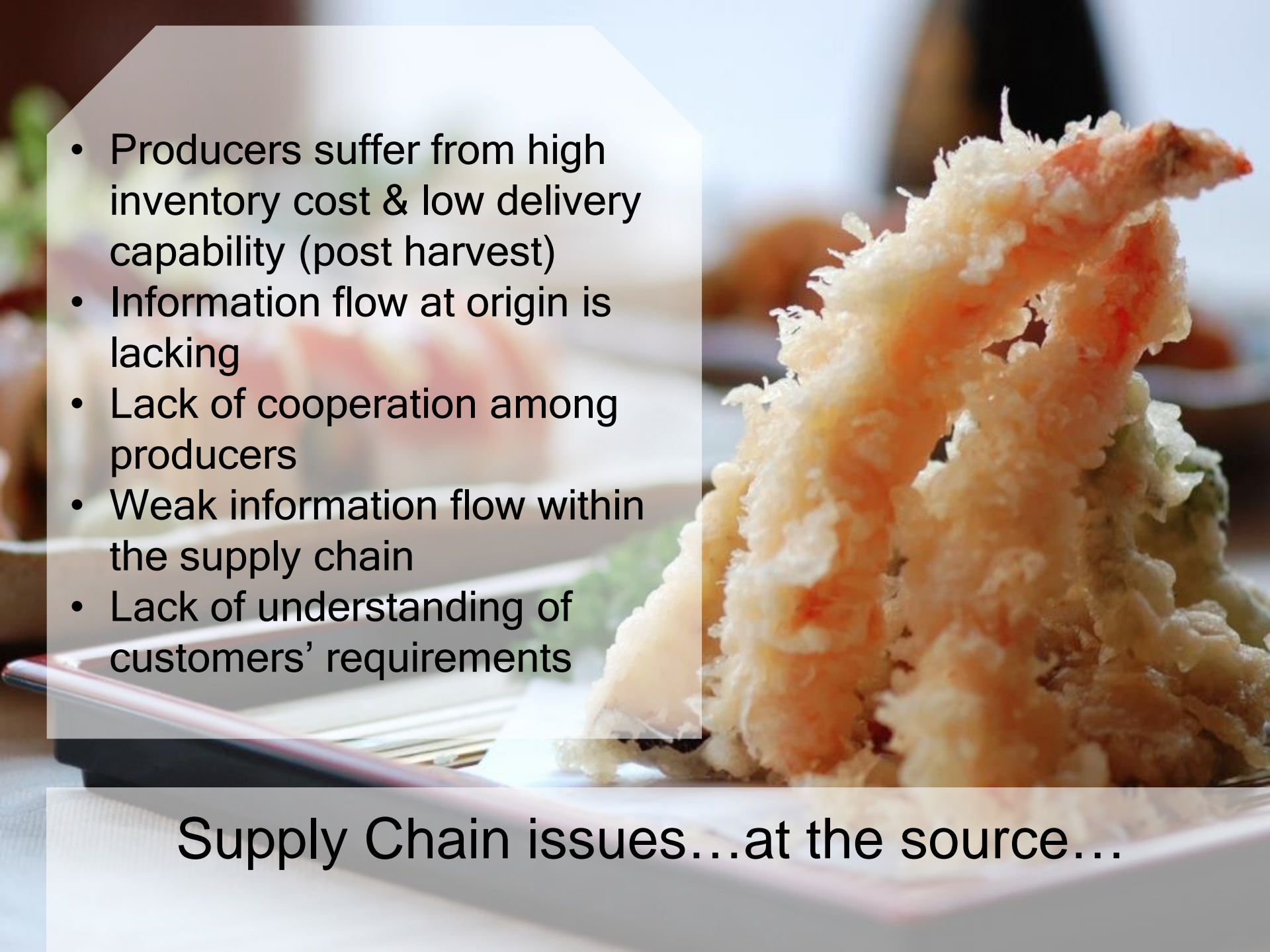
Thai-Japanfood supply chain drivers

Responding to Customers' need
(direct customers & customers of
customers)

Product quality & safety

Continuous improvement (kaizen)

Supply Chain "Trust"

- 
- Producers suffer from high inventory cost & low delivery capability (post harvest)
 - Information flow at origin is lacking
 - Lack of cooperation among producers
 - Weak information flow within the supply chain
 - Lack of understanding of customers' requirements

Supply Chain issues...at the source...

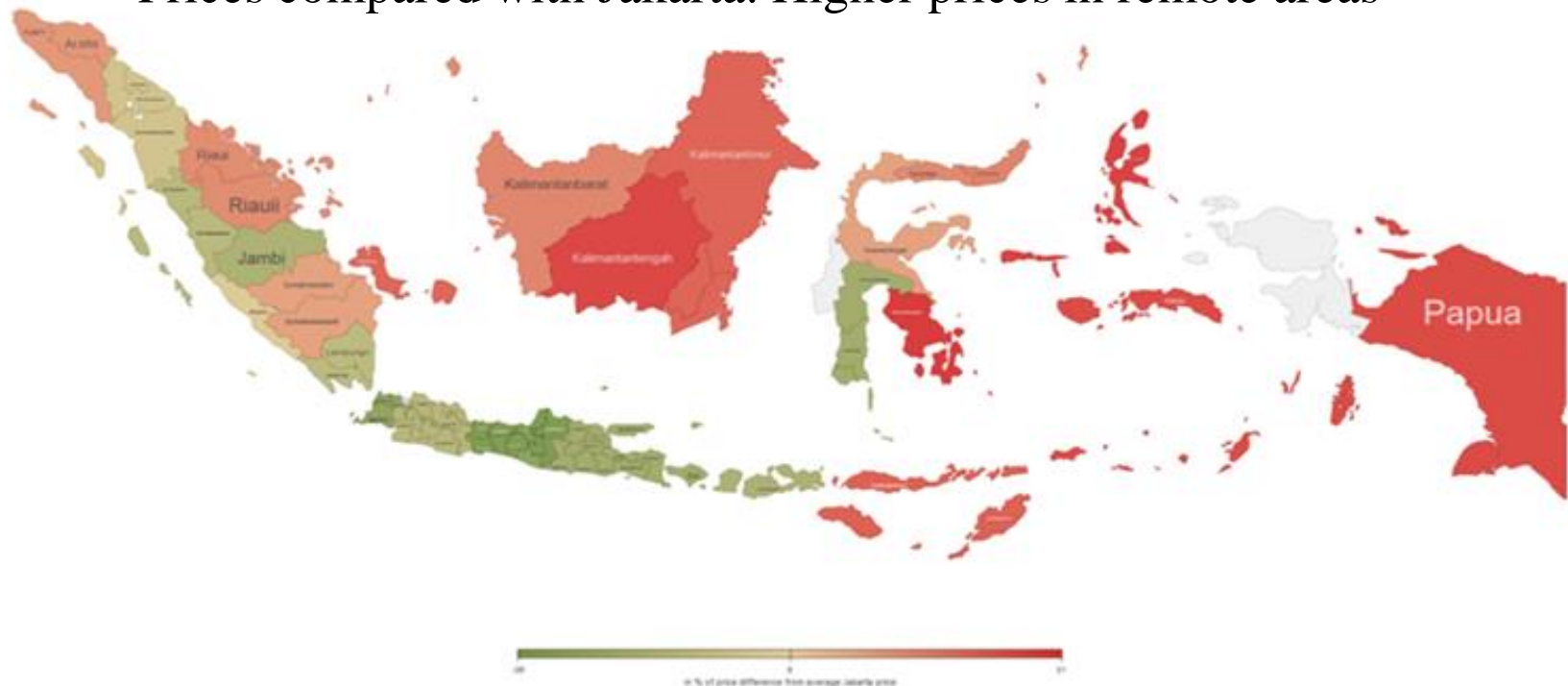


*“The Food Supply
Chain is only as
strong as its
weakest link.”*

Logistics in an archipelago like Indonesia is key

- ❑ Efficient logistics can reliably and cost-effectively bring products from the source to those who use them
- ❑ Logistics is all the more important in an archipelago as Indonesia where the sea can be a means of cohesion or a source of fragmentation.

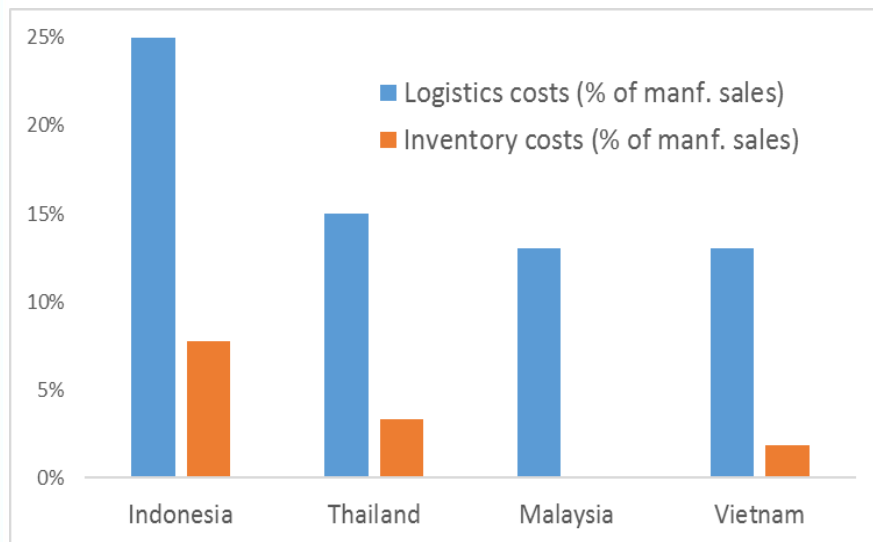
Prices compared with Jakarta: Higher prices in remote areas



Source: World Bank staff estimates.

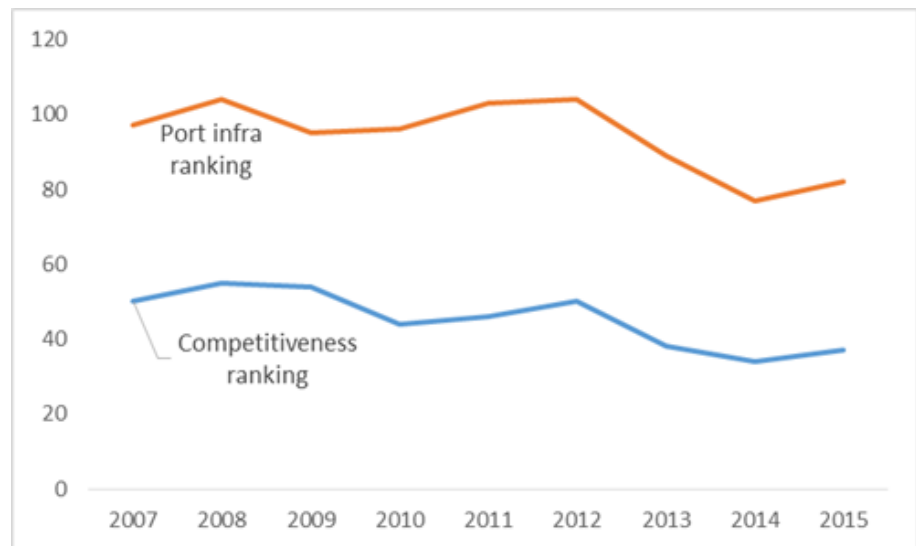
High logistics costs are a key impediment to Indonesian competitiveness and inadequate infrastructure is a big part of the problem

• *Logistics costs are higher in Indonesia than in the region*



Source: Manufacturing surveys (2013-14)

• *And Indonesia fares particularly poorly on ports' infrastructure*



Source: World Economic Forum

This gap hurt the need of Indonesia to rebalance away from commodity towards manufacturing production

Logistics reforms needed all along the supply chain

Logistics in Indonesia hampered in the key parts of the country's long supply chain:

- Ports' performance
- Logistics services
- Trade processing



The Indonesian Government has long tried to improve logistics in each of these parts but so far with mixed results

• Good intentions...

- Shipping Law to modernize maritime logistics services, including ports (2008)
- Separation of port operations from port regulation functions
- Core of port regulator functions sitting with newly created port authorities, including infrastructure development, performance monitoring and promoting competitive environment

• ...Faulty implementation

- Slow pace of implementation of reforms in the absence of a push from strong agency
- Questionable institutional set up for port authorities (low status, only civil servants, limited budget)
- Relatively strong port operators, not willing to give up their monopoly power
- Lack of systematic data prevented monitoring

• Good intentions...

- Institution of a national blueprint to reform logistics services (SISLOGNAS) (2008)
- Creation of a task force initially under Ministry of Trade and then Coordinating Ministry of Economic Affairs (CMEA) responsible for its design and implementation
- Coordination of logistics reforms across several Ministries based on agreed principles (from the blueprint)

• ...Faulty implementation

- The blueprint was eventually issued in 2011 but lacked details to link it to concrete reforms vague
- SISLOGNAS team has never had real convening and directive power over Ministries
- It has lacked a solid data foundation to base its recommendations on

Trade facilitation reforms

• Good intentions...

- Design of the Indonesian National Single Window as single gateway for traders (2008)
- Aim to Improve coordination of 18 Ministries and agencies operating at the border
- Aim to reduce trade processing time and ease compliance of trade documentary requirements

• ...Faulty implementation

- Long time to actually create the institution (2014/15)
- INSW instituted as task force under Customs rather than independent agency → little powers to convene and coordinate
- Each agency/Ministry largely maintains their standard operating procedures

Lesson from Indonesia (I): Effective coordinating mechanism(s)

- ❑ An effective and powerful coordinating institution is fundamental in each of the key reform areas identified
- ❑ Ideally this could be backed by high-level political institution (such as Coordinating Ministry, Vice-Presidency or Presidency)
- ❑ Enough powers are needed also to tackle vested interests of incumbents that typically resist reforms
- ❑ In Indonesia CMEA is now stepping up to direct logistics reforms (through the President's backing) and to empower coordinating institutions whose mandate the government is considering to reform

Lesson from Indonesia (II): Data, data, data

- ❑ Systematic data collection on key indicators is essential to track progress and identify reforms needed
- ❑ LPI is useful to give some sense of comparative performance but not at all to identify reforms:
 - ❑ Changes in rankings are often hard to relate to actual changes
 - ❑ Methodology does not allow to understand causes of performance
- ❑ Some more useful starting points:
 - ❑ Logistics costs by type faced by producers (from surveys)
 - ❑ Constraints to logistics performance by providers (surveys)
 - ❑ Ports' performance indicators (by ports)
 - ❑ Time release of shipments, customs and pre-customs clearance

Lessons learned



- Need for **clear statement of objectives** to be achieved by improving logistics performance
- **Importance of coordination** in discussion of strategies and preparation of initiatives
- Leadership from private sector in identifying impediments and **prioritizing initiatives**
- Leadership from public sector in **reviewing regulations** and policy
- **Difficulties of implementation** and need for a separate approach
- Establish national logistics council/committee under (who?)
- Prioritize initiatives based on **potential benefits** and on **period to implement** and **likelihood of success**
- Separation of **strategic and long-term initiatives**

Lessons learned



- Allocation of **responsibilities** between public and private sector **according to capacity**
- Allocation of **responsibilities** among agencies **according to mandate**
- Implementation plan with **enforceable deadlines**
- Indonesia, Malaysia, Thailand and Vietnam has clearly **defined national logistics development plan**.
- Implementation has been difficult as **coordinating agencies do not have real authorities**
- **Intra-agency coordination has been weak**