

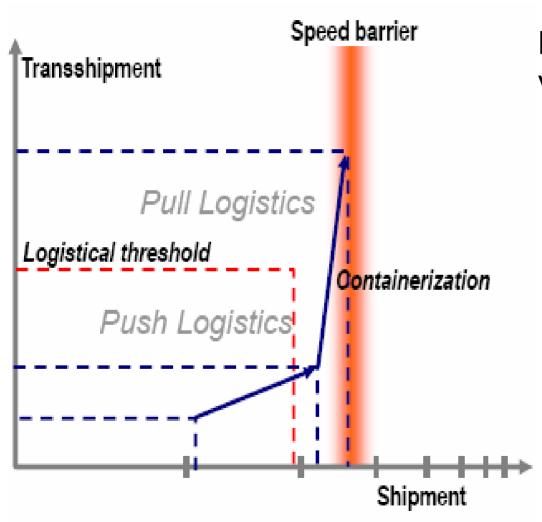
Performance assessment and monitoring for trade logistics

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Obstacles to Logistics Transactions

- Too many documentations for invoices, cargo insurance, letters of credit, bills of lading or air waybills, and inspections
- Constantly changing regulations that vary from country to country that govern import and export of goods
- Trade groups, tariffs, duties, and landed costs
- Limited shipping modes
- Differences in communication technology and availability
- Different business practices as well as language barriers
- Government codes and reporting requirements that vary from country to country
- Many players (e.g. forwarding agents, custom house brokers, financial institutions, insurance providers, multiple transport carriers, export packers and government agencies - trade specialists)CAREC

Logistics Performance Assessment for Acceleration of Freight



Need to understand velocity of freight

- Shipment and transshipment
- No significant speed improvements in recent decades
- Intermodal operations; most important element
- Logistical threshold:
 - Time based management of distribution becomes a possibility.
 - From push (supply based) to pull (demand based) logistics.

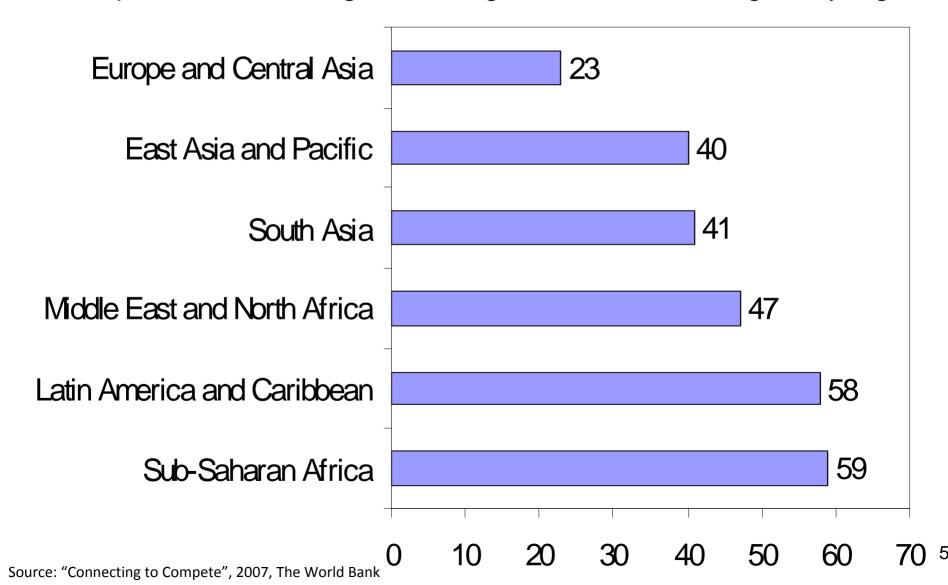
Trade Logistics Performance Focus

- Transport corridor performance
- Operational bottlenecks
- Logistics costs
- Development needs
 - Within the firm, industry
 - In the business environment
 - Within the region



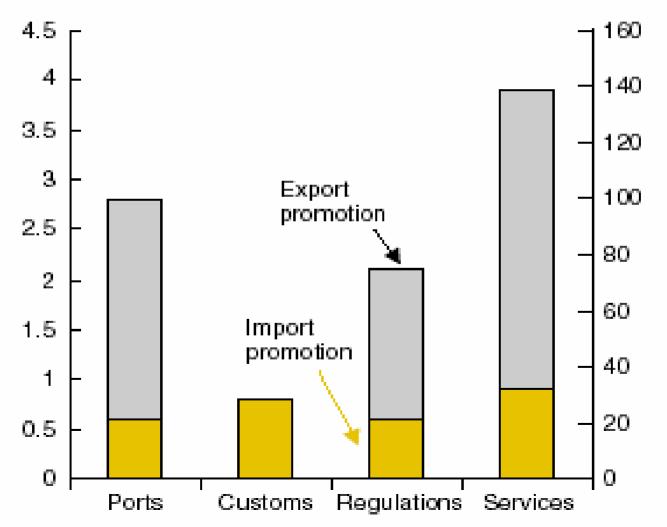
...lowering trade costs

% of respondents deeming overall logistics costs to be high/very high



Facilitating trade in less efficient countries would bring significant gains

Trade gains from raising handling capacity in 75 below-average countries halfway to the global average (percent change and dollar gain)



Source: Calculations based on table 4 in Wilson, Mann, and Otsuki, "Trade Facilitation and Capacity Building: Global Perspective," 2003, mimeo.

Empirical Estimates: Benefits from improved trade logistics

- Electronic documentation for trade can save 1.5% -15% of landed cost of an imported item; a 3% savings for intra-APEC trade translates into US \$60 billion.*
- 1% reduction in maritime and air transport cost of services can increase Asian GDP by US \$3.3 bn.*

 Facilitating trade in less-efficient APEC countries (by raising their capacity halfway to the average) would increase global trade by about 10%.

^{*.} Source: Trade Note, The World Bank, December 8, 2003



Web-based International Trade Logistics Software Systems

- reduce obstacles to global trade
 - convert language and currency
 - provide information on tariffs, duties, and customs processes
 - attach appropriate weights, measurements, and unit prices to individual products ordered over Web
 - incorporate transportation costs and conversion rates
 - calculate shipping costs online while company enters order
 - track global shipments



Why monitor trade logistics?

- Emerging patterns or trade place new demands on transportation infrastructure and flows
- performance linkage between :
 - infrastructure and user capital (assets)
 - Links and nodes (distribution networks)
- Benchmark for improvement



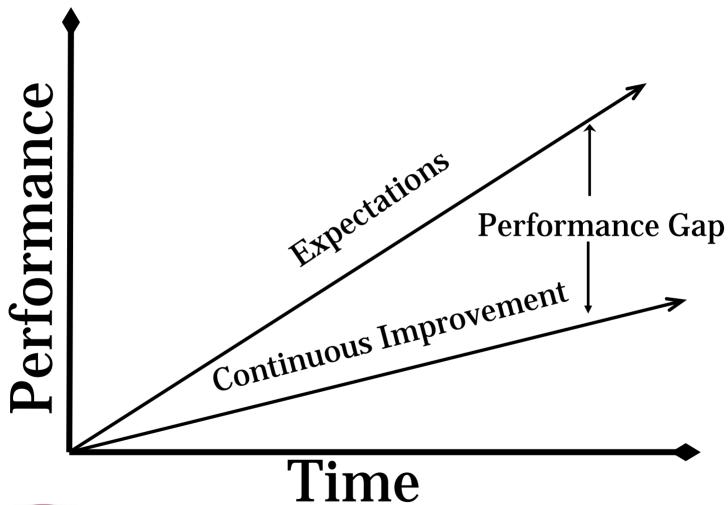
Optimise scarce resources

- Optimise use of existing physical infrastructure ("hardware"),
- By fostering "software" dimension of trade and transport through:
 - Improving performance of transport operators and auxiliary services,
 - Changing commercial behaviour of users, and
 - introducing innovative relations between public institutions and transport providers and users
- Eliminate outdated procedures, and multiple, nonstandardised documents, which result in additional transaction costs and unnecessary delays.

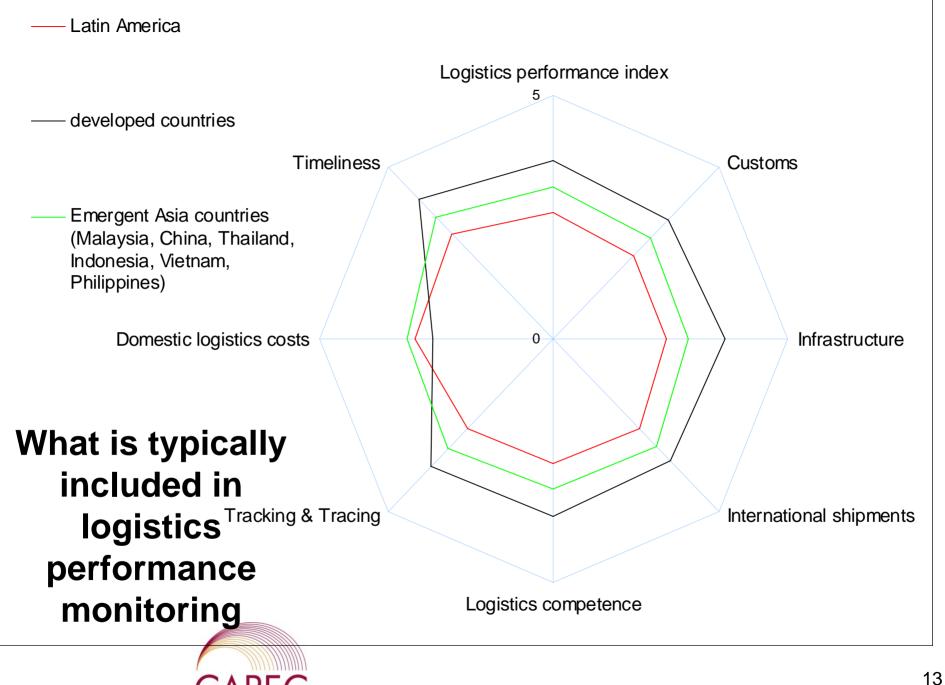
Understand source and cost of delays

- Time is of the essence...
 - lost time due to underperformance:
 - Only 63% of transpacific container vessels arrive on time at their scheduled port calls.
 - 53% for transatlantic port calls.
 - major factor behind delays is port congestion:
 - Multidimensional concept.
 - Physical docking capacity.
 - Transshipment capacity.
 - Storage capacity.
 - Inland capacity.
 - Reinforce importance of the rail/ air / land interface

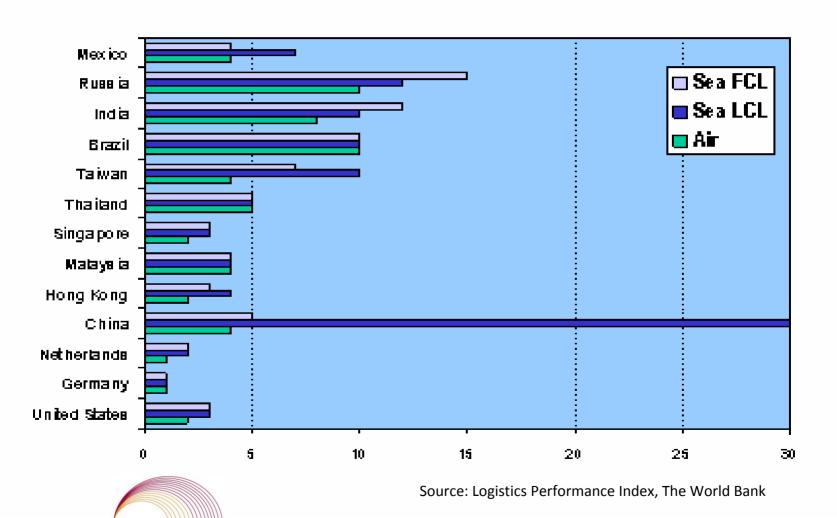








What is typically included in logistics performance Average Customs Clearance Time (days)



LPI (2007 results) Intl shipments

4.04

3.31

3.24

2.35

2.5

Log competence

4.21

3.4

3.31

2.35

2

Track &

4.25

3.37

3.25

2.38

2.38

trace

Domestic

2.7

2.97

3.21

2.8

2.88

log

costs

LPI

4.19

3.32

3.31

2.35

2.29

Customs

3.9

2.99

3.03

2.2

2.23

Infrastructure

4.27

3.2

3.16

2.06

2

Country

Singapore (1)

Thailand (31)

Kyrgyz Rep

Azerbaijan

(103)

(111)

China (30)

(111)	2.27	2.23		2.3		2.30	2.00	
Uzbekistan (129)	2.16	1.94	2	2.07	2.15	2.08	2.91	
Kazakhstan (133)	2.12	1.91	1.86	2.1	2.05	2.19	2.81	
Mongolia (136)	2.08	2	1.92	2.5	1.8	2	3	
Tajikistan (146)	1.93	1.91	2	2	1.9	1.67	2.33	
Afghanistan (150)	1.21	1.3	1.1	1.22	1.25	1	3.13	

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Timeliness

4.53

3.68

3.91

2.76

2.63

2.73

2.65

2.25

2.11

1.38

Domestic logistics performance (2007)

	Afghanistan	Kazakhstan	China	Thailand	Singapore
Rate of physical inspection (%)	100	18	7	9	3
Customs clearance (days)	3.78	7.07	1.41	1.92	1.12
Lead time export, median case (days)	8.08	2.83	2.64	3.39	2.45
Lead time import, best case (days)	14.01	2	2.42	1.44	1.19
Lead time import, median case (days)	20.73	11.54	3.81	2.29	2.21
Number of border agencies exports	2.33	2	3.97	4.25	1.5
Number of border agencies imports	3.33	7.5	3.89	4.25	1.67
Possibility of a review procedure (%)	33	50	36	0	67
Typical charge for export container or semi-trailer (US\$/FEU)	1,259.92	193.65	379.69	421.72	311.17
Typical charge for import container or semi-trailer (US\$/FEU)	1,817.12	193.65	388.34	421.72	311.17

Logistics operations excellence measure

- Port / airport charges
- Overall logistics costs (e.g. port charges, domestic transport, agent fees)
- Warehousing service charges
- Rail transport rates
- Less than full truck load services rates
- Full truck load rates



Quality of infrastructure measure

- Telecommunications infrastructure and services (land lines, breakdown rates)
- Fixed transport infrastructure (e.g. ports, roads, warehouses)



effectiveness and efficiency of processes measures

- Do traders demonstrating high levels of compliance receive expedited Customs clearance?
- Can Customs declarations be submitted and processed electronically?
- Do you receive adequate and timely information when regulations change?
- Is Customs clearance process transparent?
- Are export shipments cleared and shipped as scheduled?
- Are import shipments cleared and delivered as scheduled?

Level of competence of professions

- Trade and transport related associations
- Other border crossing-related government agencies
- Customs agencies
- Freight forwarders
- Consignees or shippers
- Warehousing and distribution operators
- Air transport service providers
- Rail transport service providers
- Road transport service providers
- Customs brokers



Evolution of factors over past 3 years

- Overall business environment
- Good governance and eradication of corruption
- Regulatory regime
- Availability of private sector services
- Quality of telecommunications infrastructure
- Quality of transport infrastructure
- Other border crossing-related government agencies clearance procedures
- Customs clearance procedures



Evidence of occurrence of trade logistics impediments

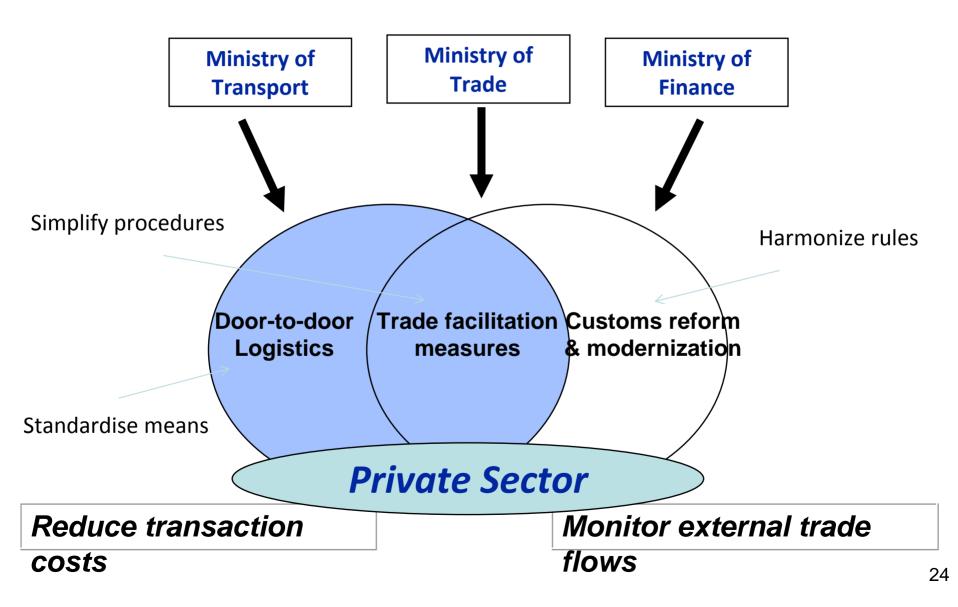
- Solicitation of informal payments
- Criminal activities (e.g. stolen cargo)
- Major delays due to pre-shipment inspection
- Major delays due to compulsory warehousing



prmance Monitoring (cont.) CD Template detailed v2.0.xls Window File rmat Tools Type a guestion for help Data Σ - 1 100% - 8 - B I <u>U</u> | **E E E E** K11 🏂 Exit Border Crossing В GH 2 LEG 1 LFG 2 LFG 3 Place of Name of city: 0 0 departure Name of country 0 0 Mode of Transport road rail Distance to next stop km km km Duration of travel hrs min hrs min hrs 0 min Costs per leg (while en route, in \$0.00 \$0.00 \$0.00 USD) 9 Name of city: Place of next stop Name of country Reason for stop Intermediate Stop Exit Border Crossing Intermediate Stop Type of activity Duration Costs Type of activity Duratio Exit Border Crossing 13 Activity A at stop hrs min hrs Entry Border Crossing 14 Activity B at stop min hrs hrs Final Destination Activity C at stop \$0.00 hrs min hrs min hrs Description of Activity D at stop hrs min hrs min \$0.00 hrs stop 17 Activity E at stop \$0.00 hrs min hrs min hrs 18 Activity Flat stop hrs min hrs min \$0.00 hrs 19 Activity G at stop hrs min hrs min \$0.00 hrs 20 \$0.00 hrs 0 min hrs 0 min \$0.00 hrs Description of actions taken (e.g. procedures, formalities applicable to the section of the route). 23 24 25 27

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Champions of Trade Logistics



New & growing competitiveness in transport services

Adequate national & bilateral frameworks

New infrastructure & technology in place

Improved admin. & commercial procedures

Better prepared operators

Benefits of Trade Logistics

Better informed traders









Customize Customs and align standards internationally

- Number of regional mechanisms:
 - high-level Regional Steering Committee convening all countries twice yearly to facilitate cooperation and experience sharing
 - regional website presenting all requirements and procedures of border agencies transparently;
 - public-private working groups interacting quarterly
 - regional conventional and distance learning programs to harmonize the standard and quality of LSPs
 - paired local project teams gathering all border agencies at pilot border crossing points with interactions across the border



Border Clearance management

- Checks must take place where they are least obtrusive, and, as much as possible, close to final destination of the goods;
- Checks must be coordinated with Customs, which is sole agency responsible for control of goods crossing the border, and take place at the same time;
- There should be no interference from other bodies in carrying out of activities for which Customs are responsible;
- Checks should be, where possible, carried out jointly by agencies on both sides of the border; and
- Fast track systems should be introduced for (i) pre-identified / cleared vehicles, and (ii) regular users
- Hubs and clearance personnel co-located at or near border (which can be designated as Free Trade Zone)
- Set specific time standards eg % of containers inspected, % of trucks cleared in less than 10 minutes, etc for quarterly policy review



	Indicators	Description	Remarks					
	Cargo Clearance Performance at ICD							
1	Import clearance time	Time between entrance of truck into	Information on truck identification and					
		ICD / terminal and goods release	time of arrival and departure will be					
			recorded with the use of computer or					
			time clocks installed at terminal entry					
			and exit points					
2	Physical examination	Number of times that goods are	Information will be derived from					
		examined or the cargo compartment is	computer system that records all					
		searched compared to the total number	declarations and from requirement to					
		of import, export, and suspense	prepare an automated report of the					
		declarations	results of each physical examination.					
3	Trucks cleared in less	Number of times that a truck completes	Information will be developed using					
	than 15 minutes	import clearance (time between entry	the same system that provides the data					
		into terminal and departure after release	on import clearance times.					
		of goods) in less than fifteen minutes						
		compared to the total number of import						
		clearances						
4	Irregularities/ Number of	Number of irregularities discovered	Information will be obtained from the					
	examinations	during physical examinations compared	automated reporting of the results of					
		to the total number of physical	all physical examinations. Data can					
		examinations carried out.	also be assessed, when more reliable,					
			on monthly basis. 28					

	Indicators	Description	Remarks				
	Border Crossings						
1	Truck examinations	Number of trucks actually opened (i.e.,	Information will be compiled through				
		seals broken) compared to total number	computerized traffic logs and the				
		of trucks processed	requirement to prepare an automated				
			report of results of each truck inspection				
2	Irregularities/ Number	Number of irregularities discovered	Information will be extracted from				
	of examinations	during examinations compared to total	automated reports of truck examinations.				
		number of trucks examined.					
3	Average border exit	For trucks exiting a country, it is the	Information on truck identification and				
	time	time between joining a queue and	times will be recorded continuously with				
		crossing a border.	computers or time clocks installed at				
			appropriate locations.				
4	Average border entry	For trucks entering a country, it is the	Same as Exit Time				
	time	time between crossing a border and					
		departing a station.					
5	Surveyed occurrence of	Number of cases when a driver makes	Information on this indicator taken from				
	corruption	or is asked to make an unauthorized	surveys of truck drivers using crossing				
		payment compared to total number of	point. This survey will be conducted on a				
		trucks/locations surveyed	continuous basis through cooperating				
			transport firms				
6	Reported Occurrence	Number of cases when a driver makes	Information for this indicator will be				
	of Corruption	or is asked to make an unauthorized	derived from records of received reports				
		payment compared to total number of	of corruption maintained by the Customs ⁹				

	Indicators	Description	Remarks				
	Develop Objective Achievements						
1	Revenue collected/ Customs staff	Total revenues collected/Total number of customs employees	Information to be obtained from records maintained by the Customs administrations.				
2	Total Customs administration cost/ Revenue collected	Total budget of the administration (including salaries, overtime, bonuses, and benefits)/Total revenue collected irrespective of its destination.	Information to be obtained from records maintained by the Customs administrations.				
3	Revenue collected / Salaries	Total agency salaries, overtime, bonuses, and benefits/Total revenue collected irrespective of its destination	Information to be obtained from records maintained by the Customs administrations.				
4	Trade Volume/ Customs staff	Trade Volume/number of customs employees	Information to be obtained from country statistical data.				
5	Annual number of declarations/ Customs staff	Total number of declarations (import, export, suspense regimes, but excluding transit), irrespective of the number of items/Total staff employed by Customs	Information to be obtained from records maintained by the Customs administrations.				

Truck Examination

	Total number of trucks/containers	Trucks/container s examined	Percent	Data collection method	Total number of vehicles carrying commercial consignments
Entry					
Exit					
Total					



Throughput Analysis

	<u> </u>			
	Time	Size of sample	Average	Percent of total
Beginning of queue				
Weighing				
Payment				
Customs				
Wait				
Police				
Other				
(Border line)				
Sub-total exit country a				
Border line				
Disinfection				
Immigration				
Customs				
Wait				
Payment				
Phyto-sanitary				
Other				
(Exit)				
Sub-total entry country b				
Total				100

Why an Institute for Trade and Logistics?

- To guide member countries on establishing policies
- To understand global/ regional trade issues
- To identify cross-cutting economic development aspects of trade transportation investment
- To facilitate cooperation among member states in undertaking joint programs
- To assist member states in making case for transport-related investments that lead to additional revenues and further economic development
- To help member states cope with pressures of local politics
- To help member countries further evolve multimodal transport agencies



Trade Logistics Performance assessment and measurement

- Various levels and various modes
- Capacity performance measure, service performance measure, cost performance measure, time performance measure
- Need to benchmark against global, regional best in class
- Need to look at parameter benchmarking

