Workshop – Quantifying transport costs for landlocked developing countries

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Analytical parameters and approaches

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Outline

1. UNCTAD general work
2. How UNCTAD measures and perceives transport costs
3. Methodological approaches
   - UNESCAP/UNCTAD time-cost model and the Cluster-based methodology
     • Example: UNCTAD support to the Central Corridor
       – Findings from Rwanda and Tanzania case studies
4. Sources we rely on
**UNCTAD + transport =**

- Enhancing the efficiency and sustainability of transport systems in developing countries:
  - Sustainable freight transport systems
  - Corridor development
  - Maritime capacity building

  - Supporting sound sustainable freight transport decision-making
  - Capitalizing on the potential of efficient transport corridors and network systems
  - Increasing awareness of maritime transport market trends for better policies
How UNCTAD measures transport costs

Figure 3.5. Transport and insurance costs of international trade, 2006–2016 (Percentage share of value of imports)

Source: UNCTAD secretariat calculations.
Note: All modes of transport; the least developed countries grouping includes 48 countries for all periods up to 2016.
How UNCTAD perceives transport costs

Determinants of (maritime) transport costs

- Ports
  - Infra- and superstructure
  - Port productivity
  - Port operator model
  - Port tariffs

- Trade flows
  - Trade imbalances
  - Volumes of trade
  - Complementarity of trade

- Structure of the maritime industry
  - Competition
  - Liner services supply
  - Regulation

- Ship operating costs
  - Crewing
  - Bunker
  - Registration

- Position within the global shipping network
  - Connectivity
  - Centrality
  - Distance

- Shipped product
  - Volume of shipment
  - Value
  - Type of produce

- Facilitation
  - Trade facilitation
  - Transport facilitation

UNCTAD Review of Maritime Transport 2015
UNCTAD Corridor development approach

1. Quantifying and assessing corridor performance
   - UNCTAD/UNESCAP cross-border and transit process management toolkit
     ✓ Measuring time and costs spent during transport
     ✓ Quantifying transport bottlenecks

2. Regional institutional capacity building to develop and manage economic corridors
   - UNCTAD Cluster-based approach
     ✓ Bringing together stakeholders to identify challenges and agree on a coordinated approach to develop the corridor
     ✓ Improving regulatory, and institutional mechanisms to support corridor management
Rwanda ➔ the Central Corridor ➔ Tanzania
Assessing key routes linking 1 LLDC with one port

- Rwanda (Kigali-Dar es Salaam)

<table>
<thead>
<tr>
<th></th>
<th>Bulk</th>
<th>Container</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost (USD)</td>
<td>1774</td>
<td>1607</td>
<td>1737</td>
</tr>
<tr>
<td>Total time (days)</td>
<td>5.1</td>
<td>3.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Distance per day (KM)</td>
<td>290</td>
<td>477</td>
<td>435</td>
</tr>
</tbody>
</table>

- Fuel (92-93%), welfare of crew (3-6%), “unofficial payments” (2%), extra truck security (1%)
- Operational bottlenecks: bad road conditions, non-operational weighbridges,

- Tanzania (transit Burundi and Rwanda)
  - Transit containers in DeS port: 14.4 days (vs 7.3 for domestic) + additional days at ICD
  - Trucks to collect containers spent 4.5 hours in port
  - Multiple costs: light container freight charges (2200-2700 USD/TEU) + port charges + freight forwarders fees + shipping line charges
  - Operational bottlenecks: inefficient and lengthy procedures Customs/port authorities
Sources we rely on...

- UNCTAD maritime statistics
  - Seaborne trade, fleet
  - Connectivity (country, bilateral, port)
  - Time spent in ports and port calls
    - [www://stats.unctad.org/maritime](http://www.stats.unctad.org/maritime)
- UN Comtrade
- World Bank
  - LPI, DB Trading Across Borders
- OECD trade facilitation indicators
- WEF: enabling trade index
- UN Global survey on TF & Paperless trade implementation
- ESCAP-World Bank trade costs database
Thank you

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Annual review of maritime transport:
www.unctad.org/RMT

Transport and Trade Facilitation Newsletter:
www.unctad.org/TransportNews