



Infrastructure Programmes in the Eastern and Southern Africa Region

**Horn of Africa Conference
Nairobi, Kenya
12-13 March 2012**

African trade – where we are now



Africa accounts for less than 2.5% of world trade and non-oil exports have been about 1% since 1992 - half of their 1980 value. Level of intra-African trade also low - 10%, compared to about 40% in North America and about 60% in Western Europe.

Africa has high export product concentration reflecting continued reliance on primary commodity exports mainly to the EU, US, and China.

Africa ranks low on trade policy and facilitation performance. 7 African countries are in the bottom ten most restrictive trade regimes, and Africa has the lowest rating of any region for logistics performance. Markets remain fragmented and borders are “thick”, preventing emergence of regionally integrated industries and supply chains.

AICD - Main Messages for Eastern and Southern Africa

Regional road network in relatively good shape, relative to traffic but freight is slow moving and more competitive transport services would reduce costs of road freight.

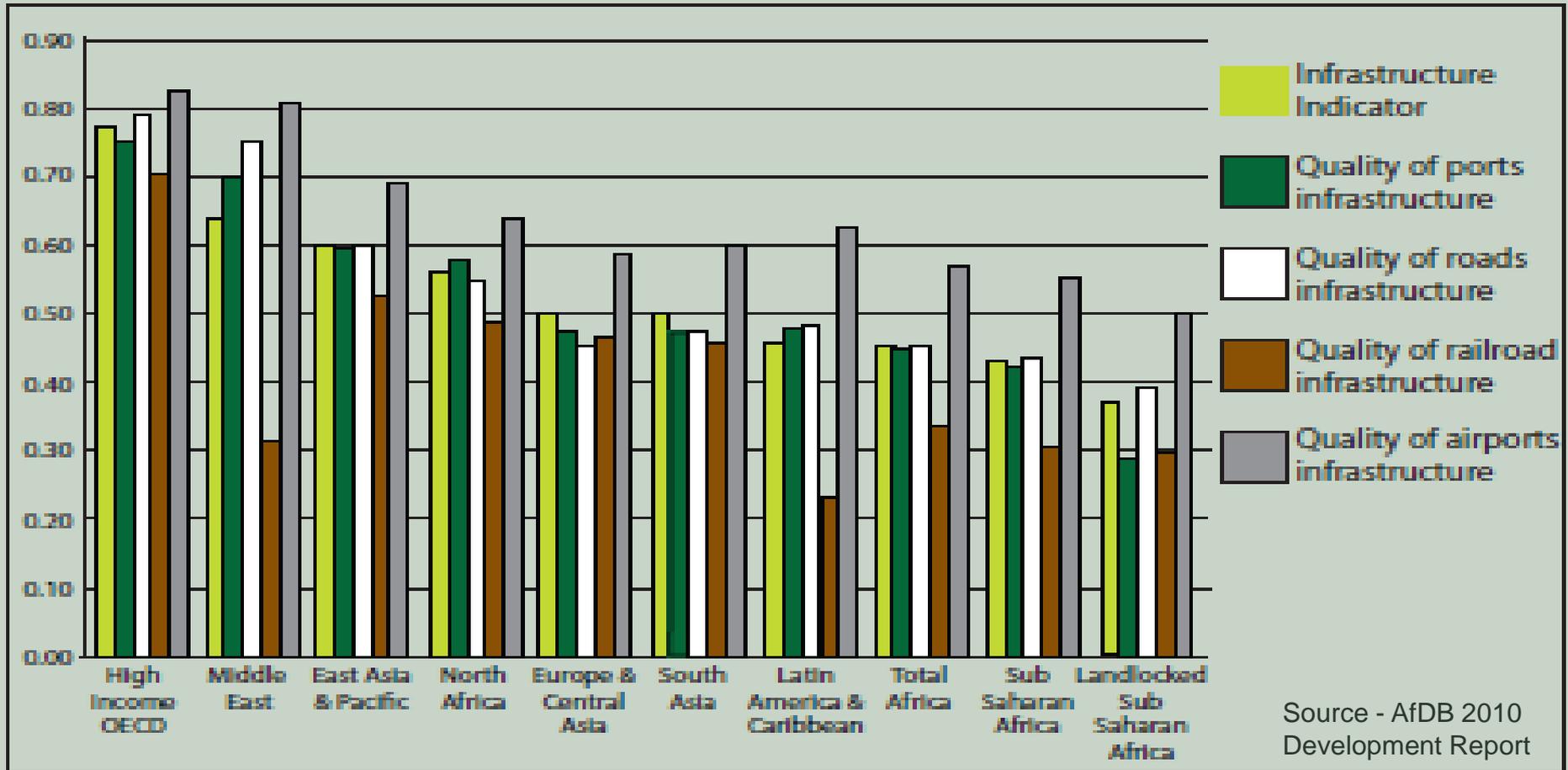
Regional power trade could save EAPP and SAPP US\$2.1 billion per year and regional fibre optic network within reach for modest investment.

Relatively advanced air transport market but still far to go on liberalization.

Achieving regional integration for Eastern and Southern Africa would require sustained spending of US\$5.5 billion a year.



The Quality of Infrastructure across Regions



Source: Portugal-Perez and Wilson (2009, table 2). Data are taken from the Indicators in the World Economic Forum Global Competitiveness Report 2008–2009 and the aggregate Infrastructure Index is constructed by factor analysis. Notes: Regions ranked by decreasing quality of overall infrastructure. The Infrastructure Indicator is a simple average of the 4 subindicators in the figure. The maximum value taken by the Index is unity.



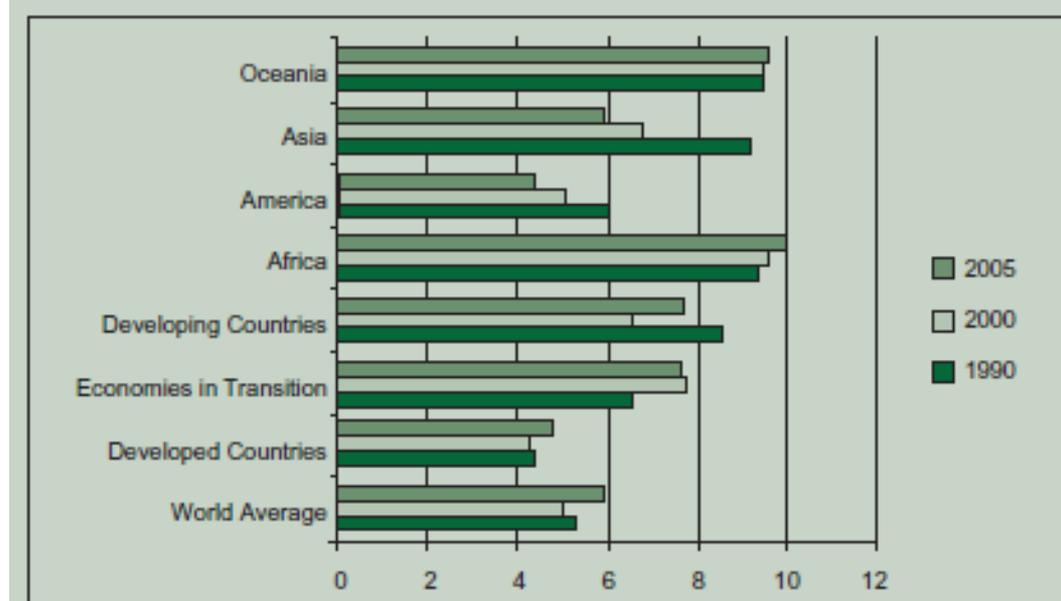
The Economic Challenge:

It costs about US\$6,500 to US\$8,000 for a fully-loaded truck to deliver goods from Mombasa to Kigali and takes about 8-10 days - compare that to about US\$1,500 to ship the same container from Japan to Mombasa or Djibouti.

Until the underlying causes of these high costs of transport are addressed African countries will remain high-cost producers, with no major direct investments taking place in non-mineral sectors, restricted economic growth opportunities and slow progress made in poverty alleviation – regional integration key.

Inadequate roads, railways, ports, inland waterways, airports, energy and telecommunications have been identified as being serious obstacles to intra- and inter-regional trade in eastern and southern Africa, increasing the cost of doing business within the region and having a negative impact on trade and cooperation and consequently economic growth.

Freight Costs as a Percentage of Import Value



Source: UNCTAD (2007). All modes of transport. Estimates based on cif/fob comparisons on bilateral trade data.



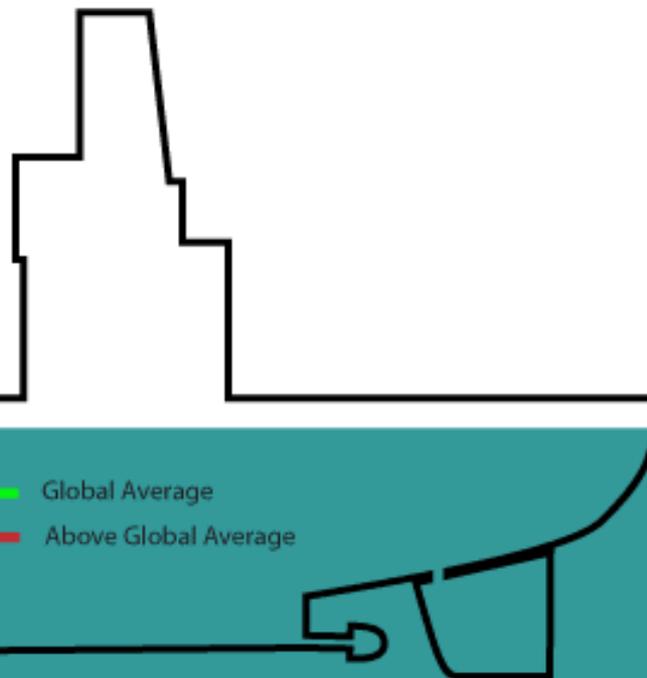
How Easy is it to Export?

Cost, Time and Documentation to Export a Full 20-Foot Container by Ocean Transport across Regions? *

Acronyms:

- EU: European Union
- EAP: East Asia & Pacific
- ECOWAS: Economic Community of West Africa States
- ECA: Europe & Central Asia
- S-Asia: South Asia
- ESA: COMESA-EAC-SADC Tripartite (Eastern & Southern Africa)

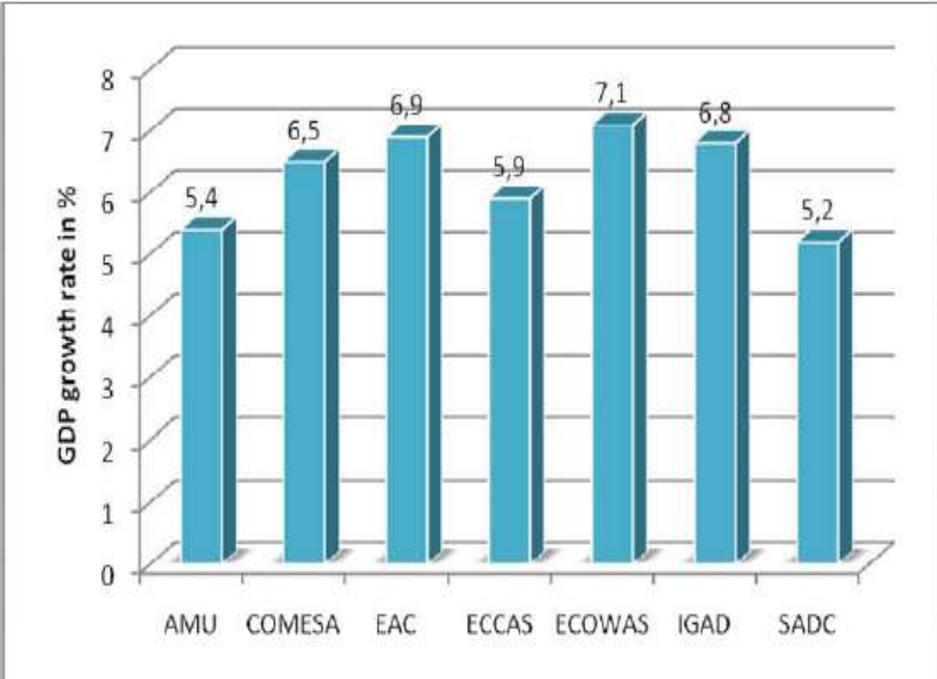
EU	EAP	ECOWAS	ECA	S-Asia	ESA
\$ 1 024	\$ 906	\$ 1 508	\$ 1 774	\$ 1 590	\$ 1 873
11,2 Days	22 Days	26,5 Days	27 Days	32,1 Days	30,7 Days
5 Docs	6 Docs	7 Docs	7 Docs	8 Docs	8 Docs



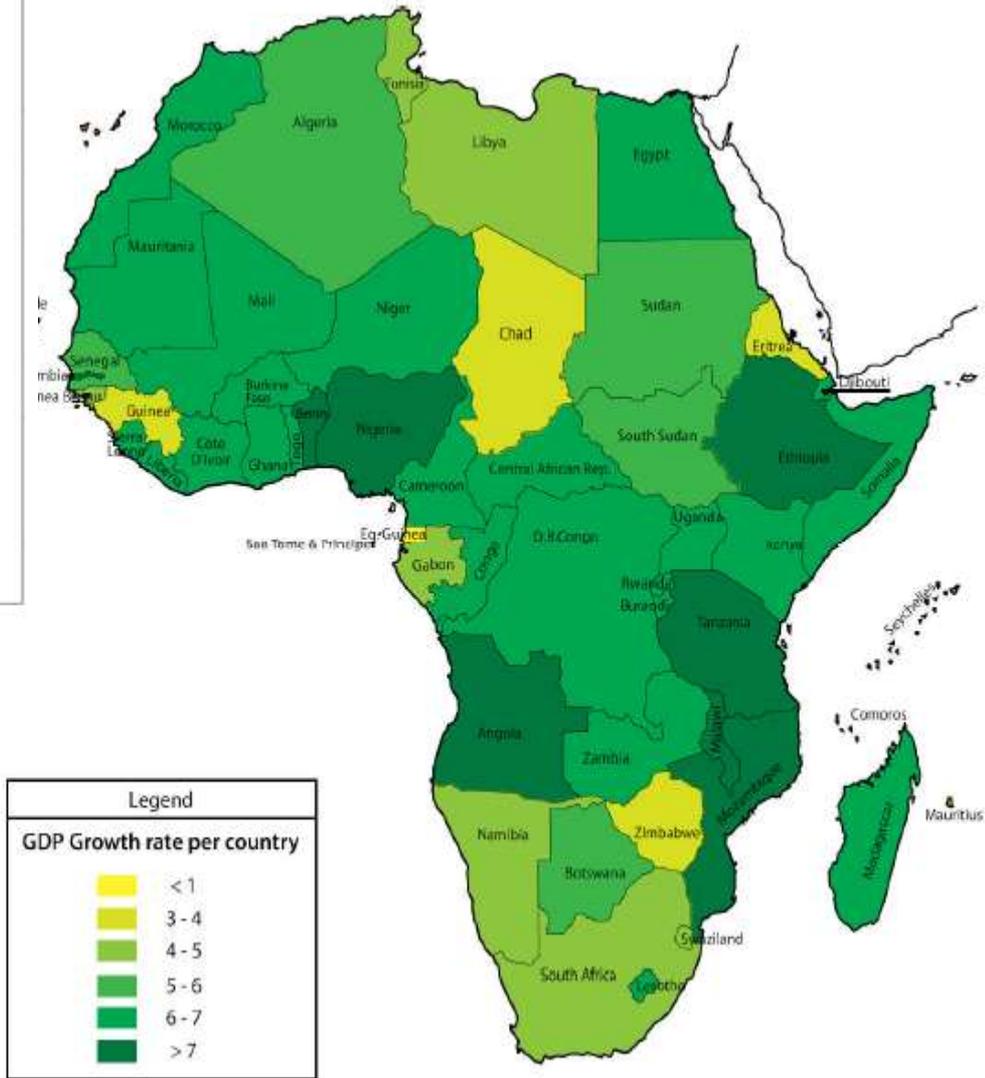
Source: *Doing Business Database* | <http://www.doingbusiness.org/>
 Doing Business measures the time and cost (excluding tariffs) associated with exporting a standardized cargo of goods by ocean transport. The time and cost necessary to complete every official procedure, as well as all documents needed by the trader, are also recorded. Procedures range from packing the goods into the container at the warehouse to their departure from the port of exit. The time and cost for ocean transport are not included.

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Growth Forecasts



GDP projected growth rates



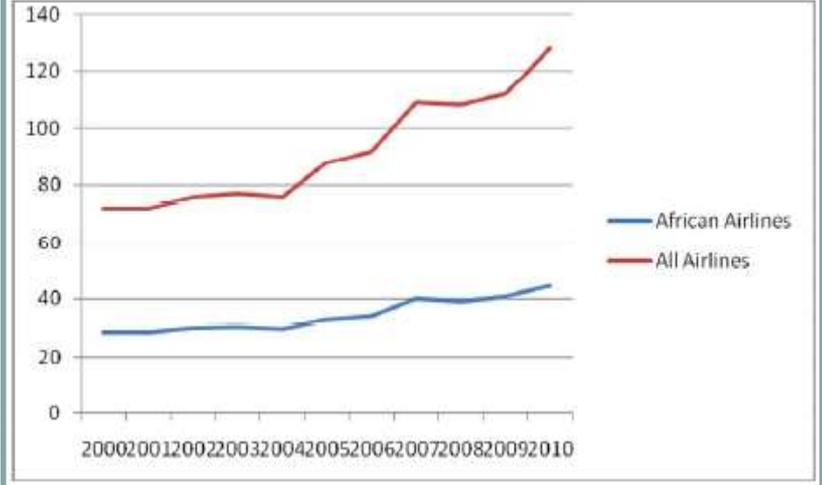
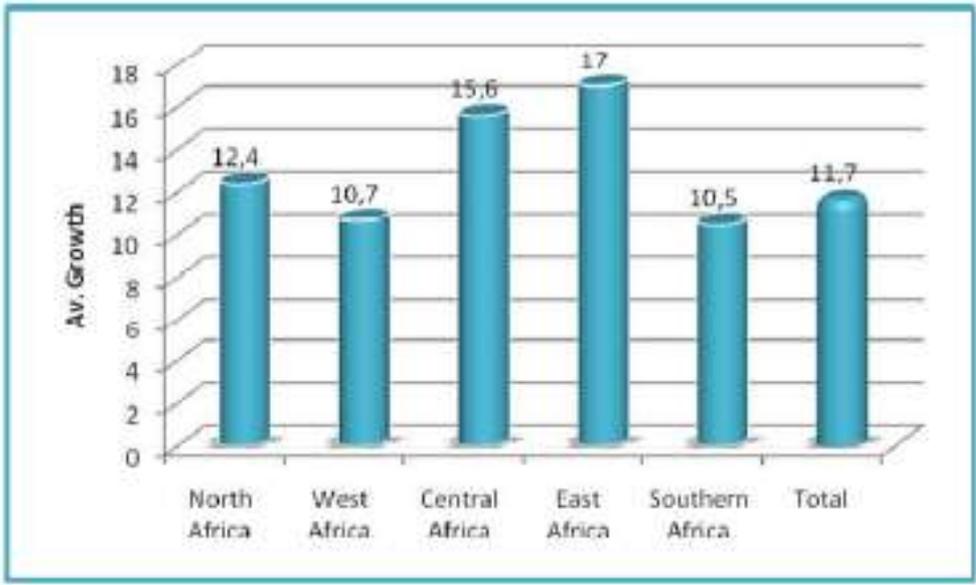
PIDA study estimates that the average growth rate for 53 African countries will be 6.2% per year between 2010 and 2040.

26 African countries should record an average growth higher than the continental average of 6.2%.

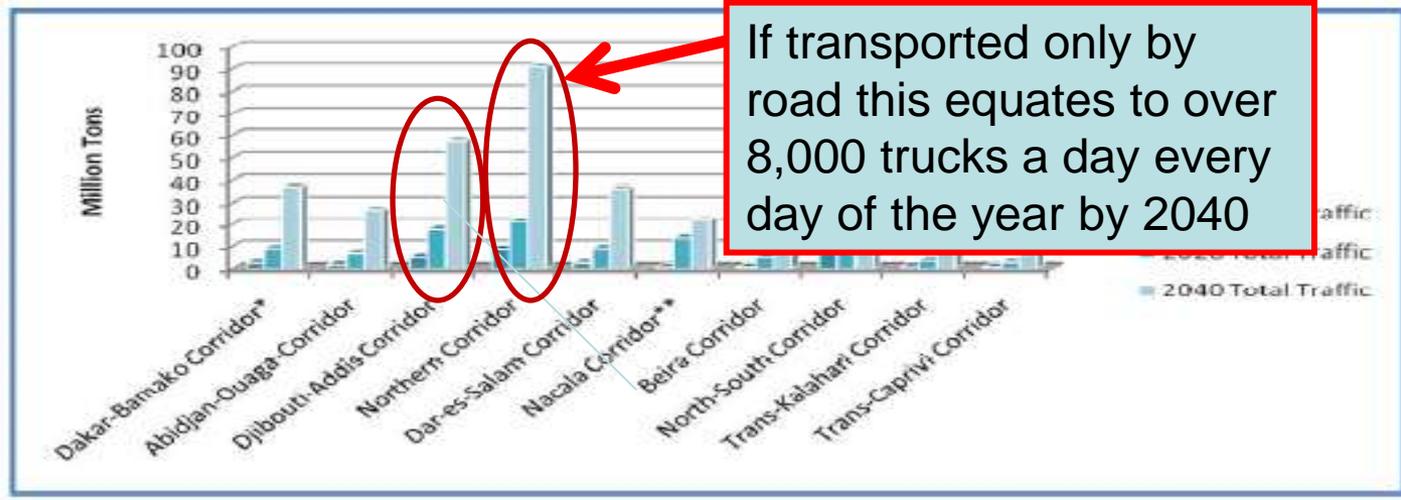


Indicative Growth Indicators

Growth in African Trade by region 2000-2009



Growth in Air Passenger Transport in Africa 2000-2009



Corridor Traffic Forecasts (million tonnes)

If transported only by road this equates to over 8,000 trucks a day every day of the year by 2040



Financing Infrastructure - Project requirements

- Projects should be economically (if not financially), institutionally, socially, and environmentally viable.....but a number of proposed infrastructure projects in the region are not viable under current economic conditions.
- A fundamental issue for the private sector is financial viability (underpinned by political will and certainty). All private institutional investors will demand a high (above 15% and as much as 30% per annum) rate of return.
- Bankability depends on how the Project is structured and ‘developed’ .
- Achieving Financial Close in a dynamic environment is dependent on, amongst other things, project structure; project type; project fundamentals; market liquidity; and political environment. For example, in the case of rail, long-term take-or-pay agreements, typically in excess of US\$1 billion per year, are essential for achieving ‘bankability’. In the absence of these agreements, governments will be asked to underwrite rail traffic. If private sector is to ‘underwrite’ traffic; large balance sheets are required.

Anomalies and misunderstandings

- Some “players” promise funding, but use the deal to try and access capital.
- There is a common misconception that large infrastructure projects are just “construction” projects. Very few companies can both construct and finance a project. This implies that governments have to provide guarantees, particularly for larger-size projects, which have treasury implications.

Source of Funds for Infrastructure Projects:



Project Preparation Funds:

There are 26 project preparation facilities in Africa, - fragmented and limited funding.

Grant Financing:

Grant financing is most useful when it can be blended/leveraged with loan finance. There are infrastructure funds that allow blending/ leveraging, such as the EUAITF.

Concessionary Loans from International/Development Financing Institutions:

The IFIs and DFIs provide concessionary loans for projects that have a positive economic rate of return but (at least in the short to medium term) do not have a positive financial rate of return.

Commercial Funds:

The private sector financing institutions are always looking for bankable projects but demand a relatively high return on investment, usually above 20% and as high as 30% and often requiring government guarantees (that have treasury implications).

Infrastructure and Sovereign Bonds:

A number of countries are issuing both infrastructure bonds (usually in local currency) an sovereign bonds to pay for infrastructure. Kenya - over Ksh18t in two offerings.

Maximise the use of the Diaspora:

The building boom in Addis Ababa is apparently largely financed from remittances.



Railways – Need to run the railways as one regional network.

There are broadly two schools of thought on railways:

- i) Railways have had their day and are now uneconomic and should be scrapped.
- ii) Railways can be revamped and be made to be economic – this would save money, ease congestion on roads and border posts and make roads safer.

Support for the revamping railways argument comes from:

- Projected freight traffic volumes over the next 10-30 years will not be able to be transported using the existing road networks alone.
- Rail is suited to handle large volumes of scheduled freight at a lower cost - a 40 wagon train with 20t axle loads can carry 2500t - equivalent to 80 road trucks.
- Operated on scheduled basis, rail is cheaper, more secure and safer than road.
- Rail is environmentally friendlier: fuel consumption is 25% that of road per t/km.

Roads

Roads are still the main surface transport mode of transport, with at least 90% of freight in Sub-Saharan Africa being transported by road. Road transport has been largely deregulated and is able to provide a flexible, low-cost door-to-door service. The key issues with roads is to ensure finance is available for regular routine and periodic maintenance so as to avoid the costs of full rehabilitation which costs about US\$1m/km. It is also important to allow decisions on road reconstruction to be taken economically rather than politically.



Trade Facilitation Measures to go hand-in-hand with Infrastructure Upgrades.

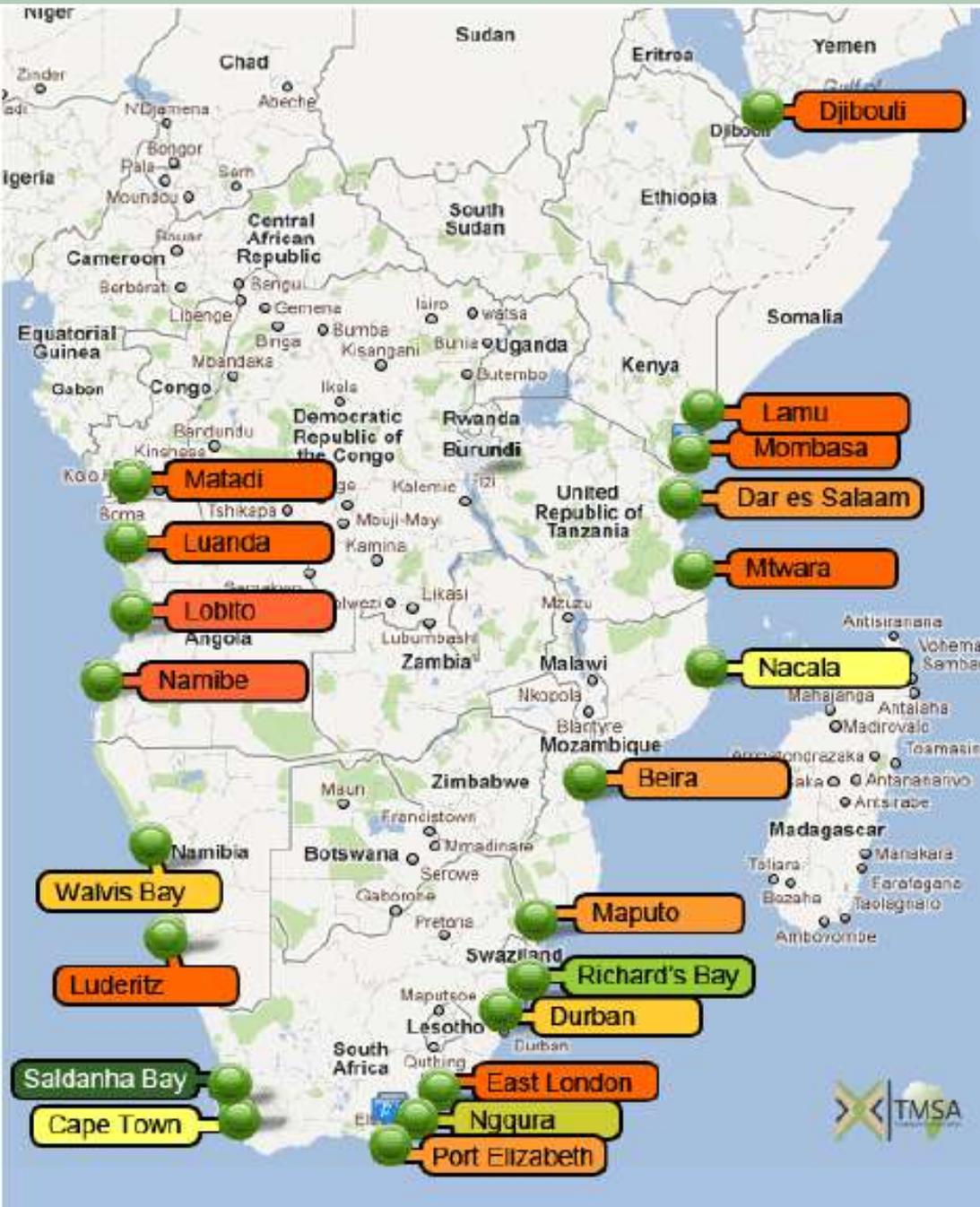
The Tripartite has launched a regional trade facilitation programme which is a combination of different trade facilitation initiatives from the various Eastern and Southern African Regional Economic Communities and is merging them into a common integrated trade facilitation programme including:

- The NTB Monitoring, Reporting and Removal System
- Border and Customs procedures (Integrated Border Management, regional customs bond, transit management);
- One Stop Border Posts - to implement an OSBP there is need to address: physical facilities (common control zone with a fenced perimeter, common facilities – scanning, weighbridges and inspection bays); operations and training; and legal framework (extraterritorial jurisdiction). Chirundu is an example of a juxtaposed OSBP.
- Immigration procedures;
- Transport procedures (regional 3rd party insurance, vehicle standards and regulation, self-regulation of transporters, overload control, harmonised road user charges, regional corridor management systems; and
- The establishment of the Joint Competition Authority linked to air transport liberalisation.



Eastern and Southern African Sea Ports

Main operating criterion is the depth of the access channel and quays. Container vessels on international routes are getting bigger. Ports now designated as feeder and hub ports, depending on the depth and volume of traffic. Depth standard now about 12m –12.8m and the current tendency is toward a depth of at least 14m-16m to cater for the newer post Panamax vessels.



Maximum Port Depths

- 11 m and less
- 12 m and less
- 13 m and less
- 14 m and less
- 16 m and less
- 18 m and less
- 22 m and more





Freight Flows and Factors Influencing Costs and Prices

Freight Flows:

Regional container freight flows (outside of South Africa) are dominated by imports, most often in the ratio of 80% imports and 20% exports. This creates problems of empty container storage, management, costs, and capacity. Port stacking areas are often filled with empty containers. The transport of containers to and from the port terminals are mostly by road rather than rail, often leading to congestion and delays around the ports.

Factors Influencing Costs and Prices:

- Competition – all ports have a captive catchment area, which is not sensitive to pricing and performance. However, all ports have the stated objective to expand (to lower costs), and regional inter-port competition is therefore inevitable.
- Volume throughput – increased freight volumes lowers infrastructure unit costs and allows for further upgrading;
- Equipment efficiency/utilisation – increasing crane movements leads to lower fixed costs, faster vessel turnaround times and increased capacity;
- Vessel size / port depth – larger vessels lower shipping costs, leading to improved port competitiveness; and
- Marine and landside access. Improved marine and land side access results in less congestion, resulting in faster vessel turnaround time, leading to increased capacity and low unit costs.



Infrastructure Projects in the Tripartite Region:

Railways: There are major improvements being planned or underway on the Ethiopia-Djibouti railway, Northern and Central Corridor railways, Nacala and Beira railways and the Benguela railway.

Ports: All the regional ports, without exception, are undergoing or are planning upgrades and expansion. Works include greater depth, additional terminals, more equipment and improved access. This will lead to increased competition between ports. New major ports are being planned at Techobanine (Mozambique), Tanga (Tanzania), Bagamoyo (Tanzania) and Lamu (Kenya).

Power: Transmission line upgrades and new lines are planned, including Ethiopia-Kenya and Zambia-Tanzania-Kenya. This will link EAPP with SAPP. Also large new hydro-power stations planned. Grand Ethiopian Renaissance Dam will generate 5,250 MW of power – largest in Africa costing US\$4.8 billion to construct. Major gas, oil and coal finds will also transform Africa's availability to power.

Roads: Significant upgrades in road infrastructure planned and underway. PiDA predicts large-scale increases in traffic volumes along all major corridors which will need improved road infrastructure.

ICT: Capacity in undersea cables around Africa continues to be made and the private sector is investing in national fibre networks, allowing Africa to make a technological leap forward.



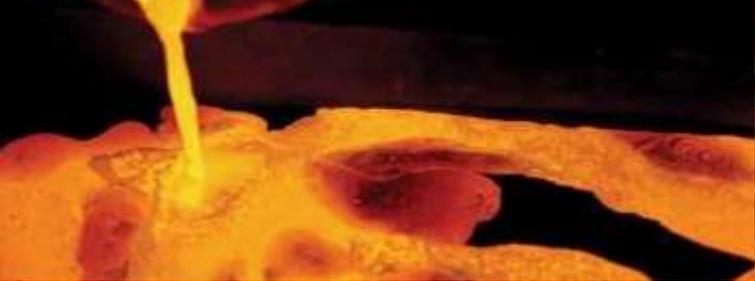
The Future for Africa: Increased food production – only a quarter of Sub-Saharan Africa's available arable land is under cultivation





The Future for Africa: Increased availability of energy will allow Africa to put more of its land under cultivation and the food produced will be processed in Africa both to feed its growing population and for export.





The Future for Africa: In coal mining areas (e.g. Botswana, Zimbabwe and Mozambique) coking coal and steam coal is produced. The steam coal will be used to generate energy and be the basis of a mineral beneficiation industrial system. Already we are seeing a surge in productive investments and increased beneficiation. South Africa has identified 10 value added products for export to China and China is investing in these African beneficiation projects so that value is added in Africa and not China. This same is happening for other products and in other countries.



The Future for Africa: The private sector describes the greatest constraint to growth of the productive sector as a lack of power. There are now major investments taking place and planned in power generating plants and transmission lines throughout ESA and this shortage of power is being addressed. Increase in availability of power will change the current situation where Africa exports what it produces and imports what it consumes.

The Future for Africa: Huge deposits of oil and gas are being discovered in Africa and this is transforming Africa's potential as an energy producer and as a productive continent. The U.S. Geological Survey believes more than 71 billion barrels of oil lie under East Africa.

In February in eastern Africa alone:

- Tullow Oil signed a deal with France's Total and China's CNOOC to sell two-thirds of its East African oil assets in Uganda's Lake Albert Rift Basin for US\$2.9 billion. The Albertine Basin could hold 3.5 billion barrels of oil. Production is expected to start soon and could reach 150,000 to 350,000 barrels of oil a day.
- Norway's oil and gas company, Statoil along with Exxon Mobil announced it found natural gas in Tanzania's India Ocean in the Zafarani exploration well in offshore Bloc 2. Gas reserves in that area are estimated at about 140 billion cubic meters so far and worth about US\$1.2 billion.



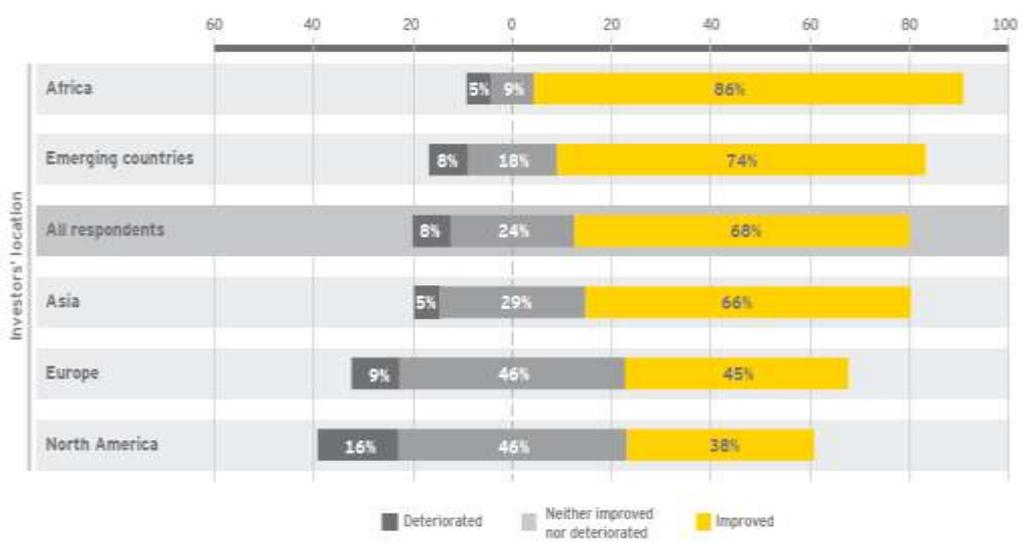
Int'l. Trade Exhibition



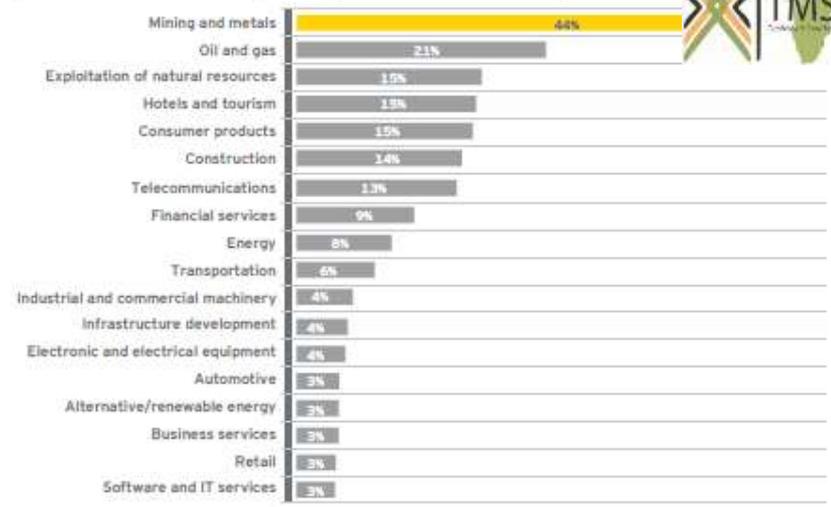
Indian plastics firms see growing opportunity in Africa



Has Africa become more attractive in the past three years: investors' perception by location



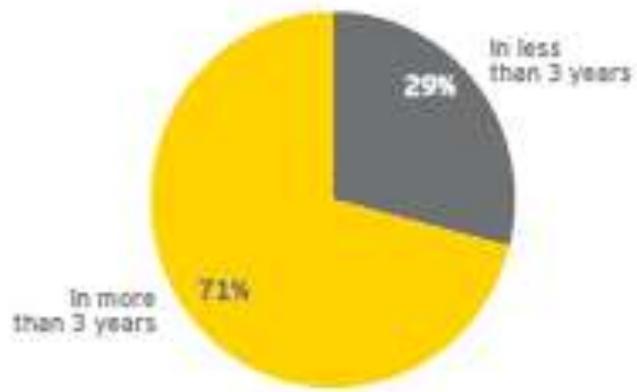
Top sectors that will offer the greatest potential in the next two years



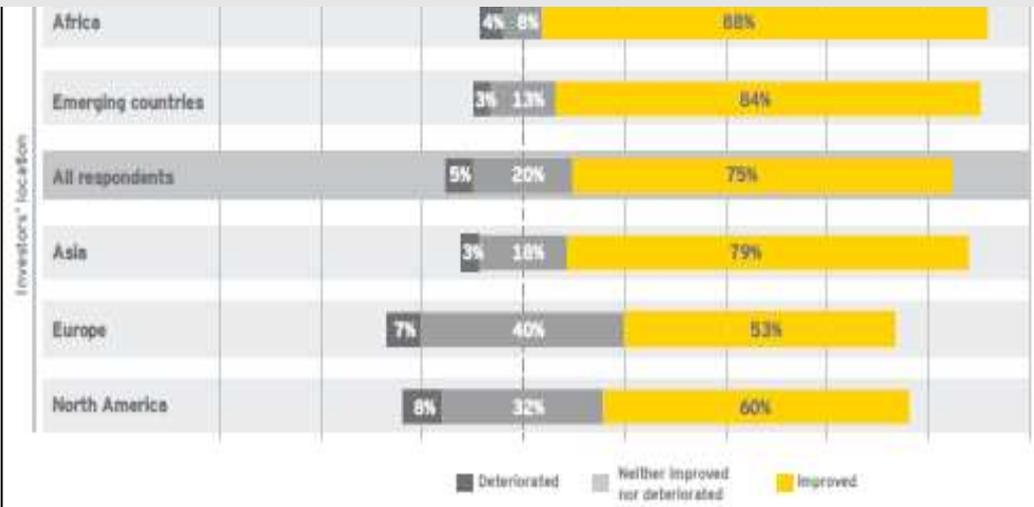
Source: Ernst & Young's 2011 Africa attractiveness survey. Respondents selected several answers. Total respondents: 562.

The Future for Africa: Ernst and Young's 2011 Africa Attractiveness Survey forecasts new FDI projects in Africa to reach US\$150b by 2015, creating 350,000 jobs per annum.

When do you think Africa will offer high and robust growth potential?



Source: Ernst & Young's 2011 Africa attractiveness survey. Total respondents: 532.



Source: Ernst & Young's 2011 Africa attractiveness survey. All respondents' figures based on 544 answers. Note: Emerging countries includes all emerging and developing economies across the world, using the IMF definition, including those also represented in the "Asia" and "Africa" samples.



The Future for Africa: To release the potential for Africa there is a need to reduce the cost of doing business across borders. This means major investments in transport infrastructure, including ports , roads, internal container depots, inland waterways and railways, are needed. Without both investments in new transport infrastructure and upgrading existing transport infrastructure Africa will not reach its potential growth rates.





This is Africa's Time

Thank You

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