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Africa: a continent of contrasts
Africa: a unique environment

- 53 countries
- Ranging in GDP from US$84 to US$4,800 per person
- Prosperity & poverty
- Climate change
- Poor social service structures
- Inhibitive government policies
- Sub-Saharan Africa has just over 10% of the world’s population, but is home to more than 60% of all people living with HIV/AIDS.
Transport challenges
## Major Transport Challenges

<table>
<thead>
<tr>
<th>Road</th>
<th>Rail</th>
<th>Maritime</th>
</tr>
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<tbody>
<tr>
<td>HIV/AIDS</td>
<td>Nationalised</td>
<td>Nationalised</td>
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<tr>
<td>Corruption</td>
<td>Pilferage</td>
<td>Security</td>
</tr>
<tr>
<td>Differing GVMs</td>
<td>Differing gauges</td>
<td>No SADC fleet</td>
</tr>
</tbody>
</table>

- Intermodal linkages
- Accessibility
Rail accessibility to ports

Approximate time in hours

Legend:
- ▲ Ports
- ● Main cities
- / International Borders

Travel time (Approx hours)*
- ▲ Up to 2 hours
- ● 2 to 5 hours
- • 5 to 10 hours
- ★ 10 to 20 hours
- ° 20 to 30 hours
- ♦ 30 to 40 hours
- § 40 to 50 hours
- ☰ 50 to 100 hours
- ● More than 100 hours

* Rail access does not include road access to rail

Sources/Notes:
Calculated using 5 X 5 km grid

Date: March 2003
The Logistics Challenges & Cost
Logistics challenges

- Lack of skilled logisticians
- Transport and infrastructure constraints
- Distance from international markets
- High transaction costs
- Lack of suitable storage capacity
- Currency fluctuations impact on input and product costs

High cost of logistics
Cost of logistics related to GDP

• “The best economies in the world have achieved logistics costs of lower than 10% of GDP, while the worst could pay as much as 30% with an average of between 11% and 16%.”

• Best in Sub-Saharan Africa is South Africa with 15.2% of GDP - insufficient for own use

• Developing countries produce 37% of global GDP but carry 48% of the logistics bill
Trends & innovative solutions
Trends

• Increased appreciation of & investment in improved logistics:
  • National and regional
  • Rural “grass-roots” logistics (ELLA)
• Development programmes aimed at improving local trade through logistics:
  • Tanzanian Traceability
• Harmonization of standards:
  • GVMs and road data
• Corridor Development
  • Maputo Development Corridor
• Logistics education & membership of professional bodies
  • University & technical qualifications
  • Professional associations: CILT, CSCMP, SAPICS, etc
local stories

- Indigenous knowledge – Tanzania
  - World bank publication: Indigenous Knowledge – local pathways to Global Development
  - Implications for logistics professionals?!?

- Public-Private-NGO partnerships – VillageReach (Mozambique)
  - Last mile delivery of vaccines in Mozambique
  - Focus on maintaining the cold chain
  - Fleet of trucks & motorbikes
  - Supported by: Private (Amerigas, Getty Images, Iridium), Public (Mozambique Ministry of Health) and NGO (Gates Foundation)
Heartbeat – South Africa

- Established in 2000
- Serves 5000 AIDS orphans and vulnerable children
- Provides food parcels, school uniforms, CCWs
- Monthly food parcels: 48kg over <12km
Thank You

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Extra slides - hidden
Heartbeat food parcel

- In an average household in Atteridgeville (consisting of 5 children), they receive:
- From established donations:
  - 8 X 2.5kg Ace maize (bundled in plastic)
  - 12 X 330g tins baked beans
  - 12 X 330g tins mixed vegetables
  - 12 X 330g tomato and onion
  - 5 x 1 kg bags of Morvite
- From the extra funds from Department of Social Welfare, the following are added:
  - Food:
    - 2 x 2.5 kg Sugar
    - 1x small pack of Teabags
    - 2 x 250g Powdered Milk
    - 1x 750ml Cooking oil
    - 2 x 200g Soya mince
    - 2 x Tin Cold meat
    - 4 x tins of pilchards
    - 250g Peanut butter
    - 225 g Jam
    - 2 x 1kg packets rice
- Other products:
  - 2x shield deodorant
  - 2x 100g Colgate toothpaste
  - 1x kiwi shoe polish
  - 2x small boxes of Omo washing powder
  - 1x small tub vaseline
  - 1 x box matches
  - Steel wool
  - 1x Bath soap
Transportation challenges: road

- Road cargo subject to crime and pilferage
- Road transportation targeted by corrupt officials
- Differing GVMs per country
- Road condition often exceedingly poor
- Constrained by fuel availability (Zimbabwe)
- High driver HIV/AIDS prevalence
Transportation challenges: rail

- Rail cargo subject to pilferage
- Rail infrastructure nationalized and poorly maintained (no competition)
- Poor cargo handling equipment at rail sidings
- Shortage of rolling stock and wagons throughout Africa
- Differing rail gauges between countries hamper smooth cross border transport
- Rail has poor density and accessibility to sea ports
Transportation challenges: maritime

- Poor condition of ports superstructure and infrastructure (nationalised)
- Poor intermodal connections to road and rail systems
- Poor security for cargo and facilities (ISPS code, CSI)
- High port costs
- Lack of SADC fleet for feeder/coastal shipping
## Gross Vehicle Mass (GVM) limitations

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<th></th>
<th>Steering Axle</th>
<th>Single Axle</th>
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