Dry ports as an enabler of trade - UNCTAD’s experience

by Vincent Valentine,
Officer-in-Charge, Transport Section,
Trade Logistics Branch,
Division on Technology and Logistics,
United Nations Conference on Trade and Development
Challenges
Challenges - Seaports

**Seaside**
- Increased size of vessels.
- Increased pressure to provide speedy ship turnaround times.
- Lack of financial resources to invest (deeper approach channels/berths, wider turning basins etc.).
- Increased pressure to be environmentally sensitive (less water pollution)

**Land side**
- Cargo arriving “bunched-up”.
- Increased pressure to provide speedy cargo handling services.
- Lack of financial resources to invest in more cargo handling equipment, bigger storage facilities).
- Increased pressure to be environmentally sensitive (less noise, air, water and light pollution)
Challenges - Inland

- 44 landlocked countries in the world
- 31 classified as LLDCs: 15 in Africa, 10 in Asia, 2 in Latin America and 4 in Central and Eastern Europe.
- Sixteen are also classified as least developed countries (LDCs).[1]

- The average GDP per capita in LLDCs is about 43% lower than their neighbouring coastal countries.
- Transport costs for LLDCs represent an average of 77% of the value of exports.[2]
- The costs of international transport of goods can be 50% higher in LLDCs than in transit countries.[3]

[1] The Republic of South Sudan is not included in these figures.
The Djibouti-Addis Ababa Railway
There are 79 curves with a radius smaller than 200 metres which seriously limits the carrying capacity of the trains. The railway is jointly owned by the governments of Ethiopia and Djibouti with approximately 681 km lying within Ethiopia and 100 in Djibouti.
UNCTAD’s report:  
The way to the Ocean  
Transit corridors servicing landlocked developing countries trade

Available in English, French and Russian
Trade corridors in East Africa
Different types of Landlockedness

Long land distance and low volumes of trade

Versus

Short land distance and high volume of trade

The LLDC is a small customer for the port (<5%)

Versus

LLDC – the main customer for the port (>85%)
Examples of other regions

- East Africa - Almost 90% of the international trade of Burundi, Rwanda, and Uganda is handled by the port of Mombasa, but combined this represents not more than 15 per cent of the port’s traffic.

- West Africa - Around 75% of the international trade of Burkina Faso and Mali transits through Abidjan (Côte d’Ivoire), yet this figure represents only 10 per cent of total traffic at the port.

- Asia - The majority of Nepal’s foreign trade transits through only one port (Kolkata) and shippers are therefore "captive" customers. [1]

Trade imbalances

• When trade is imbalanced one party (usually the importer) subsidizes the other (usually the exporter).

• E.G. it costs twice the price to import goods from Côte d’Ivoire to the East Coast of the United States than it does to import goods to the West Coast of the United States from Japan (both countries are equidistant from the United States). [1]

• Because trade between the United States of America and Japan is more balanced, importers and exporters share more equally the costs of providing liner services.

Lessons learned

• The three corridors considered in this report share similarities:
  – They are served by a single major port that accounts for over 90% of the host transit country’s imports and exports;
  – LLDCs also rely heavily upon these ports;
  – Import volumes are far greater than export volumes;
  – Rail connections are poor, albeit with improvement plans underway;
  – There is overreliance upon road transport and no inland waterway connection to the ports.
The way forward

A. Develop consolidation centres
   - Small consolidation centres to put less-than-a-container loads (LCL) into full-container loads (FCL), to be fed into dry ports with high-capacity rail lines to ports are needed.
   - Using key intermodal nodes such as dry ports to perform customs clearance is ideal, as rail transport can address many of the transit issues and risks created by road transport.
B. Build operational arrangements

- Good neighbourly relations between an LLDC and its transit neighbour are paramount to increasing trade.
- A strong bargaining position should be obtainable if trade at the transit port reaches 10 per cent or 15 per cent, for it shows trade is possible and could grow if encouraged.
- Furthermore, it could be argued that transit cargo subsidizes the infrastructure investment costs of the transit country, which benefits domestic and transit cargo, that is to say, a win–win outcome.
Dry ports in different locations have differing roles

- Nearby dry ports
  - relieve congestion within seaports thereby allowing more cargo to enter/exit the port/country

- Distant dry ports
  - In addition to relieving congestion by taking cargo from the seaport but their role should also be focused upon feeding cargo to the seaport (exports).
    - Must be located at a transport modal change point (rail/IWT).
    - Must have cargo consolidation facilities
Dry Port

Lower land and Labour costs

In deciding to relocate any business needs price stability

Must be:
- Reliable
- Predictable
- Frequent

Need not be:
- Fast
- nor cheap
- but it helps!

New business need to know they can reach their market at a good price
The port of Djibouti and the Djibouti-Ethiopia Corridor

- Rail services between Djibouti and Addis Ababa - the railway line is functional approximately half-way (Dire Dawa).

- 95% of cargo from Djibouti to Addis Ababa is transported via road, a journey which takes about 2 days and is 136km longer than via rail.

- Truck costs USD 42.8 per ton. Estimates of rail cost per ton range from USD 35.6 to USD 15.3 after a complete upgrade. [1]

Businesses locate close to ports because they want to avoid the uncertainties of overland transport. A manufacturer of foodstuff is not in the business of owning a truck fleet - the fleet is simply a tool to remove his exposure to...

Unreliability, unpredictability and infrequency

By focusing upon reliability, predictability and frequency...

Dry Port

Leading to increased employment and greater trade, equality, reduced environmental impact...

The capital released from asset retention can be used to promote further investment...
How to address unreliability, unpredictability and infrequency?

• Undertake research
  – Listen to the users concerns

• Understand the underlying issues
  – Competing government demands (public services/private)
  – Cultural change (safety first, record keeping-reviewing)
  – Finance (viability/sustainability)
  – Define priorities (trade/passengers/environment etc.)

• Gather political and institutional support

• Develop a multi-stakeholder plan
Tanzania

- The Port of Dar es Salaam experienced congestion caused by:
  - Insufficient container storage space
  - Long container dwell times
  - Sharp increase in container volumes.
  - Roads were not fully paved resulting in long travel times
  - Poor inland transport especially railway systems.
  - Low availability of locomotives and rolling stock
Local “dry ports”

- 5 local dry ports to ease space within the port
- Cargo (mainly cars) are driven by road
- Import, ownership, tax paid documents and license plates issued here.
- Port area now able to accommodate more cargo
Distant dry port (Isaka)

- 982kms by rail from Dar es Salaam with onward road connection to Burundi, Rwanda and Uganda.

- Exports arrive by truck and then loaded on train to be taken to the port.

- Cargo is mainly imports
## Impact

Export value 2006 – 2011: World, Africa & East African LLDCs (USD millions)

<table>
<thead>
<tr>
<th>Exporter</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>12134707</td>
<td>14015751</td>
<td>16137233</td>
<td>12518117</td>
<td>15257877</td>
<td>18211356</td>
</tr>
<tr>
<td>Africa</td>
<td>373284</td>
<td>438914</td>
<td>561559</td>
<td>394888</td>
<td>508201</td>
<td>590766</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1043</td>
<td>1277</td>
<td>1602</td>
<td>1618</td>
<td>2330</td>
<td>2615</td>
</tr>
<tr>
<td>Uganda</td>
<td>1188</td>
<td>2000</td>
<td>2712</td>
<td>2995</td>
<td>3107</td>
<td>2409</td>
</tr>
<tr>
<td>Burundi</td>
<td>58</td>
<td>62</td>
<td>54</td>
<td>62</td>
<td>100</td>
<td>122</td>
</tr>
<tr>
<td>Rwanda</td>
<td>147</td>
<td>177</td>
<td>268</td>
<td>193</td>
<td>297</td>
<td>417</td>
</tr>
</tbody>
</table>

While Africa as a whole is a net exporter by value (mostly because of the value of oil products), all of the four countries in this study are net importers by noticeably large margins.

The value of Ethiopia’s imports is almost four times the value of exports, while for the other countries the relative values are three (Uganda), three (Burundi) and five (Rwanda).

Source: UNCTADSTAT

Growth 200 - 285%
Conclusion
Recommended Course of Action (abridged)

1. Reliance and cooperation
   - Build trust (e.g. replace ownership with trust)
   - Engage with Multiple stakeholders (e.g. build corridor management arrangements)

2. Critical mass
   - Establish small consolidation centre (LCL)
   - Improve finance (e.g. infrastructure, release of bonds, etc.)

3. Operational needs and tailored arrangements
   - Improve transport reliability and predictability
Some of UNCTAD’s other work

www.UNCTAD.org/rmt

http://unctad.us6.list-manage2.com/subscribe?u=3592d5dcaf2d1b9278dd78095f&id=f6141a63dd