South Africa's freight transport involvement options in Sub-Saharan Africa: Declining infrastructure and regulatory constraints

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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Although global changes like political security, depletion of natural resources, energy supply and global warming are affecting all continents; Africa struggle the most to cope with these changes. This is due to the many historical impediments that Africa still has to overcome. Examples of these impediments are the negative effects caused by civil wars, poverty, poor infrastructure and a lack of skills.

Providing reliable, effective and efficient infrastructure underpins all attempts to facilitate trade, grow the economy and reduce poverty in Sub-Saharan Africa (SSA). SSA transportation related infrastructure is limited and generally in a poor condition. This poor state of transport infrastructure impedes SSA's development. However, it is not only the state of the infrastructure that challenges Africa - complicated customs and administrative procedures and inefficiencies when goods are handled at terminals and transferred from one transport mode to another also impede its potential for economic growth.

In spite of these limitations, the SSA economy has been growing. As many as 28 countries (out of 48) in SSA recorded improvements in growth in 2006 and 2007. This growth was underpinned by improvement in macro-economic management in many countries, and a strong global demand for key African export commodities (sustaining high export prices, especially for crude oil, metals and minerals). Greater flows of capital to Africa, debt relief and increasing trade with the developing Asia have also helped increase resources and lift growth across SSA. The strong economic growth in the region also reflects the institutional improvements, structural reforms, and more rigorous economic policies that have started to bear fruit in many countries.

Many countries in SSA with export potential are landlocked. Transport corridors through other countries to the sea are vital for these countries. Yet

cross-border corridor transport in most of SSA is costly, slow, and unreliable. Some of the transport problems are caused by political conflicts and security risks and others by the weaknesses of transport systems. These problems undermine the fact that the limited infrastructure has the potential to carry more volumes. Most of the infrastructure is poorly maintained and operate below design capacity.

Investing in the rehabilitation (and in some cases the upgrade) and establishment of infrastructure will help SSA freight traffic flows. However, unless reinforced with appropriate reforms of policies and institutions, investments in infrastructure may not facilitate trade (and hence economic growth). Institutional development goals are important to create an appropriate context for development.

The proportionality of regulations negatively impacts economic freedom in SSA. It is argued that economic reforms translate into legislation that can be attractive or repellent for both domestic and foreign direct investment. Although policy and regulatory reforms are occurring in most SSA countries, these are slow to act against the high level of systemic inefficiency.

A key finding of this research paper is that freight transport infrastructure development in SSA and in Africa is complex and fragmented. The public and private sectors are required to address the many barriers to the movement of freight in a comprehensive and collaborative manner. This process will enable domestic and foreign investors to take full advantage of opportunities to increase trade flow and create jobs on a broad base, which is essential for continued poverty reduction.

South Africa is in a good position to contribute to the freight transport infrastructure solution in SSA but need to carefully consider the regulatory and policy framework of the SSA infrastructure before any initiatives are formalised.

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ABBREVIATIONS

AAP	African Action Plan
ACP	Cotonou Agreement between the European Union and African, Caribbean and Pacific States
ADB	African Development Bank
AGOA	African Growth and Opportunity Act
ATIA	African Trade Insurance Agency
AU	African Union
BOT	Build, operate, and transfer project
CAS	Country Assistance Strategy
COMESA	Common Market for Eastern and Southern Africa
DAC	Development Assistance Committee
DBFO	Design, build, finance, and operate project
DoT	Department of Transport
DRC	Democratic Republic of Congo
EIB	European Investment Bank
DSI	Data Sharing Institutions
EAC	East African Community
EC	European Commission
EARC	East African Railways Corporation
ECA	Economic Commission for Africa
EEZ	Exclusive Economic Zone
EPZ	Export Processing Zone
EIB	European Investment Bank
ERS	Economic Recovery Strategy for Wealth and Employment Creation 2003-2007
EU	European Union

GDP	Gross Domestic Product
GSP	Generalised System of Preferences
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IBRD	International Bank for Reconstruction and Development
ICT	Information Communications and Technology
ICSID	International Centre for Settlement of Investment Disputes
IFI	International financial institution
IR	Indian Railways
IDA	International Development Association
IDF	Institutional Development Fund
IFAD	International Fund for Agriculture Development
IFC	International Finance Corporation
IMF	International Monetary Fund
IP-ERS	Investment Programme for the Economic Recovery Strategy
KPA	Kenya Ports Authority
KRB	Kenya Roads Board
KRC	Kenya Railways Corporation
JNP	Jawaharlal Nehru Port
KEPSA	Kenya Private Sector Alliance
Km	Kilometers
MDGs	Millennium Development Goals
MIGA	Multilateral Investment Guarantee Agency
MSA	Moving South Africa
NFLS	National Freight Logistics Strategy
NEPAD	New Partnership for African Development

ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OPIC	Overseas Private Investment Corporation
PPI	Public-private infrastructure
PPP	Public-private partnership
PRSP	Poverty Reduction Strategy Paper
REC	Regional Economic Community
SADC	Southern Africa Development Community
SDI	Spatial Development Initiative
SIDA	Swedish International Development Agency
SSA	Sub-Saharan Africa
SSATP	Sub-Saharan Africa Transport Policy Program
TATF	Technical Assistance Trust Funds (IFC)
TAZARA	Tanzania-Zambia Railway Authority
UN	United Nations
UNDP	United Nations Development Programme
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
USAID	United States Agency for International Development
VAT	Value Added Tax
WBI	World Bank Institute
WDR	World Development Report
WSP	Water and Sanitation Program
WTO	World Trade Organisation

1 Background

Many South African Transport and Logistic companies view Africa as a potential growth market and are embarking on a process to unlock the growth potential within the region. Cross-border and international business initiatives are a risky and difficult step for any company, even more so when entering the most complex, fragmented and undeveloped region in the world. Infrastructure in Sub-Saharan Africa is not only underdeveloped but is also destroyed through political unrests, backlogs in maintenance and inefficiencies in operations (African Union, 2005, p1). The regulatory environment and policies in Africa are often hamstrung by bribery, corruption, fragmentation and poor skills.

Any company intending to do business in Africa has to take applicable regulation and / or deregulation in the transport industry, industry developments, as well as the state of logistics infrastructure in Africa into consideration. It is against this background that South African companies need to thoroughly understand the policy and regulatory environment for freight transport in the continent and existing bilateral and multilateral initiatives in this arena, before embarking on the development of its Africa strategy.

This research project could be input for initiatives for South African companies' considereing entering ventures in Sub-Saharan Africa. This report sets out the consolidated findings of policies and regulations on the African continent.

2 Objectives and scope

2.1 Objectives of this report

The objective of this report is to provide insight into the Sub-Saharan Africa (SSA) regulatory environment in the context of freight transport infrastructure. The report aims to elucidate the following:

- The current freight infrastructure situation

- Market potential
- The regulatory environment
- Possible opportunities
- A proposed strategy to exploit the opportunities.

The report benefited from in-depth reviews and suggestions provided by experts from various research institutions on the continent, as well as from independent subject matter experts.

2.2 Scope

The scope of this document focuses on the regulations and policies affecting the transport sector in Sub-Saharan Africa. Also included in the scope are all aspects of transport infrastructure (both land and water); and key stakeholders and their roles.

The scope is confined to road, rail and port freight logistics solutions. Air freight does not form part of this study.

2.2.1 Depth of scope

This report focuses on the transport regulatory environment, key stakeholders in the transport sector and the physical transport infrastructure.

- The regulatory environment addresses the different role players active in funding and development of Sub-Saharan Africa in general, but more specifically in terms of infrastructure development in the region. The goals and actions of these organisations are highlighted - as well as inter – organisational alignment
- Key stakeholders include Governments (local and foreign), development organisations, regional economic communities, parastatals, private companies and; international donors and agencies
- The focus for the physical infrastructure is limited to land (rail, road and terminals) and water (ports and inland waterways). This includes a review of the current situation and the market potential.

2.2.2 Width of scope

The main focus of the report is on Democratic Republic of Congo, Kenya, Tanzania, Mozambique and Angola. Development corridors affecting these countries are also considered.

The focus on these specific countries is based on their overland connection to the SSA freight logistics network, contribution to trans-frontier corridor developments, and ability to influence growth and policy making in SSA.

The regulatory environment and infrastructure of landlocked countries with major links to the freight logistics network in SSA (Botswana, Namibia, Zambia, Zimbabwe and Malawi) is also discussed. A short review of Uganda is also included due to its infrastructure links with Kenya and Tanzania. West, North African and North Eastern African countries and Indian Ocean islands (Madagascar, Seychelles, Mauritius and Comoros) are not included in the scope of this report.

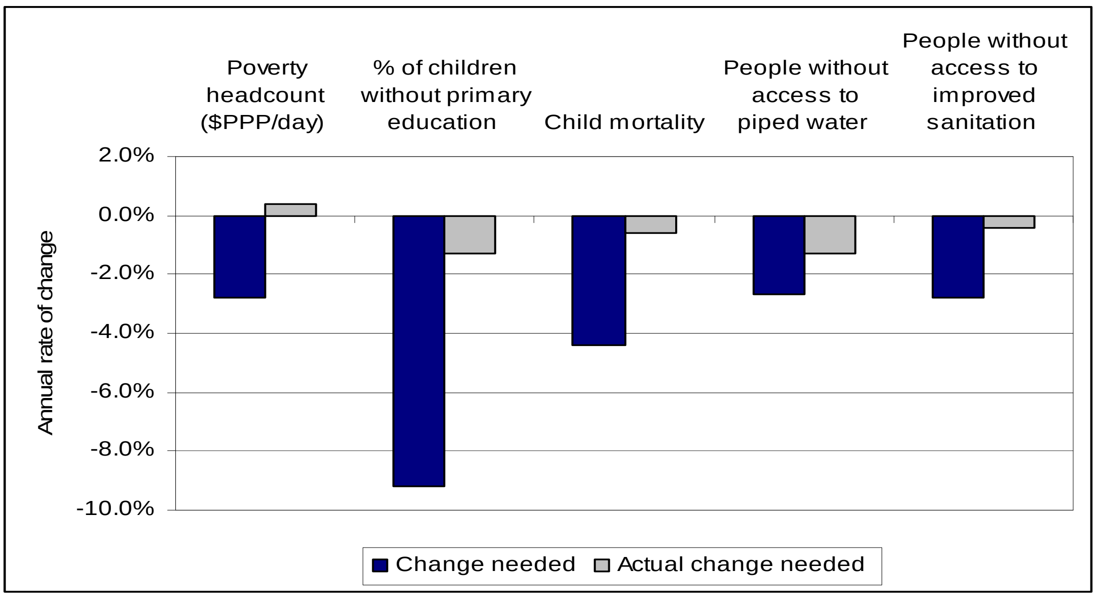
2.2.3 Research approach

The research approach in this report is qualitative as well as quantitative. A framework for the assesment of infrastructure and the regulatory environment is developed and applied for each of the countries in Sub-Saharan Africa, defined as the scope width. Once the assesment is done infrastructure opportunities in especially overland transport, defined as the biggest obstacle in this regard, are modelled in terms of density and potential density. The results of the model and qualitative survey are then presented to a panel of experts in a focus group to generate a possible case study for South Africa's largest commercialised freight transport infrastructure owner, i.e. Transnet.

3 Africa overview

Currently overwhelming changes like political security, depletion of natural resources, energy supply and global warming are increasingly occurring in the world. While the industrialised and emerging economies are able to contain the multiple external and internal shocks generated by these changes to some extent, Africa struggles the most to cope. These impacts keep Africa in a poverty stricken situation.

During the last two decades the number of the poor in Africa has doubled from 150 million to 300 million, more than forty percent of the region's population. About one third of the region's population lives in countries affected by - or emerging from - conflict. Moreover, HIV/AIDS continues to threaten African lives and livelihoods. Africa is the only region that remains behind on most of the Millennium Development Goals (MDG) as set by donors and partner countries. On current trends Africa will fall far short of meeting the 2015 MDG targets as depicted in Figure 1 (World Bank, African Region, September 2005)



Source: World Bank, September 2005

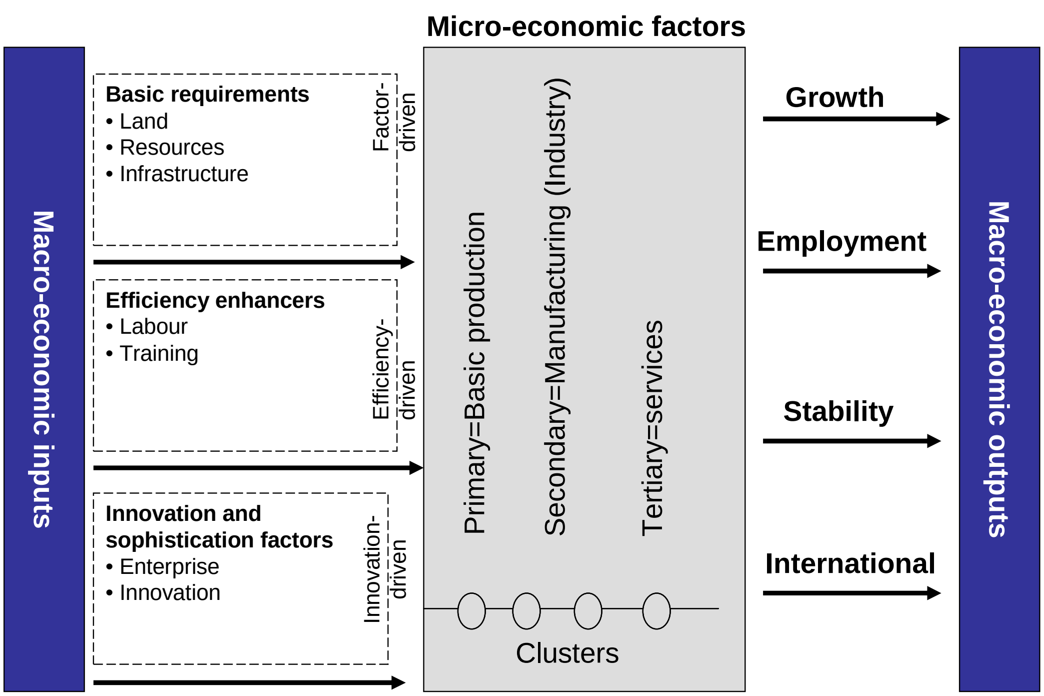
Figure 1: The gap between selected MDGs and progress

For decades, African countries were spending billions of US dollars each year repaying debts to donor countries and international financial institutions. These large debts became a serious impediment to poverty reduction and economic development. Countries began taking on new loans to repay old ones. Some countries spent more each year to service debt payments than on health and education combined.

Faced with the challenges of globalisation and ever-deepening poverty, African Governments have decided to (World Bank, African Region, September 2005):

- Do their utmost to secure peace and stability on the continent
- Strengthen capacities for governance and the rule of law
- Fight corruption
- Accelerate economic and political integration
- Make the required investments
- Pursue sustained growth and speedy development of the African common market.

The degree to which any country is successful in achieving growth, employment, stability and international competitiveness (macro-economic outputs) is dependent on macro-economic inputs. These inputs are basic requirements efficiency enhancers and innovation factors. More details on these inputs are provided in Figure 2 below.



Source: Samuelson and Nordhaus (1989)

Figure 2: Macro-economic model

Although Africa has land, resources are undeveloped, labour is untrained, and enterprise management and Government are in disarray. The sub-continent's score as measured in the World Competitiveness Report has dropped, as shown in Table 1. (World Competitiveness Report, World Economic Forum, 2007)

Table 1: Positional movements for SSA countries compared to overall competitiveness for 128 countries

Country (Ranking)	Position in 2005	Position in 2007	Movement
Angola	Not measured	128	-
Botswana	72	83	-11
Kenya	93	97	-4
Mozambique	112	124	-12
Namibia	79	88	-9
South Africa	40	46	-6
Tanzania	105	108	-3
Uganda	103	116	-13
Zambia	Not measured	117	-
Zimbabwe	110	121	-11

Source: World Competitiveness Report, World Economic Forum, 2007

The scores for the macro-economic inputs are depicted in Table 2 below.

Table 2: Global Competitiveness index 2007: Africa

Country (Ranking)	Overall ranking	Basic requirements	Efficiency enhancers	Innovation factors
Angola	128*	128*	126*	126*
Botswana	83	82	80	98
Kenya	97	109	83	59
Mozambique	124*	122*	124*	118
Namibia	88	72	93	88
South Africa	46	57	45	29
Tanzania	108	115	96	77
Uganda	116	121*	100	83
Zambia	117	116	109	127*
Zimbabwe	121*	125*	108	94

* In the lowest 10 percent in the world

Source: World Competitiveness Report, World Economic Forum, 2007

Poor performance in macro-economic inputs leads to access problems for the primary economies, low beneficiation in manufacturing and an under developed services sector. Except for South Africa, Botswana and Namibia more or less all inputs for all SSA countries ranks in the lowest quartile in the world.

The commitment from the Governments to reverse Africa's current marginalisation in the world economy and to enable their countries to harness and efficiently exploit their resources also means that efforts must be pooled together in order to attain the agreed objectives. Although this is the intent, this has been a significant failure so far.

Previously, most SSA countries' economies were not growing previously due to commodity price swings and other shocks (wars and natural disasters), as well as institutional weakness. Although African countries are currently experiencing economic growth, it may not be sustainable over the longer term. Factors that are likely to hinder growth from 2008 forward include a lack of diversification of production and exports and subsequent instability and vulnerability to shocks, and the increasing spread of the HIV/AIDS pandemic, which undermines labour supply and labour productivity. In addition, inefficient public infrastructure and unreliable energy supply at national levels as well as poor integration of transportation and energy networks at regional levels will continue to undermine productivity and international competitiveness. Moreover, increasing oil prices are a major concern for African countries, which need to continue to control inflation, promote fiscal stability, improve current account positions, and increase growth (UNECA, 2007).

4 Infrastructure

Many of the SSA's countries have a history of major ineffective infrastructure development which is caused by socio-economic problems.

SSA reflects the colonial legacy, which resulted in the construction of roads and railways from the interior to the coast, for the extraction and export of raw materials. Not only does this infrastructure remain in the wrong place today, it was designed to service industries where countries now face declining terms of trade. But more than the colonial legacy is to blame for the continent's inadequate transport infrastructure. Investment in transport infrastructure since independence has been inadequate. Civil unrests and political differences between countries (and in many countries) resulted in the destruction or closure of much transport infrastructure that fulfilled a vital role in linking rural areas with cities and ports. Conflict is a major obstacle to development in SSA (UN Policy brief, 2007).

Crime is another contributor to ineffective infrastructure development. Poverty has driven people to steal items such as railway sleepers and road boards to help with their survival.

4.1 Limitations of the SSA transportation related infrastructure

SSA has a generally inadequate road and rail network, its transport services operate at a low level of efficiency, many routes are subject to official and unofficial roadblocks, and there are slow and cumbersome border-crossing procedures. Transport costs have been recorded as the highest in the world, and many of the factors are attributable to unnecessary delays and corruption (Economic Commission for Africa, 2004)

The road network is not only poorly developed but also badly maintained. Very little of the network has been updated to accommodate larger vehicles, which can cause major damage on unsuitable surfaces. Inefficiency is equally manifested in the lack of vehicle maintenance, shoddy routine maintenance and poor operating practices.

An Organisation for Economic Co-operation and Development (OECD) report has revealed that SSA lacks transport infrastructure which is crucial to poverty reduction. Despite its importance transport has been low on the developmental agenda of SSA countries. The World Bank estimates that African countries will need to spend the equivalent of 4 percent of gross domestic product (GDP) every year for the coming decade just on roads.

The quality of the infrastructure has certainly impeded SSA's ability to compete in the global market. The share of SSA in global trade was 3.1 percent in 2007 compared to Asia's 26 percent (World Bank report, 2007).

International corridor transport in most of SSA countries is costly, slow, and unreliable. Some of the problems are caused by political conflicts and security risks and others by the weaknesses of transport systems. Another major problem in Africa is the poor quality of the national transportation networks that must be transversed in the movement of exports (often raw materials) to ports. The overall trading situation of Africa is unlikely to improve with many other parts of the world moving towards large integrated trading blocks (e.g. the European Union, the North American Free Trade Area and Mercosur). Africa's move towards an Africa Union is taking place at a slow pace but reflects a response to this situation (Button, 2002).

The remainder of the report focuses on Sub-Saharan Africa (SSA) – and in particular a number of countries in this region.

5 Summary of the African countries studied

A brief summary of the countries studied is provided below.

5.1 Mozambique

Despite regional conflict, devastating floods, and fluctuating world prices for key commodities, Mozambique has registered remarkable achievements over the past decade in growth, stabilisation, and reform. Irrespective of the achievements, Mozambique remains one of the poorest countries in the world; with more than half of its population living in extreme poverty.

Mozambique has more than 18 international donors participating in its development, but funding alone will not improve the climate for doing business in Mozambique. There are other constraints other than funding that deter growth. Addressing these constraints implies a broad but essential agenda that can only be accomplished with full endorsement at high political levels, as well as effective inter-Governmental coordination, public–private partnership, and targeted donor-funded technical assistance.

Mozambique's key challenges are:

- In the business-enabling environment, to stimulate domestic and foreign investment in labour-intensive sectors of the economy,
- In the transportation infrastructure and in border clearance procedures, to reduce the high transaction costs that currently render Mozambican products uncompetitive in global markets,
- In Mozambique's trade and investment policies, trade institutions, technical and analytic skill levels, and policy coordination processes, to address impediments to exports in a coordinated and comprehensive fashion.

5.2 Kenya

Kenya is one of the leading economies in Eastern and Southern Africa. Kenya's strategic geographic location along the Indian Ocean, with the commercial Port at Mombassa is a key transit point for internationally traded goods. With a growing demand for Kenya's export products, Kenya also gives investors access to the East African Community (EAC) and Common Market for Eastern and Southern Africa (COMESA) markets. Kenya is also a member of the African, Caribbean and Pacific States (ACP), which gives it preferential access to the EU market, among others.

The great strengths and advantages of Kenya as a location for investment are offset by serious difficulties. The main concern is the state of the country's infrastructure. Limited investment in transport infrastructure and the current political instability is a big concern.

5.3 Tanzania

Tanzania, in an effort to improve its economic performance, is pursuing economic integration through several bilateral and regional trade protocols and through its membership of SADC and EAC. Further more, the long term development goal of Tanzania is to raise the standard of living and or quality of life of its people through the enhancement of both the productive and non-productive sectors of the economy. The Government of Tanzania realises that in order to reduce poverty and ensure sustainable economic growth and development, the transport sector has to play a critical and crucial role.

The conflict in Kenya is creating a major opportunity for Tanzania – specifically to enhance and direct transport through the port of Dar-es-Salaam. Dar-es-Salaam Port handles more than three quarters of Tanzania's trade, averaging about 40 million tonnes a year, and is the largest industrial centre and business capital in Tanzania. It has rail and road links to Burundi, Rwanda, Zambia, Malawi, Zimbabwe and parts of the DRC. It also serves as a major logistics gateway to these countries due to their landlocked nature.

5.4 Angola

Now that peace has been achieved in Angola, and a fully functioning Parliament is operating, Angola has a radiant future ahead, for the economy and for the country. Angola has a fast-growing economy but most of the country's infrastructure is still damaged or undeveloped from the 22 year-long civil war. Remnants of the conflict such as widespread presence of land mines are still present in the countryside. This has a direct influence on the rate and speed of development and rehabilitation of the infrastructure in the country.

5.5 Democratic Republic of Congo

The DRC offers many opportunities for foreign investors as the country is conveniently and centrally located in the continent. It has immense and countless natural resources. The DRC confirmed in July 2006 with the Poverty Reduction Strategy Paper (PRSP) its willingness to invest in transport infrastructures rehabilitation to sustain growth while at the same time protecting the environment. The Democratic Republic of Congo currently faces a defining period in its history (after the peace agreement in 2003 and the historic election in 2006). It has its best chance to escape a cycle of conflict and suffering and to realise its full potential.

The collapse of the transport system in DRC is a result of the deterioration of both physical infrastructure and the poor performance of technical institutions in charge of its management and maintenance. None of the technical institutions function at the levels required to adequately manage the transport system, and in particular to ensure its maintenance. It has suffered a lack of financial resources for ten consecutive years, which has resulted in outdated technical knowledge and management tools, lack of equipment, and a drain of qualified and experienced staff. Institutional strengthening is vital for the long term sustainability of any newly rehabilitated infrastructure in DRC and for associated activities such as environmental protection.

6 The current reality

Despite the efforts of SSA Governments to improve transport infrastructure, problems remain: missing transport links, insufficient competition, high transport costs, few harmonised rules and procedures, inadequate safety and security at national and regional levels, little cross-border investment and private sector participation, and failure to ratify and implement conventions and regional policies adopted at sectoral meetings (UNECA - Governance and Public Administration, Transport, 2007).

The African Economic Outlook notes that geography, demography and lack of resources are all major impediments to transport development in Africa. Fifteen of the continent's 53 countries are landlocked and population densities in the interior are very low, making infrastructure investments and maintenance very expensive.

6.1.1 Ports

Excluding South African ports, SSA has nine major ports offering it access to both the Indian and Atlantic routes. Information on these ports is provided below.

Table 3: Summary of issues at major SSA ports

Port	Issues
Mombasa	Mombasa remains the best and most important deep-water port in East Africa, despite deteriorating equipment / poor infrastructure, problems with inefficiency and corruption, congestion, corruption, archaic and time consuming regulations. Kenya is investing in a second container terminal (it is anticipated the terminal can be up and running by 2008), Other project activities include: dredging the port and privatising the existing container terminal.
Dar-es-Salaam	Local news media report that operations at the port of Dar-es-Salaam have "not improved" despite a US$40.5 million modernisation programme. Port congestion remains a problem. Furthermore, according to the World Bank study, Port of Dar-es-Salaam: Leasing the Container Terminal; the terminal is under performing despite a World Bank-supported programme to improve port operations. The World Bank led a US$2.8 million commercialisation of the container terminal and funded the port's modernisation programme. Recent improvements at the port include dredging of the harbour; expansion of the port mouth to allow larger ships to

Port	Issues
	enter the harbour; installation of new navigational lights and the construction of the control tower to ensure ship and cargo safety (Dredging News, 2008).
Nacala	There has been a gradual increase in the use of the port and; linking roads and railways. Although impressive progress has been made in terms of rehabilitating port and rail facilities, a crucial 30 km of rail close to the Malawian border is in a very poor condition. The results are frequent derailments and excessively low speeds. Hence, frequent delays occur in the transport of freight from Malawi to Nacala port, with knock-on effects for shipping servicing that port.
Beira	There is ongoing rehabilitation at the port. Beira's traffic declined in the years following a peak in 1997, reflecting the depression of the Zimbabwean economy. However, it is likely to increase again, with large-scale food imports being necessary following the collapse of agriculture in Zimbabwe.
Maputo	Because of the concession and private management of mostly all productive terminals, there has been great progress in the restoration of the infrastructure at Maputo and Matola ports. Port operations are more than fifty per cent computerised and further automation efforts are continuing (Maputo Corridor Case Study, 2008).
Lobito	Angola is seeking more investment for the rehabilitation and upgrading of the Lobito Port. Currently, port–related problems are many, and unless attended to, threaten to compromise the inland transport advantage that the route has over most of Zambia's other trade outlets (Reuters, 2007).
Walvis Bay	The Zambian and Botswana Government have announced separate developments of dry ports at Walvis Bay to handle

Port	Issues
	their freight on site. Namport plans to invest $70m in increasing the handling capacity of Walvis Bay on the back of a recent increase in demand from mining companies. New cargo handling equipment is required, new berths are to be developed and the water depth of the harbour is to be increased to allow larger vessels to dock at the port. (Africa Research Bulletin, 2007) Namibia expects to borrow nearly $200 million from international lenders to expand its Walvis Bay port and plans to build a major railroad from the facility to boost trade with neighbouring countries, officials have said. The Namibian Port Authority (Namport) will spend $189 million to expand the port to handle more imports mainly destined for Zambia and DRC (Reuters, 2007).
Mtwara	The port development was accompanied by railway construction from Mtwara and Nachingwea. With the failure of the groundnut scheme, the railway line fell into disuse and is now non-operational . The port however, continues to function but is under utilised. The present under utilisation of the port is essentially due to low economic performance of the hinterland of Mtwara coupled with poor access to that hinterland. The Government of Tanzania has identified a number of projects which would directly or indirectly increase the throughput of Mtwara port. Included in the list are the following: ➢ The Ligaga Iron Ore Project ➢ The Mchuchuma Coal Project ➢ The Songosongo and Mnazi Bay Gas Projects ➢ The Agriculture, Livestock, Fisheries and Forestry Projects ➢ The Mtwara-Mbamba Bay Road

Port	Issues
	➢ The railway lines linking Mtwara port to iron and coal deposits of Liganga and Mchuma ➢ The Telecommunication Project.
Matadi	The port is starting to take off, after losing up to 40 percent of its berthing capacity. Some of the new initiatives that are geared towards the development of traffic are: ➢ Restoration works of four quays to address congestion problems ➢ Creation of a supplementary access road for trucks to the port of Matadi (DRC Government seeking funds for this).

Source:Compiled by Author

6.1.2 Roads

Road transport is the primary mode of transport in Africa. The state, management and functioning of road infrastructure is therefore critical to the success of Africa's regional integration efforts.

Most road reforms in SSA have been pressured by declining Government budgets and deteriorating road conditions. These reforms have largely been encouraged by the World Bank's Road Maintenance Initiative (RMI) whose main aim is to create autonomous road agencies and dedicated road funds as a means of improving overall road management. Some progress has been made in this respect as well as in involving the private sector in the management of the road sector. At the institutional level, Roads Boards have been established in a number of countries, with visible private sector participation. A number of countries are in the process of replacing their national roads authorities with fully autonomous "Road Agencies" (Simuyemba, 2007).

Information on the road networks for selected countries in SSA is depicted in Table 4 below.

Table 4: SSA road network summary

Country	*Road network (km)*	*Roads in good or fair condition (percent) 2000–05**	*Ratio of paved to total roads (percent) 2000–05**
Angola	51,429	Information not available	10.4
Botswana	24,455	Information not available	36.5
DRC	153,497	23.2	1.8
Kenya	63,265	67.2	14.1
Lesotho	Information not available	71.5	Information not available
Malawi	15,451	Information not available	45
Mozambique	Information not available	63.5	Information not available
Namibia	42,237	Information not available	12.8
South Africa	364,131	Information not available	17.3
Swaziland	3,594	Information not available	Information not available
Tanzania	78,891	55	8.6

Country	*Road network (km)*	*Roads in good or fair condition (percent) 2000–05**	*Ratio of paved to total roads (percent) 2000–05**
Uganda	70,746	58.6	23
Zambia	91,440	Information not available	22
Zimbabwe	97,267	Information not available	19

Source: Africa Development Indicators 2007

* Data are for most recent year available during the period specified.

6.1.3 Rail

Most railways in Africa have been progressively losing traffic to roads over the past two decades. From a dominant mode of transport in the seventies, railway transport performance started to decline in the eighties and this trend has continued into the twenty first century.

By the late nineties, railway efficiency had dropped, profitability deteriorated, service standards declined and customers shifted from rail to road. Today, most railways are seeking to bring back efficient service and profitability through a combination of restructuring, commercialisation and concessioning. Because the condition and performance of most rail systems have significantly deteriorated, it will take a while before the results of these reforms begin to come to fruition (Simuyemba, 2007).

Information on the rail networks for selected countries in SSA is depicted below.

Table 5: SSA rail network summary

Country	Rail network (km)	Average cost to ship 20 ft container from port to final destination ($)**	
		Import 2006	Export 2006
Angola	2,761	2,325	1,850
Botswana	888	2,595	2,328
DRC	3,641	3,308	3,120
Kenya	1,917	2,325	1,980
Lesotho	Information not available	1,210	1,188
Malawi	710	2,500	1,623
Mozambique	3,070	1,185	1,155
Namibia	Information not available	1,550	1,539
South Africa	20,047	1,195	1,087
Swaziland	301	Information not available	Information not available
Tanzania	2,600	917	822
Uganda	259	2,945	1,050
Zambia	1,273	2,840	2,098
Zimbabwe	Information not available	2,420	1,879

Source:Compiled by Author

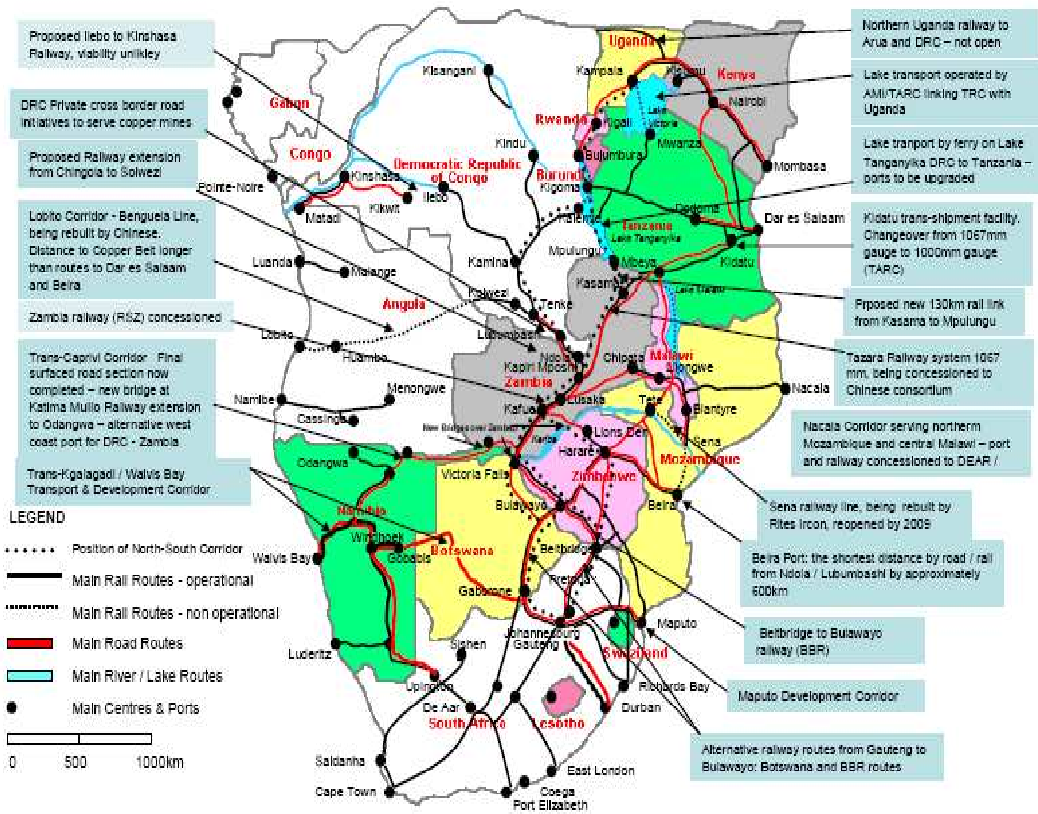
** This includes both road and rail transport

6.1.4 Cross border infrastructure

Certain infrastructure items are not isolated to one country. Cross border infrastructure refers to infrastructure items that involve more than one country and includes development corridors and lakes. Details on these are provided below.

6.1.4.1 Transport / Development corridors

The general principle of development corridors is to view the major transport routes from the maritime ports to the hinterlands that they serve, not merely as transport, but economic corridors with activities related to agriculture, industry, commerce, communications tourism and other industries. Thus, corridors serve as growth points, not just for large industries, but also for emerging small scale industries.



Source: COMESA-EAC-SADC Task Force; November 2007

Figure 3: SDIs and corridors in SSA

General information on the major corridors is provided below.

Table 6: Summary of major corridors in SSA

Major corridors	Countries served	Issues
Mombasa Corridor (Northern Corridor)	Burundi, DRC, Rwanda, Uganda and Kenya	Road transport accounts for more than 70 percent of the total transit traffic flow within the Northern Corridor. About two thirds of the road network is paved, although the condition is generally poor due to inadequate resources for rehabilitation and maintenance. Overloaded freight vehicles and poor enforcement of axle load regulations further deteriorate the road network and reduce road life spans (TTCA, 2004). Disruptions in the aftermath of the elections are causing congestions at the Mombasa port. Until recently there were claims that at least 500 containers bound for Uganda were being held up in Kenya due to the violence.
Dar-es-Salaam TAZARA Corridor	Zambia and Tanzania	Developed as a transportation route for copper from Zambia, but cargo transportation volume is gradually decreasing. The reason are: ➢ Low operational capacity of ports ➢ Low operational capacity of railways.
Dar-es-Salaam Central Corridor	DRC, Tanzania,	The 'Central Corridor', the road network linking the countries will be

Major corridors	Countries served	Issues
	Rwanda, Burundi, and Uganda	upgraded and completed by 2010.
Mtwara Corridor	Malawi, Mozambique Tanzania and Zambia.	The corridor runs from the port of Mtwara in the east to Mbamba Bay in the west on Lake Malawi Some of the infrastructure projects identified as necessary for the corridor include: ➢ Development of ports (Mtwara, Manda, Mbamba Bay, Lindi and Kilwa) ➢ Development of airports (Mtwara, Songea, Njombe and other air ports) ➢ Construction of unity bridge and Ferry crossing to Mozambique) ➢ Mtwara – Mbamba Bay road, ➢ Mtwara – Songea – Manda Railway ➢ Manda – Mchuchuma - Mlimba Railway.
Nacala Corridor	Malawi and Mozambique	The corridor was damaged and closed during the civil war. After the war, the EU funded its rehabilitation over most of its length, as far as Cuamba. However, the Cuamba –Entre Lagos connection to the border remains in a very poor condition, with average speeds of no more than 15 km/h. This has been a severe constraint on train operation in the corridor. The

Major corridors	Countries served	Issues
		southern leg of the Malawi network was further affected when in 1997, the Shire River washed away much of an embankment, 77 km north of the border. As a result, there has been no traffic of any kind south of this point for nearly 10 years. Despite progress in railway rehabilitation in the 1990s, cargo transportation volume is average. Operational capacity of ports and railways remain a problem (Nacala corridor website).
Beira Corridor	Mozambique, Zimbabwe and Zambia	The flow of traffic has been hindered by the crisis in Zimbabwe. In addition, due to the rehabilitation of the lines there are currently no connections between Harare and Beira or Harare and Maputo (Beira Corridor website).
Maputo Corridor	South Africa and Mozambique	A lack of sufficient facilities on the Mozambican side has prevented growth in the movement of coal, sugar and other commodities as well as passengers. Also, the pipeline for the movement of goods is not seamless (MDCL website).
Trans-Kalahari Corridor	Namibia, Gaborone and Gauteng	There is a road link over 1,800 km, supported by 640 km rail line. The main development initiatives for the corridor are the trilateral cooperation program and the multi -

Major corridors	Countries served	Issues
		modal transport concept. The main focus of the Walvis Bay Corridor Group, is to increase cargo volumes along the corridors via the Port of Walvis Bay. Hence, the second port expansion plans (Walvis Bay Corridor Group, 2007).
Trans Caprivi Corridor	Namibia, Zambia and DRC	The transport and trade bottleneck was removed with the completion of the Katima Mulilo Bridge crossing the Zambezi River between Namibia and Zambia in May 2004. The roads from Namibia (specifically the port of Walvis Bay) were rehabilitated and linked up with the national road network in Zambia. Both improvements increased cross border trade between Namibia and Zambia by a factor of 5 (Walvis Bay Corridor Group, 2004).
Benguela /Lobito Corridor	Angola and the rest of the SADC countries	For a long time, due to the political situation / civil war in Angola the corridor was not functioning. Railways were also destroyed during this period (Reuters, 2007).

Source:Compiled by Author

6.1.4.2 Inland waterways

Africa's inland waterways have long been mooted as part of the solution to the continent's transport woes. While road and rail networks require constant maintenance and upgrading, navigable rivers and lakes need far less investment and infrastructure. Yet relatively little effort has been put into making the most of this natural resource, mainly because it is only of great use when integrated with road and rail transport links. Various forms of cargo and particularly containerised cargo can often be most easily moved from one point to another by using a variety of forms of transport. Governments are finally recognising the value of inland waterways (Ford, 2007).

The Governments of Zambia, Malawi and Mozambique have signed a memorandum of understanding to promote shipping on the Zambezi - Shire water system. Comesa and the European Development Fund have agreed to fund a full feasibility study of the project and a comprehensive hydrographical study of the state of the river. It is believed that dredging in selected areas would be sufficient to provide a waterway deep enough to serve medium sized ocean going vessels. Results from a pre-feasibility study funded by the UK Government have already proved positive (Ford, 2007).

Details on selected inland waterways are summarised in the table below.

Table 7: Information on SSA major waterway

Water source	Countries served	Settlements	Length (km)	Width (km)	Depth – Average / Maximum (m)	Shore length (km)
Lake Tanganyika	Burundi, Democratic Republic of the Congo (DRC), Tanzania and Zambia	Kigoma - railhead for the railway from Dar-es-Salaam. Kalemie - railhead for the D.R. Congo rail network Mpulungu - proposed railhead for Zambia	673	72	570/1410	1828
Lake Victoria	Tanzania, Uganda and Kenya	Bukoba, Tanzania Mwanza, Tanzania Kisumu, Kenya Kampala, Uganda Entebbe, Uganda	337	250	40/83	3,440
Lake Malawi	Malawi Mozambique Tanzania	Likoma and Chizumulu islands	580	75	292/706	Information not available

River Shire	Tanzania, Malawi and Mozambique.	Information not available	402	Information not available	Information not available	Information not available
River Congo	DRC, Central African Republic, Congo, Angola Zambia, Tanzania	Kisangani Mbandaka, (Kinshasa, Brazzaville, Matadi, Boma and Muanda.	4,700	Information not available	Information not available	Information not available

Source: Wikipedia, 2008

7 An overview of the SSA economy

SSA’s economic growth rate appears to be at a turning point, albeit from a low economic base. Recent economic growth is encouraging.

SSA economies continue to sustain the growth momentum of previous years, recording an overall real GDP growth rate of 5.2 percent in 2006 compared to 5.4 percent in 2005 and 4.7 percent in 2004. As many as 28 countries recorded improvements in growth in 2006, relative to 2005. Only Zimbabwe recorded a negative growth rate in 2006. Africa’s growth performance in 2006, as in previous years, was underpinned by improvement in macro economic management in many countries, and strong global demand for key African export commodities, sustaining high export prices, especially for crude oil, metals and minerals (UNECA , 2007).

SSA has seen its strongest growth and lowest inflation in more than three decades. These are influenced by internal and external factors. Internally, domestic investment and productivity have risen and many SSA countries have worked to stabilise their economies and to see reforms through. Externally, strong global demand for commodities, greater flows of capital to Africa, and debt relief has helped increase resources and lift growth across SSA.

The strong growth in the region reflects the institutional improvements, structural reforms, and more rigorous economic policies that have started to bear fruit in many countries. The per capita income is increasing in tandem with other developing countries (Figure 4).

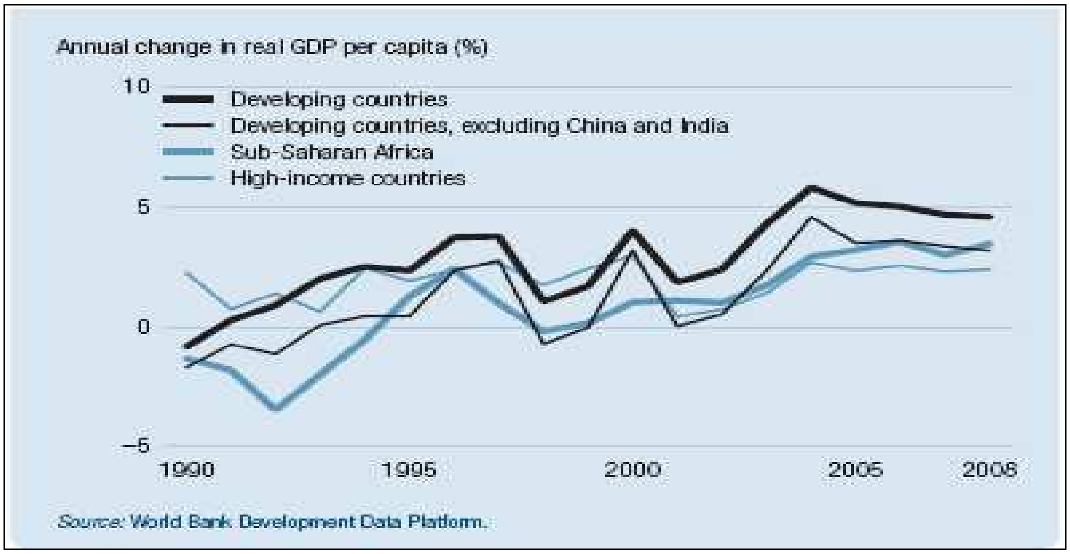


Figure 4: Annual change in real GDP per capita

7.1 The contribution of commodity exports on SSA's economic growth

Heavy dependence on primary commodities remains a common feature of production, exports and growth in SSA. This exposes the sub-region to external shocks and makes economic diversification a top priority for growth policies on the continent (UNECA, 2007).

Global demand for oil and minerals has grown fast due to global growth, especially driven by China's high economic growth rate.

Between 2002 and 2005, the UNCTAD price index for non-fuel commodities rose by 45 percent with minerals, ores and metals prices increasing by almost 100 percent and crude oil by 114 percent. The prices of metals, minerals and oil have remained high.

Table 8: World primary commodity prices (percentage change)

	2000	2001	2002	2003	2004	2005	2002 - 2005
All commodities (excluding crude petroleum)	1.7	-3.6	0.8	8.1	19.4	12.1	44.8
Crude petroleum	55.6	-13.3	2.0	15.8	30.7	41.3	113.9
Food and tropical beverages	-0.1	0.4	0.4	2.3	13.2	8.8	26.0
Coffee	-25.1	-29.0	4.7	8.7	19.8	43.8	87.2
Cocoa	-22.1	22.7	63.3	-1.3	-11.8	-0.7	-13.5
Tea	6.8	-20.2	-9.5	8.4	2.1	9.1	20.8
Sugar	30.4	5.6	-20.3	2.9	1.1	37.9	43.6
Rice	-18.2	-15.3	11.0	4.1	23.1	17.1	50.1
Agricultural raw materials	3.1	-3.9	-2.4	19.8	9.9	7.1	41.0
Hides and skins	11.2	5.5	-2.9	-16.8	-1.7	-2.1	-19.9
Cotton	11.5	-19.0	-3.6	37.2	-3.3	-11.6	17.2
Rubber	7.9	-14.1	33.1	41.7	20.3	15.2	96.3
Tropical logs	3.7	6.4	-10.5	20.1	19.2	0.3	43.6
Mineral ores and metals	12.4	-10.8	-2.7	12.4	40.7	26.2	99.6
Aluminum	13.8	-6.8	-6.5	6.0	19.8	10.6	40.6
Copper	15.3	-13.0	-1.2	14.1	61.0	28.4	135.9
Gold	0.1	-2.9	14.4	17.3	12.6	8.7	43.5

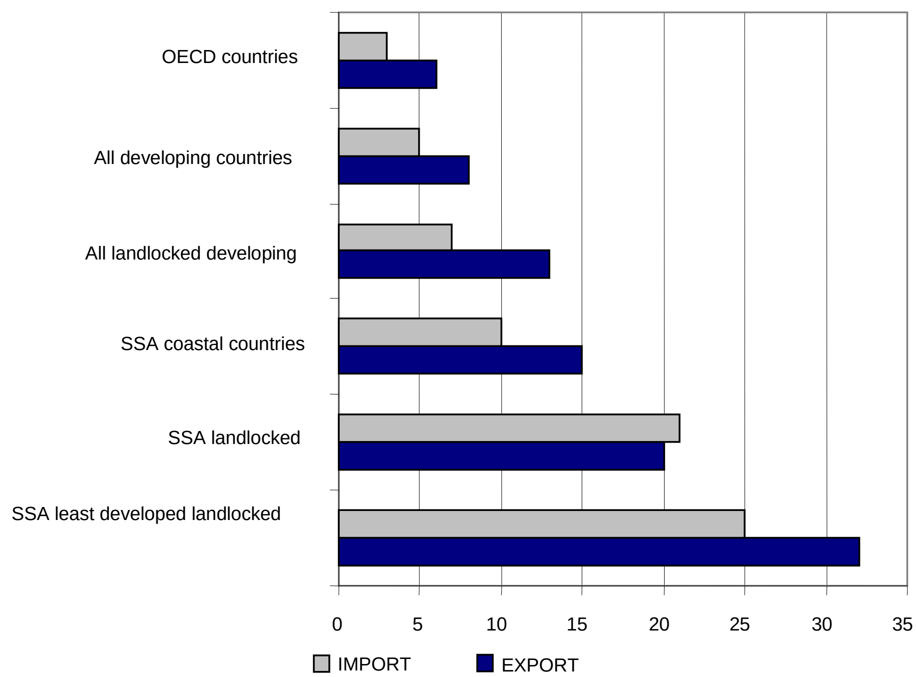
Source: UNCTAD

7.2 The effect of location on trade

Africa has 15 landlocked countries (with 10 in SSA), whose distance to the sea range from 220 km for Swaziland to 1,735 km for Chad.

The ability of landlocked countries to trade relies on the existence of efficient and easily accessible transit corridors. In addition to own infrastructure, landlocked economies need good roads and railways in neighbouring countries.

Econometric evidence suggests that being landlocked constitutes a geographical disadvantage with relevant effects on transport costs and trade flows. Compared to a coastal country, the cost of shipment of goods for similar distances is always greater for the landlocked country, as Figure 5 depicts.



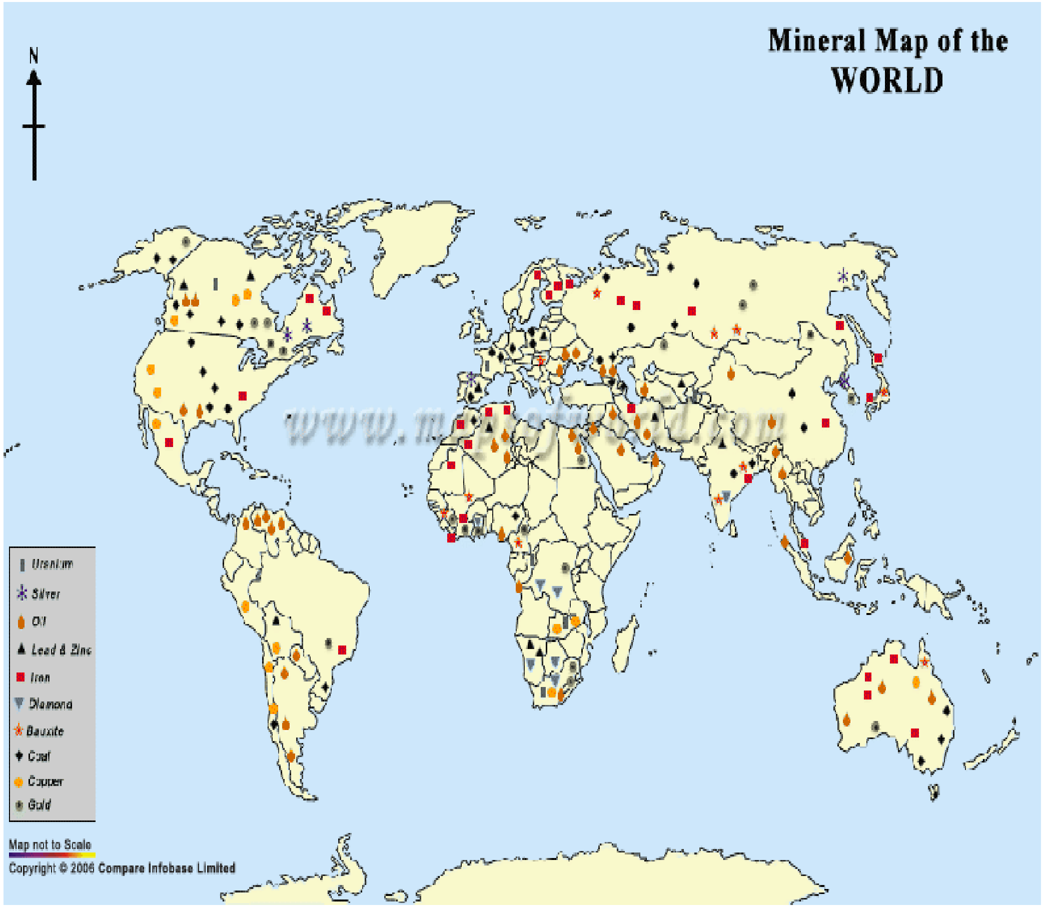
Source: Santiso, OECD Development Centre, 2006

Figure 5: Transport and insurance costs as a percentage of trade value

The generally low density and poor quality of infrastructure on the sub-region tends to aggravate these disadvantages further. Poor average quality of infrastructure even in countries with direct access to the sea, places an even large burden on the competitiveness of landlocked countries.

The World Mineral Map shows a world map of the availability of minerals in various parts of the world. World minerals marked on the mineral map of the world, are uranium, silver, oil, lead and zinc, iron, diamond, bauxite, coal, copper and gold. Mineral reserves are important for the economy of every country as the products of the mineral mining industry are used as inputs for consumer goods and services (World Minerals, 2007).

In the case of SSA, most commodities are located far from the coastal areas, as depicted in the Mineral Map below.



Source: http://www.mapsofworld.com/world-mineral-map.htm

Figure 6: Mineral map of the world

The table below summarises export trading information for landlocked SSA countries.

Table 9: Commodity export information

Country	*Exports – commodities (percent)*	*Exports - partners (percent)*
Botswana	Diamonds, copper, nickel, soda ash, meat, textiles	European Free Trade Association (EFTA) 87 percent, Southern African Customs Union (SACU) 7 percent, Zimbabwe 4 percent (2006)
Burundi	Coffee, tea, sugar, cotton, hides	Switzerland 33.7 percent, UK 12.2 percent, Pakistan 8.5 percent, Rwanda 5.3 percent, Egypt 4.2 percent (2006)
Central African Republic	Diamonds, timber, cotton, coffee, tobacco	Belgium 30.7 percent, Spain 10.7 percent, Indonesia 8 percent, France 7.8 percent, China 6.9 percent, Democratic Republic of the Congo 6 percent, Turkey 5 percent, Italy 4.7 percent (2006)
DRC	Diamonds, copper, crude oil, coffee, cobalt	Belgium 29.4 percent, China 21.1 percent, Brazil 12.3 percent, Chile 7.8 percent, Finland 7.2 percent, US 4.9 percent (2006)

Lesotho	Manufactures 75 percent (clothing, footwear, road vehicles), wool and mohair, food and live animals (2000)	US 81.9 percent, Belgium 15 percent, Canada 1.9 percent (2006)
Malawi	Tobacco 53 percent, tea, sugar, cotton, coffee, peanuts, wood products, apparel	South Africa 12.6 percent, Germany 9.7 percent, Egypt 9.6 percent, US 9.5 percent, Zimbabwe 8.5 percent, Russia 5.4 percent, Netherlands 4.4 percent (2006)
Swaziland	Soft drink concentrates, sugar, wood pulp, cotton yarn, refrigerators, citrus and canned fruit	South Africa 59.7 percent, EU 8.8 percent, US 8.8 percent, Mozambique 6.2 percent (2006)
Uganda	Coffee, fish and fish products, tea, cotton, flowers, horticultural products; gold	Belgium 9.9 percent, Netherlands 9.4 percent, France 7.9 percent, Germany 7.7 percent, Rwanda 5.6 percent, Sudan 4.8 percent (2006)
Zambia	Phosphates 62 percent	Switzerland 38.4 percent, South Africa 21.6 percent, China 10.3 percent, UK 7.6 percent, Tanzania 6.4 percent (2006)
Zimbabwe	Platinum, cotton, tobacco, gold, ferroalloys, textiles/clothing	Sudan 24.9 percent, Republic of the Congo 17.7 percent, Burkina Faso 15.8 percent, US 10.5 percent (2006)

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Source:Wikipedia, 2008

Table 10 summarises import trading information for landlocked SSA countries.

Table 10: Commodity import information

Country	Imports - commodities (percent)	Imports - partners (percent)
Botswana	Foodstuffs, machinery, electrical goods, transport equipment, textiles, fuel and petroleum products, wood and paper products, metal and metal products	Southern African Customs Union (SACU) 74 percent, EFTA 17 percent, Zimbabwe 4 percent (2006)
Burundi	Capital goods, petroleum products, food	Saudi Arabia 12.6 percent, Kenya 8.2 percent, Japan 7.8 percent, Russia 4.7 percent, UK 4.6 percent, France 4.4 percent, China 4.4 percent (2006)
Central African Republic	Food, textiles, petroleum products, machinery, electrical equipment, motor vehicles, chemicals, pharmaceuticals	France 15.4 percent, Netherlands 15.1 percent, US 9.2 percent, Cameroon 8.9 percent (2006)
DRC	Foodstuffs, mining and other machinery, transport equipment, fuels	South Africa 19.2 percent, Belgium 11.8 percent, France 9.3 percent, Zambia 7.5 percent, Kenya 7.4 percent, Cote d'Ivoire 4.8 percent (2006)

Country	*Imports - commodities (percent)*	*Imports - partners (percent)*
Lesotho	Food; building materials, vehicles, machinery, medicines, petroleum products	Hong Kong 33.4 percent, China 31.2 percent, Germany 7.7 percent, India 7.3 percent (2006)
Malawi	Food, petroleum products, semi-manufactures, consumer goods, transportation equipment	South Africa 34.6 percent, India 8.1 percent, Zambia 7.8 percent, US 6.4 percent, Tanzania 5.8 percent, Germany 4.6 percent, China 4.3 percent (2006)
Swaziland	Motor vehicles, machinery, transport equipment, foodstuffs, petroleum products, chemicals	US 29.4 percent, Netherlands 18.9 percent, Trinidad and Tobago 14.9 percent, Japan 5.1 percent, China 4.9 percent (2006)
Uganda	Capital equipment, vehicles, petroleum, medical supplies; cereals	Kenya 34.1 percent, UAE 8.5 percent, China 7.1 percent, India 5.6 percent, South Africa 5.4 percent, Japan 4.2 percent (2006)
Zambia	Fuel for fishing fleet, foodstuffs	South Africa 47.3 percent, UAE 10.4 percent, Zimbabwe 5.7 percent, Norway 4 percent (2006)
Zimbabwe	Machinery and transport equipment, other manufactures, chemicals, fuels	South Africa 40.8 percent, Zambia 29.6 percent, US 4.9 percent (2006)

7.3 China and India's role in the growing SSA economy

China and India are major economic hubs in developing Asia. Growth in developing Asia was high in 2006, driven by China (10.2 percent) and India (7.7 percent), which are the engines of manufacturing within the region.

Recently there has been an explosion of trade flows between Africa, China and India. As a result, African exports to China of mainly raw materials have increased tenfold since 1995 and by more than 50 percent in the first half of 2006 alone. China's main focus is on developing relationships with Africa (Economic Report on Africa, 2007).

It is important to note that the growth of Africa's exports is narrowly correlated with the growth of its major commodity exports – oil, industrial as well as precious metals, tropical woods, and cotton - to China and India. Africa is linked to the Asian drivers' demand for primary commodities via two channels, namely raw material prices (which are increasingly governed by China's net import demand) and through the growing trade dependency of Africa on China and India. Africa's income terms of trade may well have benefited from Asia's emergence as a net rise in the demand for raw commodities has translated into higher export unit prices, and as urban consumers gain from cheaper consumer goods and investors benefit from cheaper capital goods (Goldstein *et al*, 2006).

The value of trade between China and Africa increased by an average 24 percent between 1995 and 2007, with total trade (imports and exports) of approximately US$ 74 billion in 2007 (Fundira, Africa-China trading relationship, 2008).

- Imports into China from Africa increased by 27 percent over the review period while Chinese exports to Africa rose by a lesser 23 percent. This resulted in a small trade deficit for China with Africa for 2007 (US$ 1.1 billion)
- Angola (19 percent) and South Africa (19 percent) were among the biggest African trading partners for China, accounting for 38 percent of all African trade with China in 2007. The China- Africa trade increased by

25 percent between 1995 and 2007, in line with the overall increase in the value of China trade with Africa for the review period.

During 2006, Indian imports from Africa totalled US$12.6 billion while exports to Africa were US$9.5 billion (The African trading relationship with India, 2007). There has been a very significant increase in both imports and exports since 2003, as Table 11 depicts.

Table 11: India's trade with Africa

Year	Imports from Africa (US$ billion)	Exports to Africa (US$ billion)
1999	6.0	2.0
2000	3.0	2.2
2001	2.5	2.5
2002	3.0	3.0
2003	3.0	3.5
2004	3.0	4.5
2005	4.5	7.0
2006	13.0	9.5

Source: http://www.tralac.org/pdf/20070717_The_AfricanTrading_Relationship with india.pdf

The increase in trade with the east requires efficient access to the Indian Ocean. Similarly, landlocked countries, in Central Africa (SSA), trading with western economies need more access to the Atlantic Ocean.

Generally SSA exports face trade barriers, such as high tariffs and taxes that make it difficult for the products to compete in important markets globally.

8 The market potential

As the economy in SSA grows, so do the trade flows. This section pays attention to capacities (current and potential capacities) of all considered transport modes.

8.1.1 Ports

Ports traditionally form gateways to their countries. The political situation in some countries and the poor conditions and operating efficiency of most ports resulted in reduced traffic at ports, in spite of the port's national or international significance. This implies that most ports operated below their design capacity. Port volumes are as recorded below for 2007.

Table 12: Capacity and utilisation of major ports in SSA (excluding South African ports)

Port	**Capacity (tons/annum)**	**Utilisation (tons/annum)**
Mombasa	250,000TEUs	600,000 TEUs (2007)
Dar-es-Salaam	10.1 million	7.6 million (2005/06)
Nacala	1 million	30 000 (2005)
Beira	3 million	1.4 million (2004)
Maputo	20 million (Ultimate)	6.6 million (2006)
Lobito	3 million	1.4 million (2006)
Walvis Bay	Information not available	2.5 million (2005)
Mtwara	400 000 tons	149 769 (2005/06)
Matadi	Information not available	1.7 million tons (2006)

Sources:

Mombasa - KPA website
Dar-es-Salaam - Tanzania ports website
Nacala - Port of Nacala website
Beria - Port of Beira website
Maputo – Mpumalang province freight transport data bank and MCLI presentation
Lobito – UK Reuters, 2007
Walvis Bay - Namport website
Mtwara - Tanzania ports website
Matadi - Otal/DRC website

8.1.2 Roads

Current road flows for SSA (recorded in 2007) are set out below. The volumes represent the total flow of both imports and exports on the roads.

Table 13: Estimated road volumes per country

Country	***Road volumes (excluding metropolitan)*** *(Million tons/ annum)*
Angola	50.4
Botswana	18.8
DRC	14.1
Kenya	59.3
Lesotho	4.3
Malawi	5.9
Mozambique	13.4
Namibia	10.8
South Africa	553.0
Swaziland	3.6
Tanzania	34.7
Uganda	Information not available
Zambia	30.1

Comparison of the current and potential road volumes for SSA countries is graphically represented below.

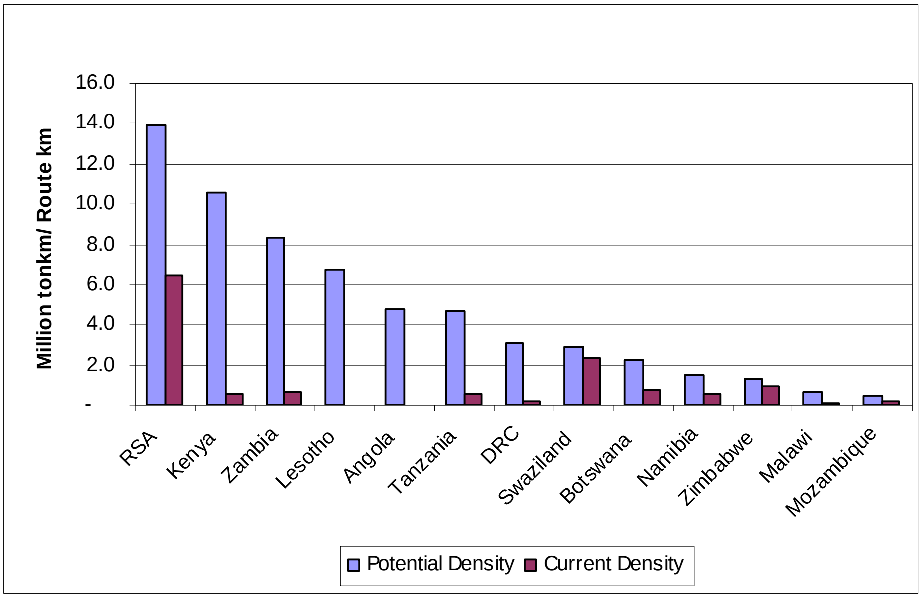

Figure 7: Current and potential road density

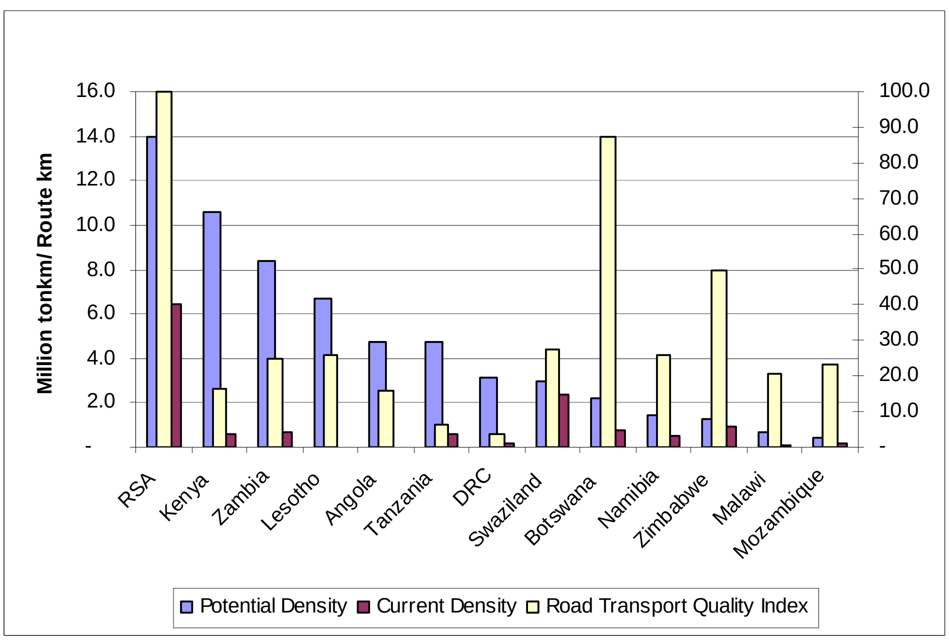

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Figure 8: Current and potential density vs. road transport Quality Index

8.1.3 Rail

Rail flows for selected SSA countries (recorded for 2007) are set out below.

Table 14: Estimated rail volumes per country per country

Country	***Rail volumes*** *(Million tons/ annum)*
Angola	0.0
Botswana	1.8
DRC	0.5
Kenya	1.5
Lesotho	0.0
Malawi	0.4
Mozambique	4.0
Namibia	2.1
South Africa	178.0
Swaziland	3.9
Tanzania	2.0
Uganda	Information not available
Zambia	1.2
Zimbabwe	5.3

Comparison of the actual and potential rail volumes for selected SSA countries is graphically represented below.

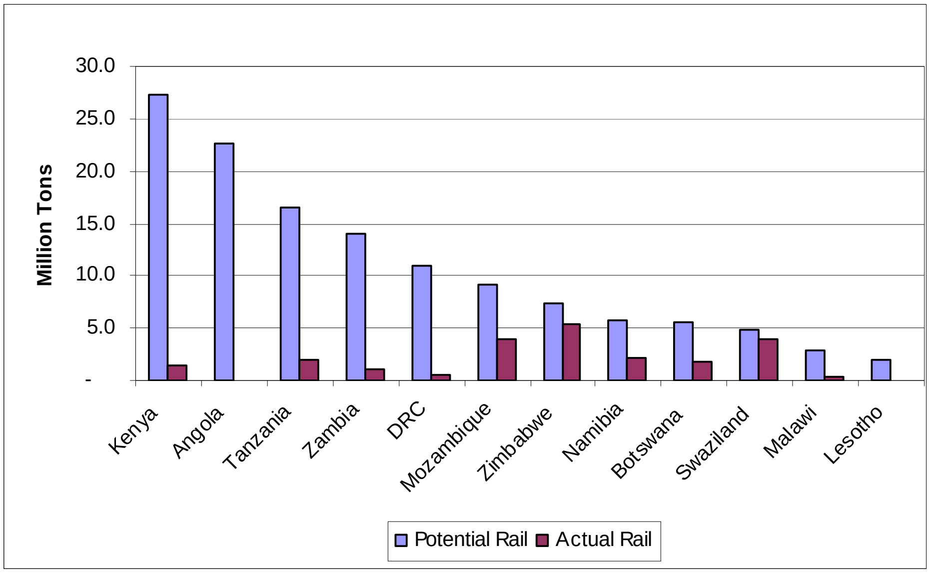


Figure 9: Current and potential rail volumes

8.1.4 Cross border infrastructure

Cross border infrastructure is critical in promoting regional integration, trade and investment because it opens up areas of main economic activities, such as mining, tourism, agriculture and manufacturing, in addition to serving landlocked countries.

8.1.4.1 Transport and development corridors

No volumes are available for transport and development corridors.

8.1.4.2 Inland waterways

No volumes are available for inland waterways.

9 Regulatory environment

This section elucidates the due process of regulation surrounding the transport sector in SSA. It entails all relevant legislative aspects (laws / regulations, policies, agencies or organisations that have the responsibility over the legislation (policies and regulations) for the transport (specifically freight) sector.

9.1 Economic freedom

It can be argued that economic reforms translate into legislation that can be attractive or repellent for both domestic and foreign direct investment.

According to the Heritage Foundation team, economic freedom can be defined as that part of freedom that is concerned with the material autonomy of the individual in relation to the state and other organised groups. Individuals are economically free when fully in control of their labour and property. This freedom is related to political freedom.

The 2008 Index of Economic Freedom covers 162 countries across 10 specific factors of economic freedom. The Index of Economic Freedom is an average of 10 individual freedoms, each of which is vital to the development of personal and national prosperity. Some of the freedoms measure the extent of an economy's openness to investment or trade; some assess the liberty of individuals to use their labour or finances without restraint.

The 10 Economic Freedoms are (2008 Index of Economic Freedom, p40-41):

- **Business freedom**
  - The ability to create, operate, and close an enterprise quickly and easily (burdensome, redundant regulatory rules are the most harmful barriers to business freedom)
- **Trade freedom**
  - A composite measure of the absence of tariff and non-tariff barriers that affect imports and exports of goods and services
- **Fiscal freedom**
  - A measure of the burden of Government from the revenue side. It includes both the tax burden in terms of the top tax rate on income (individual and corporate separately) and the overall amount of tax revenue as a portion of gross domestic product (GDP)
- **Government size**

- As defined to include all Government expenditures, including consumption and transfers. Ideally, the state will provide only true public goods, with an absolute minimum of expenditure

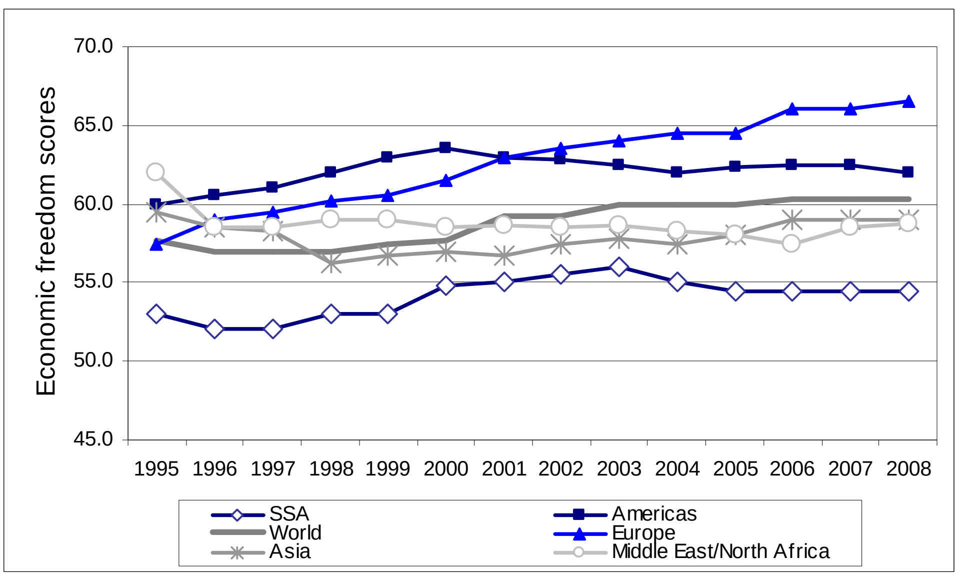
- **Monetary freedom**
  - Combines a measure of price stability with an assessment of price controls (Both inflation and price controls distort market activity. Price stability without micro-economic intervention is the ideal state for the free market)
- **Investment freedom**
  - An assessment of the free flow of capital, especially foreign capital
- **Financial freedom**
  - A measure of banking security as well as independence from Government control. (State ownership of banks and other financial institutions such as insurer and capital markets is an inefficient burden, and political favoritism has no place in a free capital market)
- **Property rights**
  - An assessment of the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state
- **Freedom from corruption**
  - Based on quantitative data that assess the perception of corruption in the business environment, including levels of Governmental legal, judicial, and administrative corruption
- **Labor freedom**
  - A composite measure of the ability of workers and businesses to interact without restriction by the state.

Taken together, these 10 freedoms offer an empirical depiction of a country's degree of economic freedom. According to the Heritage Foundation team a systematic analysis of the 10 freedoms has demonstrated that economic freedom is the key to creating an environment that allows a virtuous cycle of entrepreneurship, innovation, and sustained economic growth and development to flourish.

High economic freedom scores approaching 100 represent higher levels of freedom. The higher the score on a factor, the lower the level of Government interference in the economy. Thus economies with higher levels of economic freedom enjoy higher living standards.

9.2 Economic freedom as an implication of regulation

SSA's overall level of economic freedom is weaker than any other world region and has stagnated over the years. Nevertheless, there are some success stories – these usually involve countries with greater freedom and high GDP per capita.



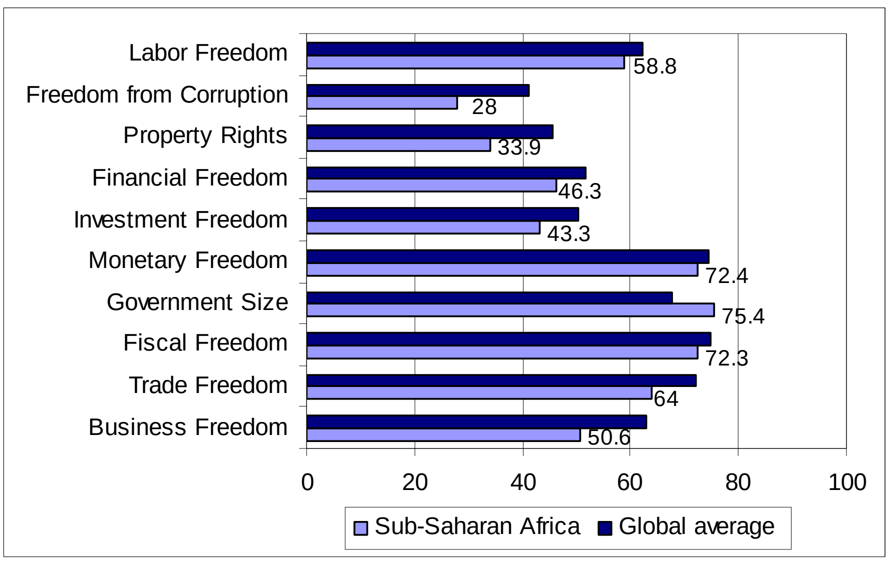
Source: Economic index 2008

Figure 10: Economic freedom – World average vs. regions, 1995 to 2008

The dip in the score for SSA in 2005 is largely caused by Zimbabwe, the third largest of countries measured in the world that deteriorated rapidly; where Government interference in the economy, poor economic management and total lack of monetary freedom is causing a systemic collapse of the country.

The negative effect of repressed economies can be illustrated by comparing the economic freedom score of Ghana and South Korea. Both these countries had a GDP per capita of US$400 per person in 1960. Ghana's current GDP per capita is US$2500 per annum compared to US$25000 of South Korea. South Korea ranks 41 in the global economic freedom score compared to Ghana's rank of 94. Most analysts indicate that the level of development, education and resources were the same for both countries in 1960 and that the difference is mostly attributable to economic freedom discrepancies.

Figure 11 below depicts the ten economic freedoms specifically in SSA compared to the global average.



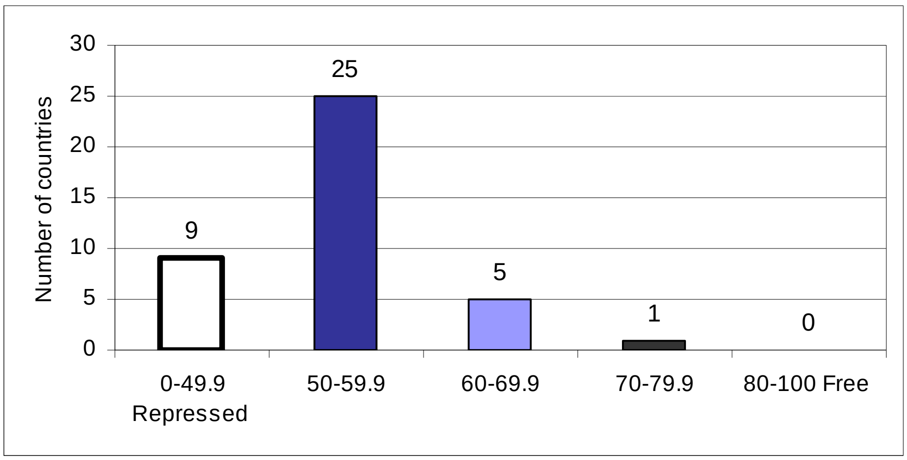
Source: Economic index 2008

Figure 11: Ten Economic Freedoms in SSA

When considering investments into this region which has already been identified as having the worst economic repressive regimes in the world, the ten sub-items of this index should also be taken into account. Two of the most critical items that are often highlighted, i.e. corruption and property rights. These are not only the lowest for SSA but the gap between these items and global average is also the biggest.

Unlike regions that have a diverse range of free-market economies, in SSA there are only distinctions among less free economies. A majority of nations are ranked “mostly unfree,” with “moderately free” economies outnumbered by “repressed” economies.

Nine of the 20 countries ranked “repressed” around the world are located in SSA.



Source: 2008 Index of Economic Freedom Figure 12: Distribution of Economic Freedoms in SSA

The degree of economic freedom informs an assessment of the success of regulation. The donors have got this as the top priority. These parties want to address regulation because they understand that the management of regulation will influence economic freedom. In the light of this drive to improve economic freedom, regulation now needs to be discussed.

9.3 Funding and regulatory framework SSA.

This is one of the key benificiaries of global aid and development inititaives. Various countries, organisations and agencies contribute to the development of SSA, making the funding and regulatory environment a very complex and confusing environment. This also leads to regional integration and alignment challenges.

Although there is a plethora of funding and development agencies and organisations involved in SSA, there are those whose contribution, participation and presence is quite noticeable. Figure 13 below provides a broad outline of the major funding and development frameworks operating in SSA in the development of infrastructure:

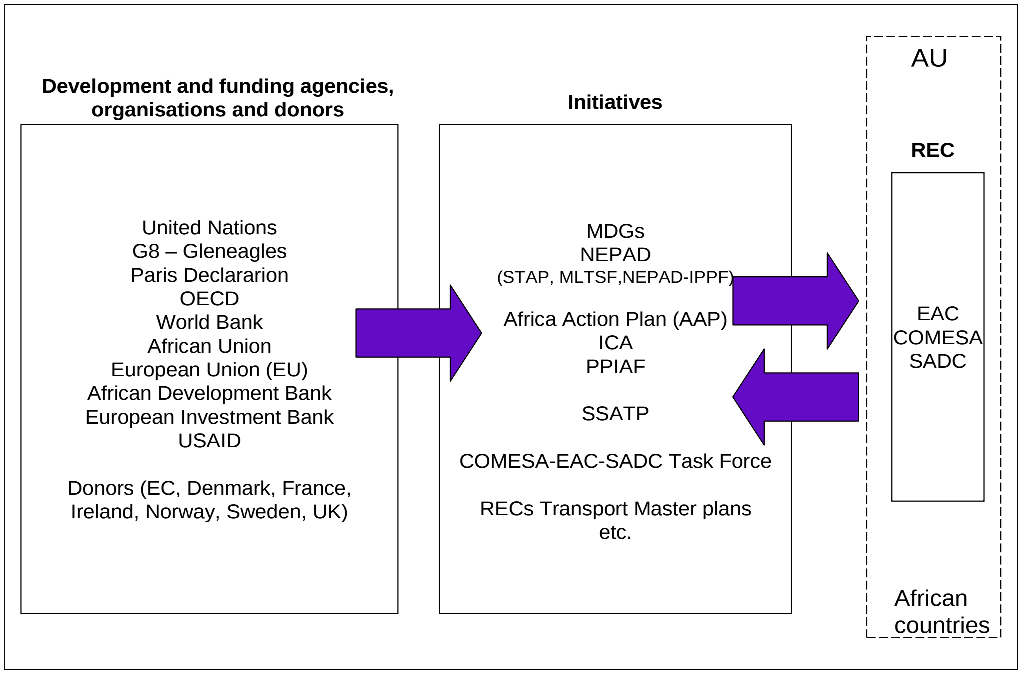


Figure 13: Outline of the major SSA funding and development framework

The development and funding organisations coordinate efforts through the establishment of different organisations, or the implementation of specific initiatives to address the transport (infrastructure) needs in the SSA countries. In parallel, Regional Economic Communities (RECs) are developing master plans, joint initiatives, task forces and groups to address country specific and regional transport (infrastructure) needs.

The World Bank states clearly that the World Bank Group alone cannot address SSA's needs. Partnerships at country, regional and global levels are needed. Global development alignment and focus was initiated in September 2000 at the United Nations (UN) Millennium Summit. World leaders agreed to a set of time bound (2015) and measurable goals and targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. The goals were termed the Millennium Development Goals (MDGs). The MDGs provide a framework for the entire United Nations system to work coherently together towards a common end.

The following MDGs where identified (United Nations Department of Public Information, 2002):

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a global partnership for development.

Infrastructure and the development of infrastructure play a vital role in the achievement of these goals.

The challenges for the global community, in both the developed and developing world, are to mobilising financial support and political will, re-engaging Governments, re-orienting development priorities and policies, building capacity and reaching out to partners in civil society and the private sector. UN agencies, the OECD Development Assistance Committee, World Bank and the International Monetary Fund, are working together to support Millennium Development Goals (MDGs) for every developing country. These actions paved the way for new and integrated initiatives to address the challenges facing SSA (but also Africa as a whole). The Global funding and development organisations and communities designed different “initiatives” to address these challenges and to support the RECs. Through these principles of coordination and integration the SSA RECs are also moving towards establishing “initiatives” to address infrastructural challenges (UN Department of Public Information, October 2002)

In order to understand the different role players, their objectives and actions towards infrastructure in SSA, a brief explanation of the important organisations follows.

9.3.1 Development and Funding agencies, organisations and donors

There are several participatory structures established at local, regional, continental and international level to encourage sustainable economic growth, infrastructure development and poverty alleviation (through income generation, employment and decent jobs).

Development led by SSA communities is regarded as the answer to disadvantaged regions. This “bottom-up” approach ensures that local communities become participants in their own development rather than the objects of development. A partnership between national and international stakeholders led to the establishment of the Paris Declaration.

Although development initiatives were in place before the Paris Declaration (as early as 2001), the main foundation was set by the Paris Declaration.

9.3.1.1 Paris Declaration

Ministers and other high-level officials of about 90 developed and developing countries, and heads/officials of 27 aid agencies, endorsed the Paris Declaration on Aid Effectiveness in March 2005. The Partnership commitments were organised around five key principles:

- Ownership
- Alignment
- Harmonisation
- Managing for results
- Mutual accountability

The Paris Declaration takes its place as one of the milestones in the global effort to increase how effectively development resources are used — a chain of commitments and efforts rooted in the 1990s, and extending from the

Millennium Summit (2000), which set out the Millennium Development Goals; the Monterrey Conference (2002); the Rome High-Level Forum on Harmonisation (2003); and the Marrakech Roundtable on Managing for Results (2004) (World Bank, Paris Declaration Endorsed, March 2005, p1). The Paris Declaration lays down a practical, action orientated roadmap to improve the quality of aid and its impact on development. As a result, the G8 and key multilateral agencies, namely the World Bank, African Development Bank, European Commission and the European Investment Bank established the Infrastructure Consortium for Africa (ICA) in 2005 in order to increase focus on attention to Africa's infrastructure needs. More information on ICA is set out in Par 9.3.2.3. For a list of participating organisations and countries refer to Addendum A.

9.3.1.2 African Union

The African Union (AU) is an inter-Governmental organisation consisting of 53 African states. The AU was established in 2001, as a successor to the amalgamated African Economic Community (AEC) and the Organisation of African Unity (OAU). The purpose of the union is to help secure Africa's democracy, human rights, and a sustainable economy, especially by bringing an end to intra-African conflict and creating an effective common market.

The AU vision is based on the common vision of a united and strong Africa and on the need to build a partnership between Governments and all segments of civil society, in particular women, youth and the private sector, in order to strengthen solidarity and cohesion amongst the people of Africa. Hence the objectives of the AU are to:

- Achieve greater unity and solidarity between the African countries and the people of Africa
- Defend the sovereignty, territorial integrity and independence of its Member States
- Accelerate the political and socio-economic integration of the continent
- Promote and defend African common positions on issues of interest to the continent and its people

- Encourage international cooperation, taking due account of the Charter of the United Nations and the Universal Declaration of Human Rights
- Promote peace, security, and stability on the continent
- Promote democratic principles and institutions, popular participation and good governance
- Promote and protect human rights in accordance with the African Charter on Human and People's Rights and other relevant human rights instruments
- Establish the necessary conditions which enable the continent to play its rightful role in the global economy and in international negotiations
- Promote sustainable development at the economic, social and cultural levels as well as the integration of African economies
- Promote co-operation in all fields of human activity to raise the living standards of African peoples
- Coordinate and harmonize the policies between the existing and future RECs for the gradual attainment of the objectives of the Union
- Advance the development of the continent by promoting research in all fields, in particular in science and technology
- Work with relevant international partners in the eradication of preventable diseases and the promotion of good health on the continent.

9.3.1.2.1 New Partnership for Africa's Development (NEPAD)

NEPAD was established as a vision and strategic framework for Africa's renewal. The NEPAD strategic framework document arises from a mandate given to the five initiating Heads of State (Algeria, Egypt, Nigeria, Senegal, and South Africa) by the Organisation of African Unity (OAU) to develop an integrated socio-economic development framework for Africa. The 37th Summit of the OAU in July 2001 formally adopted the strategic framework document, with the objective of developing values and monitoring their implementation within the framework of the AU.

NEPAD is designed to address the current challenges facing the African continent. Issues such as the escalating poverty levels, underdevelopment and the continued marginalisation of Africa needed a new radical intervention, spearheaded by African leaders, to develop a new vision that would guarantee Africa's renewal (NEPAD in Brief, 2005). More information on NEPAD is later set out in Par 9.3.2.1. The AU and NEPAD play a very important role in the integrated approach to infrastructure development in Africa.

9.3.1.3 World Bank

The World Bank Group has a major role to play in facilitating the international response to the call for expanded assistance to Africa by working in partnership with other development partners to help every African country to reach as many of the Millennium Goals as possible by 2015. The World Bank developed an Africa Action Plan (AAP) in April 2005 to show how the Bank Group will work in partnership with others to help every African country to achieve the MDGs. These actions are also aligned with the Paris declaration of 2005. More detail on AAP is set out in Par 9.3.2.4.

9.3.1.4 European Union (EU)

The EU is the largest donor in Africa. Its Official Development Assistance (ODA) accounts for 51 percent of the total ODA allocated to Africa. The EU developed a comprehensive integrated and long term framework for its relations with the African Continent in 2005. The previous relationship with Africa was based on fragmented policy formulation and implementation.

The EU's priorities are to make aid effective and to coordinate donor activities. The EU's principle objective is to promote the achievement of the UN MDGs in Africa. The EU views Africa as one entity, thus it supports and initiates programs that facilitate interconnectivity at continental level to promote regional integration. The EU-Africa Partnership was established for this purpose. The EU-Africa relationships are governed by equality, partnership and ownership, with the EU also playing a political and commercial partner role.

The Partnership for Infrastructure encompasses investments in trans-boundary and regional infrastructure and their regulatory frameworks in the widest sense: transport networks (roads, railways, inland waterways, ports and airports), water and energy infrastructure and connections as well as ground-based and space-based electronic communications infrastructure and services. The Partnership for Infrastructure is based on a number of central principles:

- The Partnership's success depends on coherence complemented with the action taken at country and regional level and its long-term sustainability. Such sustainability is secured through the development of national operators and service providers as well as regional entities.
- The Partnership will ensure African ownership through close engagement with the African continental and regional institutions – the AU and the RECs – in accelerating the AU-NEPAD Action Plan on Infrastructure. Effective support for this Plan by the partnership demands a substantive increase in funding levels and the deployment of flexible methods of financing. Initially the EU will set up a task force that combines European Commission (EC) and European Investment Bank (EIB) resources and expertise open to Member States and their development financial institutions. This enables an early start up of the Partnership and provides flexibility for designing an appropriate institutional structure that seeks efficient implementation and successful outcomes. The EU task force will facilitate coordination and mobilisation of the substantial funds necessary to interconnect Africa; and through participation in other international initiatives enhance its effectiveness. In the framework of this Partnership, specific action should include identifying and address missing links and harmonising transport policies through support of the Sub-Saharan Transport Programme (SSATP). (Commission of the European Communities, Brussels, 12.10.2005, COM(2005) 489 final, EU Strategy for Africa: Towards a Euro-African pact to accelerate Africa's development {SEC(2005)1255}.

9.3.1.5 United States Agency for International Development (USAID)

USAID is directed to helping African Governments, institutions, and African based organisations in 47 African countries to incorporate good governance principles and innovative approaches to health, education, economic growth, agriculture, and environment programs. In SSA, the United States' main interests are: increasing trade and strengthening economic ties with the region, mitigating the region's HIV/AIDS crisis and recurrent food insecurity, and strengthening democracy to reduce the risk of conflict in the region.

The U.S. also plays a leading role in discussion and coordination within such international bodies as the United Nations and the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD), the World Bank, and regional multinational lending bodies.

9.3.1.6 African Development Bank (ADB)

The African Development Bank (ADB) is Africa's premier development finance institution and is dedicated to combating poverty and improving living conditions across the continent. The Bank's mission is to promote economic and social development through loans, equity investments and technical assistance.

The ADB strongly supports attainment of the MDGs. This paved the way for the development of a Bank strategy (2004-2007) that focuses specifically on poverty, agriculture and rural development, human capital and education, health, infrastructure development and regional integration.

The ADB objectives are aligned with the NEPAD initiatives. The ADB believes that greater regional cooperation in infrastructure will reduce costs; facilitate market integration; and help promote investment, particularly by the private sector. The regional member countries are Algeria, Angola, Benin , Botswana, Burkina Faso, Burundi, Cameroon, Cape-Verde, Central African Republic,Chad, Comoros, Congo, Côte d'Ivoire, Djibouti, Democratic Republic of Congo, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland ,Tanzania, Togo, Tunisia, Uganda , Zambia, Zimbabwe. There is a rising realisation among Regional Member Countries that progressive integration holds great potential for minimising the costs of market fragmentation and thus, is a precondition for integrating African economies into the global economy.

The Bank has a long history of financing regional / multi-national projects and national investments, which increase the complementarities of Regional Member Countries economies. The lessons learned from these projects identify the need for selectivity in the choice of areas of future interventions. Since multi-national projects tend to be large, costly and involve high sunk costs, the Bank pursues co-financing arrangements with other development partners and the beneficiary Regional Member Countries. The Bank is selective, concentrating on demonstration and high- impact projects that facilitate cooperation and integration confidence among participating countries. This approach call for greater emphasis on programs and projects in power interconnections, upgrading transport and telecommunications projects. The Bank’s focus is for better linkages between Regional Member Countries and improved market access, in particular for land-locked countries where these are economically sound and represent important components of regional integration programs.

Key strategic partnerships are with the World Bank, the International Monetary Fund (IMF), International Fund for Agriculture Development (IFAD), United nations Development programme (UNDP), and the European Union and active bilateral agencies and regional economic communities. (Strategic Plan 2003-2007, African Development Group, November 2002).

9.3.1.7 Summary: Development and Funding agencies, organisations and donors

Bi-lateral and multi-lateral donors are playing a pivotal role in assisting countries in SSA with the development of infrastructure; undertaking actions in the power sector, focusing on reforms to improve performance, regional transmission networks, and expansion of access in rural and peri-urban areas; in transport, focusing on rehabilitation of road networks and reform programs to establish independent financing and management mechanisms; and in water supply and sanitation, focusing on service expansion to meet the water MDG.

With just a fraction of the population of Asia, Sub-Saharan Africa receives more absolute foreign aid, both multilateral and bilateral, than any other region. The main objective for donors is to reduce poverty in middle income and creditworthy poorer countries by promoting sustainable development through loans, guarantees, risk management products, and analytical and advisory services.

Major active donors in SSA include: the World Bank Group, European Commission, African Development Bank, Overseas Private Investment Corporation (OPIC) Sweden, Denmark, Norway, Ireland, United Kingdom, France, Islamic Development Bank, and United Nations Economic Commission for Africa (UNECA), and the European Union.

Aid levels to SSA have increased. For SSA to achieve the 7 percent GDP growth rates needed to halve income poverty, SSA's infrastructure investment needs will amount to around $20 billion per year, twice as much as the region has historically been investing. Throughout the 1990s, infrastructure was largely overlooked in the allocation of official development assistance in favour of the social sectors. It is only recently, with the September 2005 UN Millennium plus 5 Summit and the report of the Commission for Africa, that infrastructure again became a top priority on the international development agenda. The World Bank estimates that African countries will need to spend the equivalent of 4 percent of GDP every year for the coming decade, just on the rehabilitation and development of roads to ensure sustainable economic growth (Boardman,2006).

The objectives and the approach followed by donors are important consideration in assessing transportation solutions in Africa. A point often missed is that transport infrastructure is crucial for poverty reduction. Studies have shown that transport accounts for nearly 6 percent of global GDP. It is therefore important that up-front planning should maximise the benefits from infrastructure projects while minimising their environmental and social costs (Boardman, 2006).

9.3.2 Initiatives

Various initiatives / vehicles have been created and developed by the different funding and development organisations in order to address the challenges facing SSA in general but also specifically for infrastructure development. A few of these initiatives are discussed below in some more detail.

9.3.2.1 NEPAD

NEPAD is designed to address the current challenges facing the African continent with the primary objectives of:

- Eradicating poverty
- Placing African countries, both individually and collectively, on a path of sustainable growth and development
- Halting the marginalisation of Africa in the globalisation process and enhance its full and beneficial integration into the global economy
- Accelerating the empowerment of women.

The NEPAD principles are:

- Good governance as a basic requirement for peace, security and sustainable political and socio-economic development
- African ownership and leadership, as well as broad and deep participation by all sectors of society
- Anchoring the development of Africa on its resources and resourcefulness of its people
- Partnership between and amongst African peoples
- Acceleration of regional and continental integration
- Building the competitiveness of African countries and the continent

- Forging a new international partnership that changes the unequal relationship between Africa and the developed world
- Ensuring that all Partnerships with NEPAD are linked to the Millennium Development Goals and other agreed development goals and targets.

The NEPAD priority is the promotion of regional integration in the continent to overcome the lack of economies of scale. NEPAD's approach is built around regional integration, good governance and public-private partnerships. A two-pronged approach for the development of infrastructure:

- **Short Term Action Plan (STAP)** to kick start the process (developed by African development Bank, in consultation with the Regional Economic Communities (RECs) and Specialised Infrastructure Development agencies and development partners)
- **Medium to long term strategic framework (MLTSF)** to complement the STAP and guide the systematic development of infrastructure in the continent. It will provide a strategic framework that will serve as the basis for defining, implementing and monitoring infrastructure development on the continent. Study is expected to be ready for reporting in 2008.

The Africa Infrastructure Country Diagnostic (AICD) Study initiated by NEPAD is sampling national level data across infrastructure sectors in 24 African countries, to generate a quantitative assessment of the state of Africa's infrastructure and creating a baseline to assess progress and address future needs. Study is expected to finish reporting in 2008.

The AICD and the MLTSF study essentially complement each other, insofar as the AICD focuses on the infrastructure situation within countries, while the MLTSF focuses on cross-border infrastructure needed to promote regional integration.

The NEPAD Infrastructure Project Preparation Facility (NEPAD-IPPF)

NEPAD-IPPF was established in 2003 with funding from the Canadian Government. In May 2005, the IPPF was transformed into a multi-donor facility.

The mandate of the NEPAD Infrastructure Project Preparation Facility is to assist African countries, Regional Economic Communities (REC's) and related institutions to prepare high quality and viable regional infrastructure projects and programs, develop consensus and broker partnerships for their implementation with the long-term goal of reducing Africa's economic marginalisation by ensuring sustainable regional economic development and integration through cooperation among African countries, donors and the private sector.

Other objectives of the NEPAD-IPPF are to support the creation of an enabling environment for private sector participation in infrastructure, and support to targeted capacity building initiatives in infrastructure development in order to enhance the sustainability of existing and planned regional infrastructure developed in the continent. The NEPAD-IPPF promotes and facilitates the preparation of regional infrastructure projects and programs approved within the context of the NEPAD Infrastructure Program.

The Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, is assisting the NEPAD (New Partnership for Africa’s Development) Secretariat in developing an online project management and reporting system to improve the coordination of regional projects in Africa, particularly in the infrastructure sector. The proposed approach involves the enhancement of an existing prototype database into a more robust information-sharing mechanism, which will be hosted and maintained by the Development Bank of Southern Africa (DBSA). MIGA consultants will also assist the Secretariat and the NEPAD unit of the African Development Bank (ADB) in collecting and organising existing information on regional projects.

With the objective of pursuing a coherent and strategic framework for monitoring the development of transport infrastructure, NEPAD emphasises the formulation of sub-regional strategies and an Africa regional strategy.

9.3.2.2 Sub Saharan Transport Policy Program (SSATP)

SSATP was launched by a joint initiative of the World Bank and the United Nations Economic Commission for Africa (UNECA) in 1987. The purpose of the organisation was to improve transport sector performance by promoting policy reforms and institutional changes. The management of the programme is with the World Bank. The principles and goals of SSATP are aligned with AU/NEPAD. Regional Economic Communities (RECs) play an integral part in sharing the ownership of the SSATP.

SSATP is an international partnership of 35 Sub-Saharan Africa countries and the Regional Economic Communities of Sub-Saharan Africa. It is funded by 11 donor agencies – European Commission, Sweden, Denmark, Ireland, United Kingdom, France, African Development Bank, United Nations Economic Commission for Africa (UNECA) and the World Bank. South Africa's absence in this organisation is a major concern.

SSATP facilitates policy development and related capacity building in the transport sector of SSA. The SSATP is on its second development plan (2008-2011 Development Plan) and the focus is on the promotion of sound transport policies and strategies and to emphasise the strengthening of country and REC ownership and partnering with donor operations.

Most of the infrastructure initiatives for Africa recognise the critical role of SSATP in ensuring that investment in transport are made within sensible policy frameworks and strategies to improve access and reduce transport cost in the region. (World Bank, Sub-Saharan Transport policy Program (SSATP), Second Development Plan 2008-2011, October 2007)

9.3.2.3 Infrastructure Consortium for Africa (ICA)

Aligned with NEPAD's initiatives the G8 and key multi-lateral agencies, like the World Bank, African Development Bank, European Commission and the European Investment Bank, the Infrastructure Consortium for Africa (ICA) was established in 2005 to increase focus on and attention to Africa's infrastructure needs.

The membership of the Consortium from the African side is led by the African Development Bank while AU Commission, NEPAD Secretariat and Regional

Economic Communities participate as observers in the meetings of the Consortium.

The Consortium addresses national and regional constraints to infrastructure development through the sharing of information, project development and good practice. The ICA is not a financing agency but it acts as a platform to catalyse donor and private sector financing of infrastructure projects and programs in Africa.

The ICA estimated that the total resources available for transport (excluding South Africa) have increased from $1.9 billion in 2004 to $2.2 billion in 2006. Most of these investments are for road. Three multilateral agencies provide the bulk of this financing. (European Commission, International Development Association and African Development Bank). Regional and cross border activities have increased. Japan's support in transport infrastructure is also increasing. Private financing has been limited and linked to port and railway concessions. (World Bank, Accelerating Development Outcomes in Africa progress and change in the Africa Action Plan, April 2007, DC2007-0008).

9.3.2.4 World Bank - African Action Plan (AAP)

The AAP aims to help countries develop financing options to attract additional private and public resources and support accelerated progress towards results (Increase aid and trade in Africa).

Four pillars exist:

- Accelerate economic growth (MDG achievement)
- Building capable states
- Strengthen outcome based strategies and focus on results
- Strengthening development partnership for Africa.

The AAP's infrastructure (transport) focus is to address the expansion and upgrading of road networks and to enforce regional integration.

Many new bilateral donors and private foundations are primarily interested in sector specific initiatives as education, infrastructure etc. The World Bank's aim is to use its power and human resources to assist Governments in matching viable country plans and strategies with appropriate funding.

The report on Accelerated Development Outcomes in Africa – Progress and change in the Africa Action Plan, April 2007 indicates that there is definite evidence of governance improvements in Africa. It also states that there are definite progress on MDGs due to sustained efforts by Governments and development partners. SSA and South Asia are however not expected to achieve all the MDGs for 2015.

Progress on the four pillars:

- Accelerate economic growth (MDG achievement)
    - Progress has been best here. Good progress in establishing the preconditions for an export push, in regional integration (for example custom clearance).
- Building capable states
    - Compared to the average for all developing countries about a third of African countries have made more rapid strides in decreasing corruption, improving accountability and boosting Government effectiveness since 2000.
- Strengthen outcome based strategies and focus on results
    - Most African countries (66 percent thereof, and specifically Mozambique and Tanzania) undertook major efforts to clarify their development goals and targets, based on a medium-to-long term vision and to link these to public actions.
- Strengthening development partnership for Africa
    - Progress by developing partners at policy level, Organisation for Economic Co-operation and Development – Development Assistance Committee (OECD-DAC) has been encouraging.

The World Bank is planning to focus on the institutional framework for urban and rural transport in six countries in 2008 and to launch initiatives to support three major regional transit corridors. Twenty percent of investments are focused on rural transport.

One of the main components of the AAP is regional integration and the AAP will continue to emphasise regional initiatives in investment and policy reform.

9.3.2.5 OECD-DAC (Organisation for Economic Co-operation and Development – Development Assistance Committee)

Development challenges such as poverty, climate change, education and health makes it imperative for donors and partners countries to work together. Donors need to give their aid more predictably and efficiently.

There is definitely more of a joint enterprise for development, built around the objectives set in the Millennium Declaration (Development Co-operation report Volume 9, 2007). Most, but not all, DAC members have announced medium-term commitments to increase ODA, at least to 2010, and there is a common commitment to double ODA to Africa from 2004 to 2010.

Another significant indicator of donors' intentions is their decision to contribute to three key multilateral replenishments: the International Development Association (IDA), the African Development Fund (AfDF) and the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM). These decisions were taken towards the end of 2007, and all involve three-year funding commitments.

The OECD's Development Assistance Committee (DAC) is the key forum in which the major bilateral donors work together to co-ordinate development co-operation and to increase the effectiveness of their efforts to support sustainable development. The DAC is one of the main committees of the OECD, and has 23 members. The DAC, however, has three features which distinguish it from other committees within the OECD Secretariat. First, it meets more frequently than other OECD committees (about 15 times a year) and the Chair is based at OECD headquarters in Paris. Second, the DAC has the power to make binding recommendations in matters within its competence, to countries on the Committee as well as to the Council (e.g. DAC Recommendation on Untying ODA to the Least Developed Countries, 2001).

Third, the Chair issues an annual report on the efforts and policies of DAC members. This report is the key annual reference document for statistics and analyses on the latest trends in international aid.

The DAC holds an annual High Level Meeting and the participants are ministers or heads of aid agencies. Once a year, a Senior Level Meeting is also convened at the OECD to review the Committee's work on current policy issues. Ordinary DAC meetings are attended by Paris-based delegates of DAC members and by officials from member capitals)

9.3.3 Regional Economic Communities (REC)

There are essentially 3 key RECs in SSA:

- The Southern African Development Community (SADC)
- Common Market for Eastern and Southern Africa (COMESA)
- The East African Community (EAC).

Figure 14 below shows membership countries for the RECs.

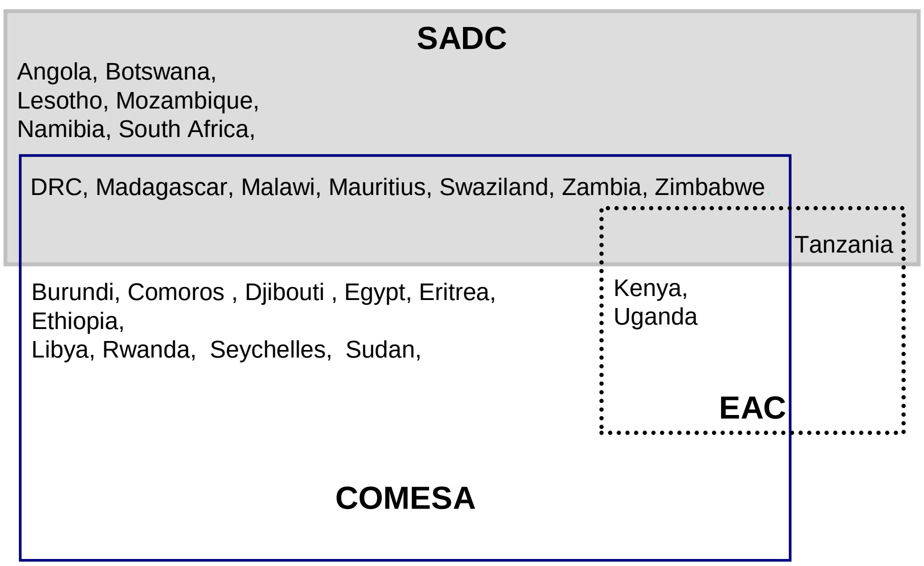


Figure 14: Country membership for different RECs

The representation of certain countries in more than one of the RECs is an interesting phenomenon and duplication and possible conflict could arise.

RECs under the African Union's guidance are moving more towards coordinating activities and programs.

9.3.3.1 Southern African Development Community (SADC)

The Southern African Development Community (SADC) has been in existence since 1980. It was formed as a loose alliance of nine majority-ruled States in Southern Africa known as the Southern African Development Coordination Conference (SADCC), with the main aim of coordinating development projects in order to lessen economic dependence on the then apartheid South Africa. In 1992 the organisation transformed from a Coordinating Conference into a Development Community (SADC). The Member States are Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe.

The objectives of SADC are to:

- Achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the people of Southern Africa and support the socially disadvantaged through regional integration
- Evolve common political values, systems and institutions
- Promote and defend peace and security
- Promote self-sustaining development on the basis of collective self-reliance, and the interdependence of Member States
- Achieve complementarity between national and regional strategies and programs
- Promote and maximise productive employment and utilisation of resources of the Region
- Achieve sustainable utilisation of natural resources and effective protection of the environment

- Strengthen and consolidate the long-standing historical, social and cultural affinities and links among the people of the Region.

SADC developed a Protocol on Transport, Communications and Meteorology with the following underlying principles:

- Developing a Regional Transport Master Plan to meet the trade and developmental requirements of the region, based on regional consensus
- Packaging of infrastructure development projects identified by the Master Plan to be market to the private sector through, among others, Private and Public Participation (PPP) options
- Implementing corridor infrastructure development to ensure high standard of road, rail and inland waterways linkages interconnecting SADC Member States
- Undertaking transport and trade facilitation along with corridors to ensure smooth passage of trucks and people with minimal delays at border posts, through application of the one stop border post concept and standardisation of customs procedures and documents
- Development of harmonised road transport multilateral agreements in respect of licensing, road user charges, vehicle dimensions, overloading enforcement, third party, control rules of fair competition and bond guarantee schemes.

Transport is a key sector as it facilitates the deepening of regional integration in SADC. The transport sector entails road transport, rail transport, ports, maritime and inland waterways, as well as air transport. The main areas of intervention in the transport sector include harmonisation of policies, infrastructure development, capacity building; and transport and trade facilitation.

The desired integrated transport objectives are based on the ability of Member States to promote economically viable integrated transport service provision in the region. This will be:

- Characterised by high performance standards and consistent levels of efficiency and reliability of all individual component parts of the transport chain
- On the basis of complementarity and co-operation between modes, modal choice optimisation, seaport hinterland optimisation and with due regard to modal advantages
- Bearing in mind the need to preserve the region's transportation infrastructure
- By encouraging the development of multimodal service provision
- Compatible with responsible environmental management.

All the above will support the development of major regional development corridors and facilitate travel between their territories.

Integrated Transport Policy

At the signing of the SADC protocol, Member States agreed to develop a harmonised integrated transport policy, which includes:

- The establishment of infrastructure, logistical systems and institutional frameworks
- The establishment of appropriate legal and financial frameworks
- The execution of research and technology transfer
- The development of effective communication networks.

All the inclusions mentioned above are to support intra- and inter- modal synergy and optimal utilisation of modes.

When implementing the transport policy, Member States are to apply the following principles:

- The right of freedom of transit for persons and goods
- The right of land-locked Member States to unimpeded access to and from the sea
- The right of coastal Member States to unimpeded access to and from land-locked Member States
- Equality of treatment of the nationals and passenger service providers of Member States with regard to the provision, access and use of infrastructure and immigration and clearance procedures
- The right of individual Member States to negotiate access and freedom of transit rights consistent with the principles of this Protocol, while recognising that individual needs of Member States may require specific bilateral arrangements
- All modes of transport are allowed the necessary economic space to operate in a self sustaining free market environment.

Most importantly, Member States shall have the right to take all measures necessary to ensure that the application of the above principles does not infringe their legitimate interests.

Supporting infrastructure

The SADC objective is to ensure broad based investment to develop, preserve, and improve viable strategic transport infrastructure within an investor-friendly environment generating adequate returns. For this reason, all Member States are to:

- Co-operate in providing, operating and maintaining transport infrastructure which supports the provision of integrated transport services, considering that infrastructure should progressively be self sustaining with funding based on a user pay principle.

- Create and maintain regulatory frameworks, investment regimes and incentives which may facilitate the provision of such infrastructure by the private and/or public sector.
- Promote the effective management of existing and future infrastructure by both public and private sector and encourage:
  - The provision of integrated multi-user ship-to-shore and shore-based trans-shipment facilities
  - Joint ventures by multinational groupings to develop commercial facilities dedicated to the handling of regional trade
  - The development of strategically located and commercially viable dry ports where appropriate
  - The provision of integrated passenger transfer facilities
  - The improvement and integration of frontier facilities, including the provision of common user facilities at frontiers
  - The provision of receiving, off-loading, storage and final distribution facilities at destination
  - The integration of infrastructure development along identified regional development corridors.

Supporting logistical systems

In order to eliminate or reduce hindrances and impediments to the movement of persons, goods and services, Member States are to co-operate in incrementally promoting the development of logistical systems by public and private sector bodies to support effective inter modal transport operations characterised by:

- Inter modal synergy
- Intra modal co-operation, especially between established service providers and small, medium and micro enterprises
- Optimal use of unitised loading units such as freight containers and pallets to transport cargoes.

The logistical systems referred to above, are to enhance the efficiency of specific regional development corridors in:

- The transshipment of cargoes
- The transfer of persons between modes
- The processing of cargoes and persons at transshipment points, frontiers and destination points
- The planning and operation of transport equipment and infrastructure.

Based on the above, Member States in particular focus on:

- The harmonisation of domestic legislation, including provisions dealing with statutory liability of service providers;
- The development of simplified and harmonised documentation which supports the movement of cargoes along the length of the logistical chain, including the use of a harmonised nomenclature
- The implementation of state-of-the-art rapid communication, information and data processing and exchange facilities to support corridor operations and supplying real-time logistical and other information to corridor users
- The encouraging of containerisation, including the balancing of supply and demand
- The improvement of rail transit times
- The enhancement of performance of rail and freight container information tracking systems
- The limitation of dwell times in ports and dry ports
- The implementation of measures to enhance the security of cargoes and protect the life and property of passengers
- The development and implementation of quality controls including safety standards applicable to all modal transport operators.

Member States are to encourage the adoption of simplified measures falling outside the sectors addressed in this Protocol which may also contribute towards the integrated transport objectives. Such measures may include:

- Clearance and pre-clearance procedures at borders, ports and dry ports for goods and pre-clearance of freight containers
- Financial requirements for import, export and transit movement of goods and road vehicles
- Clearance procedures for SADC nationals, including immigration and public health measures.

Member States shall promote the necessary liaison between their various ministries and departments to execute the provisions of the transport protocol. Members are responsible for implementing the provisions of this protocol.

Progress and planned strategies on infrastructure initiatives are:

- Liberalise regional transport markets by 2008
- Harmonise transport rules, standards and policies by 2008
- Recovery of all costs for maintenance of infrastructure by 2008 and full infrastructure investment costs by 2013
- Removal of avoidable hindrances and impediments to the cross border movement of persons, goods and services by 2015.

9.3.3.2 Common Market for Eastern and Southern Africa (COMESA)

COMESA replaced the former Preferential Trade Area (PTA) in December 1994. COMESA's aspiration is to become a fully integrated internationally competitive regional economic community; a community within which there is economic prosperity demonstrated by high living standards of its people coupled with political and social stability; and a community within which goods, services, capital and labour move freely across national geographical borders.

COMESA's member states are: Burundi, Comoros, D.R.Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

COMESA's strategy for infrastructure development is three pronged:

- Policy and regulatory harmonisation
- Facilitation
    - COMESA has adopted and implemented trade and transit facilitation instruments with the main objective of reducing transport costs.
- Development of physical regional infrastructure.

The infrastructure strategy is being done in collaboration with other RECs, AU (and through NEPAD), African Development Bank, United Nations Economic Commission for Africa (UNECA) and the donor community.

COMESA's goals for the next four years are:

- Goal 1: COMESA Customs Union is in place in 2008
- Goal 2: Negotiating Capacities in Multilateral Trade are strengthened
- Goal 3: Capacities to develop and adopt harmonised standards and enhance sanitary and phytosanitary standards
- Goal 4: Capacity to produce and analyse statistical data at national statistical bureaux are enhanced
- Goal 5: Regional policies and programs implemented by regional organisations are harmonised (SADC, IGAD, EAC, and IOC)
- Goal 6: Macro economic convergence is attained
- Goal 7: Costs of Transportation are reduced through Trade and Transit Transport Facilitation instruments
- Goal 8: Gender equality and equity is mainstreamed at all levels of regional integration and cooperation

- Goal 9: Institutional capacities to respond to emerging global and regional issues are strengthened.

COMESA is currently developing a Transport and Communications Infrastructure master plan. The master plan includes the priorities of country strategies which have a regional implication and will catalogue the region's main transport routes. It will cover all modes of transport (road, rail, air and water). In addition the master plan will examine future plans such as concessioning of the railways, funding of the infrastructure such as fuel levies and road user charges and the communications needs of the region. The master plan also identifies transport and communications corridors which are a priority for the integration and economic development of the region. (COMESA, 2007). COMESA believes that the solution for rail transportation in Africa is regional integration. COMESA countries have also realised the importance of strengthening Africa-Asian relations in order to facilitate development programs and activities.

9.3.3.3 East African Community (EAC)

The East African Community (EAC) was established in July 2000 by Kenya, Uganda and Tanzania. Rwanda and Burundi became full members in July 2007.

The EAC's aim is to address Infrastructure Development and Supportive Services by establishing:

- Roads
    - Harmonising traffic laws, including regulations and highway codes, adoption of common definition of classes of roads and route numbering system, vehicle dimensions, axle-load limits, and road transit charges and provision of laws concerning licensing, equipment, marking and registration numbers for trade transport within the community
    - Completion of rehabilitation/construction of prioritised regional roads

- Ratification of road transport Agreement
- Road Safety improvement.

- Railways
  - Undertake a feasibility Study on Tanga-Arusha-Musoma-Portbell/Jinja Railway line
  - Undertake a study on status of Railway networks
  - Establish a Joint Railway Secretariat
  - Carry through an ongoing railways concession process (Expected completion July 2007- not confirmed)
  - Develop an EAC Railways Master Plan (Expected completion December 2007 - not confirmed).
- Inland waterways
  - Ratification of Inland waterways Transport Agreement
  - Establishment of common maritime transport policy for EAC with focus on Lake Victoria
  - Strengthen the Dar-es-Salaam Maritime Institute to serve as a regional training institute (EAC Development Strategy 2006-2010).

Southern African Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC) has agreed to jointly implement transport programs and instruments to ensure harmonised regulations and seamless service across the three sub-regions (Makumbe, 2007).

9.3.4 Beginning of REC cooperation and integration

The Regional Economic Communities (RECs) of COMESA, SADC and EAC have long recognised the importance of improving trade facilitation (amongst other issues) in the context of deepening regional integration and in reducing the costs of cross-border transactions and so improving economic livelihoods. All RECs have supported infrastructural development programs.

COMESA, SADC and EAC are moving into coordinating more activities and programs between the RECs and member countries specifically through the establishment of the COMESA-EAC-SADC task force.

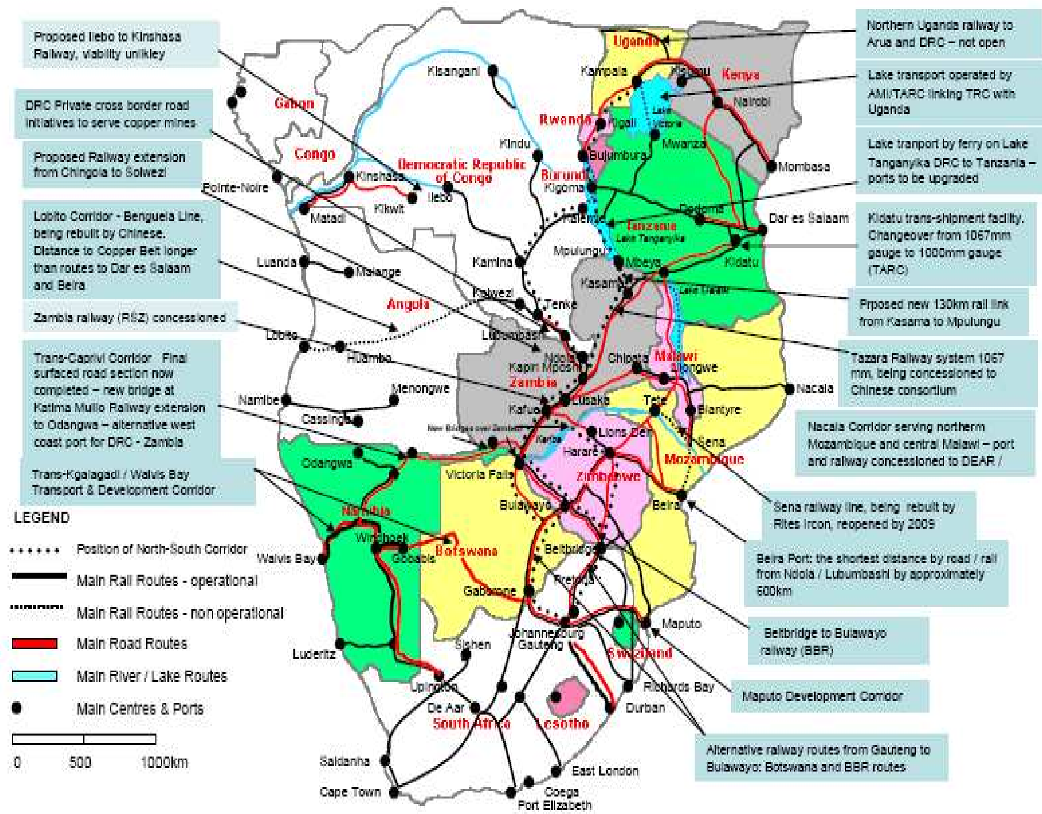
9.3.4.1 COMESA-EAC-SADC task force

COMESA-EAC-SADC task force focuses on developing a joint multimodal transport program along one or more corridors which would have both hardware and software components. The advantages of such a program are (COMESA-EAC-SADC Task Force, 2007):

- Providing a focus for co-operation for COMESA, EAC and SADC in terms of being a vehicle through which the RECs could develop and pilot or implement common systems
- Being a mechanism through which trade could be mainstreamed into economic policy at a regional level
- Creating an apex through which co-ordination on existing initiatives, required actions and their appropriate sequencing could take place
- Being a vehicle through with a regional Aid for Trade mechanism could be put into operation
- Linking a number of Enhanced Integrated Framework Action Matrices
- Being a mechanism through which donor coordination could be improved, in line with the Paris Declaration on Aid Effectiveness
- Speeding up the implementation of the NEPAD STAP and MLTSF.

The task force believes that targeted and well considered investment in upgrading and operational improvements of the sub-region's corridor transport infrastructure could bring costs down and optimise expenditure and investment. Figure 15 below, summarises the transport infrastructure issues in the Eastern and Southern region as identified by the task force.

The task force proposed a pilot project to focus on the North-South and Dar-es-Salaam Corridors to ensure that trade facilitation instruments are fully developed and rolled out along these corridors and to sequence infrastructure improvements with regulatory improvements and improved trade facilitation. If the pilot delivers the planned outcome it can be replicated in other corridors.



Source: COMESA-EAC-SADC Task Force; November 2007

Figure 15: Transport Infrastructure in the Eastern and Southern region as identified by the Task Force.

9.3.5 Private and Publc Participation (PPP)

Governments are looking to public-private partnerships (PPPs) to radically improve infrastructure networks in their countries and enhance service delivery to the people. The hope is that this development finance model — where the state shares risk and responsibility with private firms but ultimately retains control of assets — will improve services, while avoiding some of the pitfalls of privatisation: unemployment, higher prices and corruption.

In theory, PPPs may have the potential to solve SSA's profound infrastructure and service backlogs, but the process is complex, and Governments should not expect PPP's to be a 'magic bullet'.

PPPs potentially bring the efficiency of business to public service delivery and avoid the politically contentious aspects of full privatisation. PPPs allow Governments to retain ownership while contracting the private sector to perform a specific function such as building, maintaining and operating infrastructure like roads and ports, or providing basic services like water and electricity. Both sides stand to benefit from the contractual agreement. Government earns revenue by leasing state-owned assets or alternatively pays the private sector for improved infrastructure and better service delivery. Often the private sector can do the job more efficiently, which can lower prices and improve rollout. The private operator gets reimbursed either by Government or consumers for doing its work, at a profit.

Some of the negatives of PPP's are:

- The private sector is not always more efficient and the service provision is often more expensive to the consumer
- Big Government contracts are complex and demanding and prone to abuse by unscrupulous individuals, firms or politicians, unless controlled by disciplined, highly transparent procedures.

The PPPs that have been most successful in Africa have been characterised by thorough planning, good communication, strong commitment from parties and effective monitoring, regulation and enforcement by Government. PPP's are complex, demanding and time-consuming but under the right conditions, and in the right sectors, they can offer significant benefits to Governments, the private sector and consumers. PPPs have been generally more successful in sectors such as ports, telecommunications, and transport and eco-tourism projects than power and water. But with the correct regulatory framework and strong political commitment, they do offer value for money to Governments and good opportunities for investors. A recurring theme is that for PPPs to be successful, Governments need to undertake thorough feasibility studies that address the issues of affordability, value for money and risk transfer.

Most of the successful PPP projects [in Africa] are the result of very strong political commitment. That has been the underlying factor of success of all these projects, especially in countries where there has been an absence of regulatory and legal frameworks to govern these projects. The private sector has needed some guarantee or commitment from a senior political body to ensure that they are going to get a good return on their investment. Examples of PPPs in Africa that have benefited from having a political champion include the N4 toll road, which was promoted by the then Mpumalanga premier, Mathews Phosa; water and electricity provision in Gabon; the concession for Maputo port and the container terminals at Dar-es-Salaam port.

"Governments should not slow down in their efforts to utilise various forms of private sector participation in the development of infrastructure and the improvement of service delivery just because they don't know all the answers. Instead they should seek to learn from their mistakes and share their lessons learnt with the intention of improving on their performance. This is the only way that Governments who are really constrained in terms of their fiscus, will be able to effectively and innovatively continue to provide service to the public." (Farlam Peter, p66)

9.3.6 Summary of the funding and regulatory framework within SSA

For the first time in decades the AU/NEPAD and regional organisations (RECs) have provided Africa with political and economic roadmaps and a vision for the future. Global development and donor organisations support these actions and objectives as set out by AU/NEPAD and aligned actions to enforce. Africa's development is now at the top of the international political agenda and there is a broad international consensus on the basic action that needs to be taken. There is now a unique window of opportunity to give Africa a decisive push towards sustainable development.

Table15 below summarises details on the different role players in SSA and their objectives.

	Role player	Goal /objective	Alignment/ Strategy	General comments
Development and funding agencies, organisations and donors	United Nations	Focus on MDGs: Poverty, education, gender equality, child mortality, HIV/AIDS, environmental sustainability and global partnerships for development.	Global vision and focus	➢ The MDGs created the beginning of an integrated approach to Africa ➢ Challenges: mobilising financial support, political will, re-engaging Governments, re-orientating development priorities and policies; and private sector involvement.
	Paris declaration	➢ Aims to improve quality of aid and impact on development ➢ Focuses on ownership, alignment, harmonisation, management of results and mutual accountability.	Global alignment. All major role players and countries support the declaration	

	African Union	Focus on: unity and solidarity, political and socio- economic integration, international cooperation, peace, security, stability, human rights, development, education and coordination of policies between RECs	NEPAD programme to achieve goals	Integration of the different RECs to one African unity
	World Bank	Facilitate the assistance to African countries globally	➢ MDGs alignment ➢ Paris declaration ➢ AU/NEPAD alignment ➢ African action Plan to ensure implementation	Facilitating role
	European Union	➢ Aims to make aid effective and coordinate donor activity ➢ Focus on equality, partnership and ownership.	➢ MDGs alignment ➢ AU/NEPAD alignment	➢ View Africa as one entity and focus program accordingly ➢ Focus regional integration

Development and funding agencies, organisations and donors	USAID	Focus on increased trade with Africa, HIV/AID, food/poverty and strengthening the democracy	➢ MDGs alignment ➢ AU/NEPAD alignment ➢ OECD-DAC alignment ➢ World Bank ➢ Multinational lending agencies	
	ADB	➢ Dedicated to combat poverty and improving living conditions ➢ Focus on poverty, agriculture, rural development, human capital, education, health infrastructure development and regional integration	➢ MDGs alignment ➢ AU/NEPAD alignment ➢ ICA alignment	➢ Support and focus on regional and economic integration ➢ More emphasis on stronger project implementation

Initiatives	NEPAD	➢ Monitor implementation within the African union framework ➢ Focus on regional integration, good governance and PPP	➢ MDGs alignment ➢ Paris declaration ➢ AU ➢ ADB ➢ EU	Priority is the regional integration to overcome the lack of economies of scale
	SSATP	Facilitate policy development and capacity building in transport sector in SSA	➢ Initiated by World Bank and UNECA ➢ MDGs alignment ➢ Paris declaration ➢ AU/NEPAD alignment ➢ REC alignment	➢ RECs share ownership ➢ Absence of South Africa a concern
	AAP	Assist African countries to attract additional private and public resources and support for: accelerated economic growth, building of capable states, achieve and focus on	➢ MDGs alignment ➢ Paris declaration ➢ AU/NEPAD alignment	➢ Main focus regional integration and investment and policy reforms ➢ Strong road focus

		results and partnership development	➢ OECD-DAC alignment.	
		➢ Focus on Africa's infrastructure needs ➢ Address national and regional constraints to infrastructure development through information sharing, project development and good practice	➢ MDGs alignment ➢ Paris declaration ➢ AU/NEPAD alignment ➢ ADB, EC, World Bank and EIB alignment	Facilitate donor and private sector financing of infrastructure projects/programmes
	OECD-DAC	➢ Aims to encourage coordination of donors and partner countries ➢ Focus on poverty, climate change, education and health ➢	➢ AAP alignment ➢ MDGs alignment ➢ Paris declaration	Key forum for major bilateral donors to coordinate development

Regional economic Communities	SADC	Develop economic growth, reduce the distort, ensure quality of life for people and regional integration	➢ MDGs alignment ➢ AU/NEPAD alignment	Committed to the COMESA-EAC-SADC Task Force to deepen regional integration
	COMESA	➢ Believes answer to railway transportation in Africa is regional integration ➢ Currently developing a transport master plan ➢ Focus for infrastructure development is on policy and regulatory harmonisation, facilitation and development of physical and regional infrastructure	➢ MDGs alignment ➢ AU/NEPAD alignment ➢ ADB, UNECA, EU alignment	➢ Committed to the COMESA-EAC-SADC Task Force to deepen regional integration ➢ Strongest statement of all RECs re regional integration an merger into one entity = AU
	EAC	Regional integration a major focus starting the process with inclusion of Rwanda and Burundi	➢ MDGs alignment ➢ AU/NEPAD alignment	Committed to the COMESA-EAC-SADC Task Force to deepen regional integration

Table 15: Different role players in SSA and their objectives

It is evident from the above that there is global agreement and understanding for the need of infrastructure integration specifically transport integration in Africa. Most of the organisations and agencies are focussing on regional integration as they recognise that it is important to harmonise, rationalise and avoid duplication of key aspects. Most regulations and policies discussed in this section are intended to spur economic growth. Some organisations, however are still too focussed on specific regional integration and do not view Africa as one entity. The future success of Africa will be the ability to coordinate actions and programs to address infrastructure developments as a holistic Africa. The World Bank and African Unity's role is very important to coordinate and ensure achievement of this.

10 Concessions

Since the early 1990s, SSA Governments have been privatising State owned and operated infrastructure. The decision was spurred by the need to respond to international donors' pressures and recognition of the fact that the Governments do not have necessary fiscal resources to support infrastructure operations alone. Various forms of public-private partnerships have been tried in airports, seaports and railways, more rarely for roads (Pozzo di Borgo et al, 2006).

A number of countries in the region have conducted studies to determine options for privatisation taking into account their own needs. Furthermore investors' perception of high risk renders full privatisation impractical, so most private participation in transport infrastructure has taken the form of leases or concessions (Mlenga, 2003).

Two models have generally been recommended as workable in the region:

- The Vertically Integrated Concession (VIC) where the Government continues to own the infrastructure and simply leases it to the private investor to operate. A prime example of this is Transgabonais Concession (Gabon, 1999)

- The Joint Venture Concession (JVC) where the Government and the private investor jointly own shares in the company and run the entity together. An example is the Camrail concession (Cameroon, 1999).

Fixed infrastructure traditionally requires large scale investment that private investors more than often fail to deliver on their own. The upgrading and extension of networks have continued to be largely funded by multilateral and bilateral loans on concessional terms.

An important facilitator in some cases has been the insurance instruments developed by institutions such as the U.S. Overseas Private Investment Corporation (OPIC) and the Multilateral Investment Guarantee Agency (MIGA) and by the World Bank's Partial Risk Guarantee offerings over the past 15 years (Goldstein and Kauffmann, 2006).

Not all concessions in Sub-Sahara Africa are profitable. Key reasons why most concessions are failing are (World Bank, Report No. 32659, 2005):

- Some concessions are seen as a way of getting rid of capital burdens instead of as a way of getting a credible party to offer better service to an already working infrastructure item
- Involved parties not finding the right balance in the design of a concession bid between Government interests and incentives to private operators to venture into a difficult business
- Concessioning of railways or ports that are :
    - Likely to incur losses because they are hugely overstaffed, require major investment in fixed assets and equipment to attain a satisfactory operating condition
    - Inadequately compensated for uneconomic services.
- Wars and natural disasters have also led to the cancellation of several railway concessions.

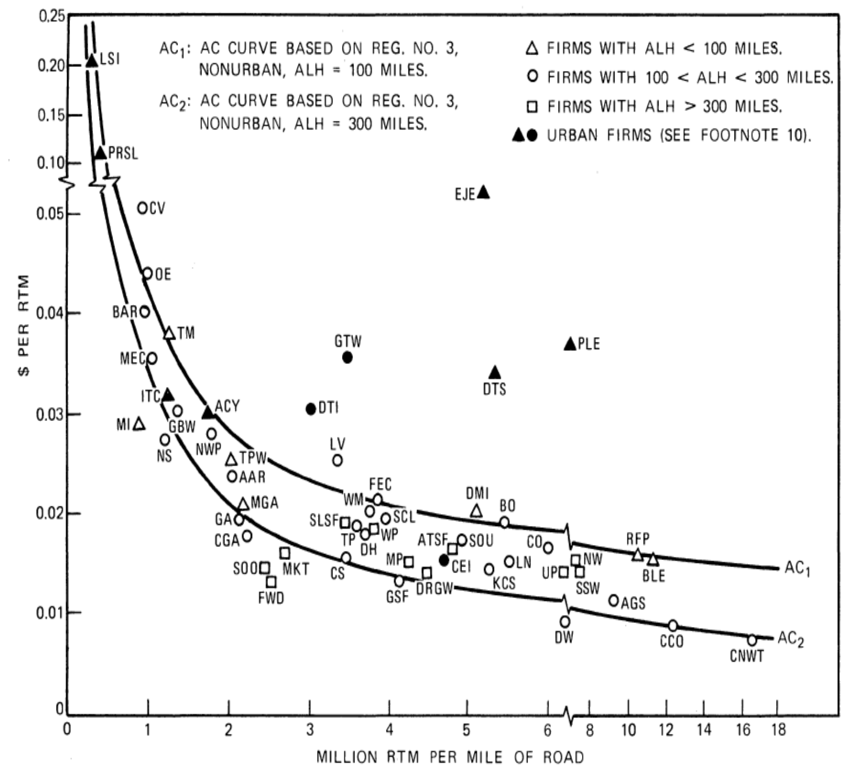
Two working rail concession examples are the Beitbridge Railway (BBR) concession and the Cameroon concession (Camrail).

Camrail is an important concession, not least because it is the only one of those concessioned prior to 2000 that has not faced major disruptions, either from war, natural causes or by termination. Its financial performance, whilst positive, has by no means achieved the margins that were anticipated in the financial projections at concessioning and, given the substantial investment program it has undertaken, its financial sustainability must be due in large part to the low-cost financing terms for loans from the development agencies and banks (Bullock, 2005).

11 Role of SA Government

South Africa's (SA) share of railways is 35 percent in Africa and 42 percent in SSA. South Africa is also dominant in the number of electrical locomotives and wagons used in the continent. The amount of rail freight tonnes moved also occurs mostly in the South African system, with about 71 percent of the African total and 91 percent of Sub-Saharan traffic (Radebe J, Minister of Transport, SA, 2005).

Although South Africa is dominating the transport infrastructure in Africa the transport cost of doing business in Southern Africa are generally higher than elsewhere in the world. The major cause of this problem is density. According to research work by Robert G. Harris (Economies of Traffic Density in the Rail Freight Industry, The Bell Journal of Economics, 1977) a direct correlation between cost and density exists which leaves poorer countries with smaller freight loads at an obvious disadvantage (Figure 16).



Source: Economies of Traffic Density in the Rail Freight Industry, The Bell Journal of Economics, 1977)

Figure 16: Harris' density curve

After many years Harris' work is still proved valid and the regression curve that he identified shows the correlation between density on the x axis and cost on the y axis. If the curve is applied to Southern African railways an interesting picture emerges (Figure 17).

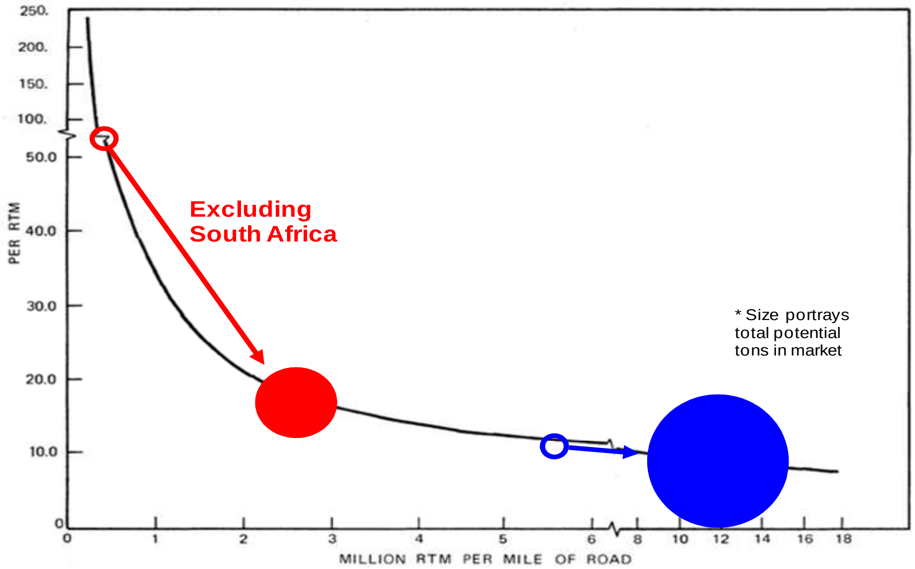


Figure 17: Harris' density curve applied to South Africa and a combination of other railways in the report

South Africa's envious position in this analysis is obvious, although if the two export lines are excluded from the analysis, less positive results (Figure 18) are evident.

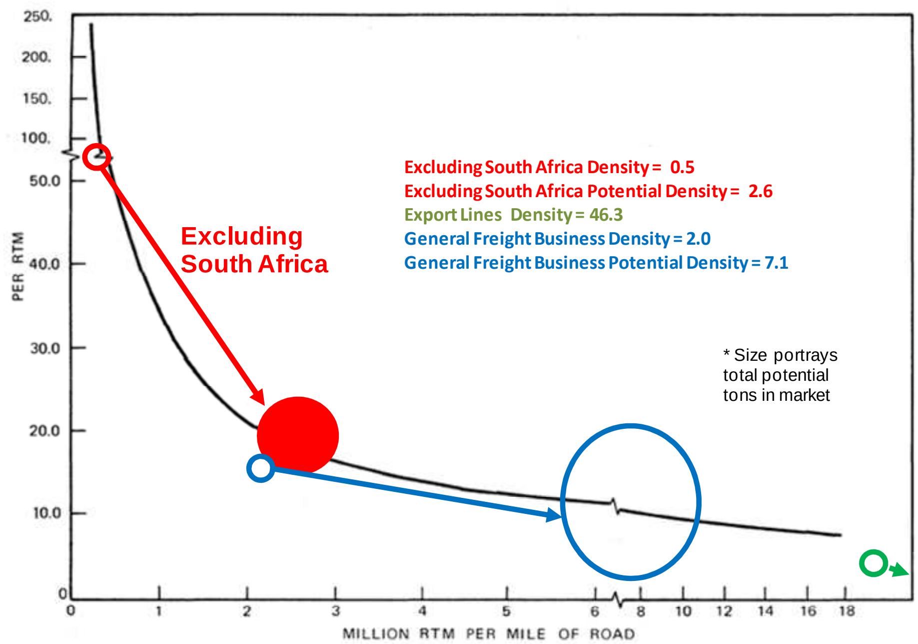


Figure 18: Harris' density curve with GFB separately indicated

The major advantage that could be gained for Africa would be to densify rail systems and Figure 19 indicates that an obvious potential do exist.

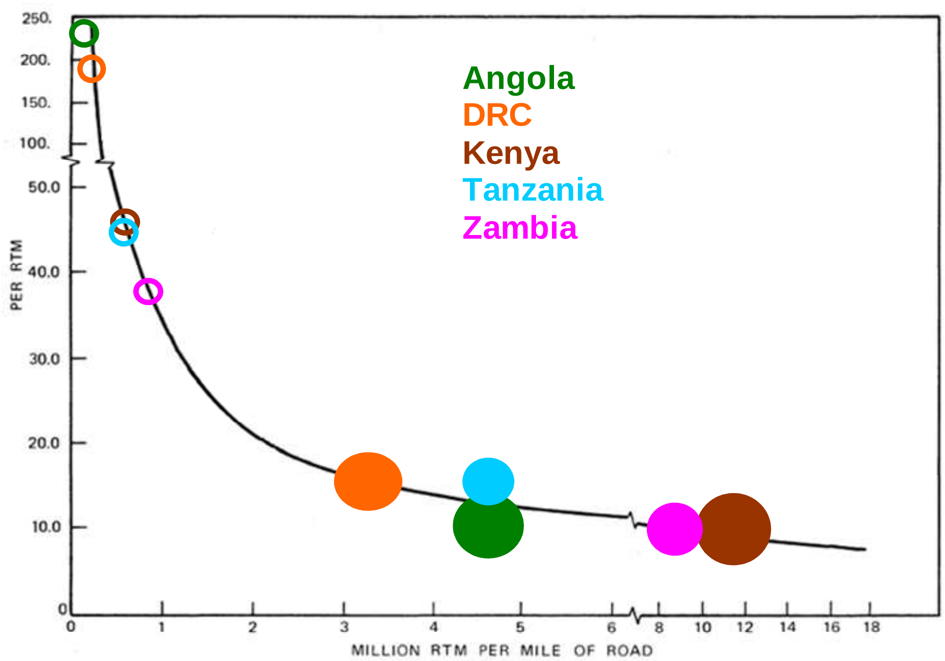


Figure 19: Harris' density curve for countries in report only

This could result in advantages for other African countries as they could gain better access to markets at lower costs. Advantages for South Africa would be an extension of the domestic system, more density on own lines and compliance with overarching economic communities objectives in terms of the MDGs.

In order to do this South Africa should be more actively involved to ensure that they play a role in the reform and integration of the transport system in Africa. South African Transport can assist Sub-Saharan Africa and Africa in various areas i.e. transport human resource development and training, operations procedures, technological development and assistance and in the safety regulatory environment, etc. This overarching approach is obviously in the ambit of Government and Government support for initiatives and active involvement of the agencies of foreign affairs, trade and industry ministries will be helpful and productive. As African countries, donors, funding organisations with the increasing involvement of private investors are focusing on concessioning and public-private ownership of infrastructure networks the concessions are always, initially, awarded by the respective issuing Governments. South Africa's Government support will therefore always be useful in these processes.

For the next decade the international focus will be on developing an integrated transport network in Africa – more specifically Sub-Saharan Africa and Governments play a major role in this. The SA Government therefore - more specifically the Transport Ministry with other Africa Transport Ministries - have a vital role to play to ensure that South Africa is involved in the solution design of the African Infrastructure system.

Any company, however, that wishes to get involved in SSA in the form of tendering for concessions or projects does not need the SA Governments' permission or involvement in a statutory role in order to comply with local (South African) regulations. This will only be necessary, for instance, if a concession is granted that will cause open access to South Africa's system from a neighbouring country, in which case South Africa's rail safety and economic regulations will be applicable.

Any company therefore needs to acknowledge that:

- Although statutory requirements do not exist, it could be useful to ensure good relations, cooperation and coordination with Government
- Ownership of the overarching transport strategy in South Africa is with the Department of Transport (DoT), but the degree to which an active role should be played is not certain. The National Freight Logistics Strategy (NFLS) is not always shared and agreed on (in fact some transport institutions/companies have shown a preference for Moving South Africa (MSA)). The NFLS and MSA do not include strategies on cross border issues. This means that consultation with the DoT is only necessary to the same level as consultation on domestic transport strategy is concerned.

If a positive business case for more involvement is proven, other international infrastructure role players will take up the challenge and this could hold some risk for the South African Freight Transport Industry and South Africa as a whole (i.e. existing South African freight traffic could be re-directed via these new networks and corridors (excluding SA) and negatively influence the economic situation in South Africa). From this perspective, the South African Government has a strategic role to play – it needs to expand its involvement in funding development organisations. The Government and the South African Freight Transport Industry should work together as a strategic alliance to expand its role in SSA transport and logistics.

Information obtained from the respondents interviewed in this research project highlights the following practical considerations:

- Local Government consulate and ambassadorial offices often prefer to be informed about negotiations. However, in the past, support has been proved to be scant and often counter-productive. These offices are not commercial, but rather politically orientated
- Normal South African foreign investment regulations (such as the notification to the Registrar of companies) are obligatory if foreign shareholding is taken up - and the Reserve Bank when capital is removed from South Africa
- The Department of Finance should be notified when Government is the shareholder, as is the case for example withTransnet
- Consideration should be given to regulatory mismatches between Anglophonic, Francophonic and ex Portuguese colonies in terms of legal frameworks, i.e. Roman-Dutch law and Latin law.

12 Ideal solution design

The South African Freight Transport Industry by it self cannot address the region's interrelated strategic challenges. However, once it understands a potential solution to the region's infrastructure and logistics challenges, it can influence the overarching solution design and also actively participate in specific projects.

12.1 The role of the South African Freight Transport Industry in the solution design

The proposed solution to infrastructure problems might be a grand design that the South African Freight Transport Industry cannot own - but can influence.

Any South African Freight Transport Company considering involvement in SSA should in its approach take the following into account:

- Regional and international trade are central to economic growth and development
- Transport is at the heart of regional and market integration
- Efficient infrastructure network attracts foreign direct investments and technology as well as generates new investments in other sectors
- African countries, individually, are too small to generate economies of scale found in larger markets
- Weak infrastructure linkages negate Africa to low level of competitiveness in the global market
- Regional infrastructure leads to larger markets capable of attracting more private sector investments.

Facilitating increased trade between SSA countries and the rest of the world is essential for SSA's future economic well-being, and it is an objective that deserves serious attention from Governments, sub-regional organisations, the African Union and NEPAD. In improving the continent's ability to trade, Governments and sub-regional organisations need to address other persistent constraints, most particularly the poor state of the continent's transport infrastructure and the laborious customs and payments procedures prevailing in many countries. These factors result in the very high costs of overland transport for exports and imports, particularly for Africa's 15 landlocked countries. These hindrances severely constrain SSA's trade growth, and have become a major disincentive to the kinds of private investment that are essential to keep the regional economies on the path of closer integration into the world economy.

Most trade facilitation initiatives undertaken so far in Africa have not shown much success. Generally, this has been attributed to factors such as non-compliance with the agreements, poor programme implementation, lack of coordination among and between countries, lack of cooperation among relevant agencies within countries, inadequate skilled labour and, most importantly, the absence of a multi-sectoral approach to trade facilitation. Africa is still faced with very high transaction costs resulting from the blockages and delays prevalent in many countries. This is sometimes aggravated by the difficulty of meeting increasingly stringent international trade standards.

South Africa is in a good position to contribute to the solution for all these problems.

12.2 Opportunities for viable investments in SSA for companies in the South African Freight Transport Industry

All SSA regions are currently looking at more efficient provision of infrastructure:

- Improved telecommunications, surface transport, and energy infrastructure
- Improvement includes far more than just the construction of physical networks such as roads, bridges, railways and microwave towers
- Physical links are critical, but so are the policies, laws, regulations, standards, and agreements that underpin them, providing the basis for their maintenance and efficient use.

The strategy of any South African Freight Tansport company interested in investing in SSA should seek to contribute (through the South African Department of Transport and the South African Government) to improving infrastructure efficiency through policy, legal and regulatory reform with the ultimate aim of enhancing prospects for economic growth in the region.

UN and NEPAD are encouraging PPP (public-private partnerships) participation to help SSA countries to harmonise their policies and practices in support of regional cooperation.

There are various opportunities in SSA for many South African Freight transport players / companies to extend their business and footprint in the SSA market. What is however evident from the research is how African Governments are keen to relieve themselves of heavy expenditure on railways, which historically represented a drain on national budgets. NEPAD's hope is that the private sector can contribute to build infrastructure, plug the funding gap and reverse the flow of public money towards railway operations. NEPAD has prioritised providing institutional support for the concessioning of railways. As Transnet is the largest railroad and heavy hauler in Southern Africa (80% of Africa's total) and connects the South African ports (also managed by Transnet) with the rest of South Africa and already connects with networks in SSA, Transnet is a excellent pratical example to illustrate possible involvement in the transport industry in SSA and are therefore used as a case study in this study.

13 Case study: Transnet involvement options in SSA

A process to develop a transport Master Plan in Africa has recently commenced. This process is an initiative of the Bureau of the Conference of African Transport ministers that met in April 2007 in Algiers and signed a

Memorandum of Understanding with the International Union of Railways (UIC). This agreement is within the framework of the continental integrated transport Master Plan of the African Union. The proposed design features South Africa as a pivotal point even though many of the new corridors that are considered to circumvent the country Transnet can collaborate with multilateral and bilateral agencies and organisations; and RECs to formulate regional transport policies. Transnet's relative advantages are:

- Its knowledge and experience of infrastructure-related issues
- Its insight into regional regulations and transport related factors
- Its capacity to pool information and to mount projects on the basis of regional studies
- Its capacity to insert a corridor project in a broad country policy framework
- Its influence on adjustment policies through its technical assistance operations.

A possible Africa strategy for Transnet is set out below.

- Firstly, to actively get involved in the developments of the ports of Nacala and Lobito, and in so doing establish an important presence in a potentially significant East-West Sub-Saharan African transport corridor. The rationale for the strategy is:
    - To circumvent the cross-border policy issues
    - To actively participate in the exports of commodities from landlocked central Africa
    - To influence the development of these potentially super ports that could take away economic activity from South African ports.
- Secondly, expanding Transnet's rail capability northwards into Africa. A key element of this strategy is the requirement to create a more southerly East-West corridor linking the ports of Walvis Bay and Maputo. The rationale for this strategy is:

- To architect and control inland rail network design
- To exploit market opportunities in central Africa where roads are under developed and over used. Railway corridors can therefore be densified to become economically viable

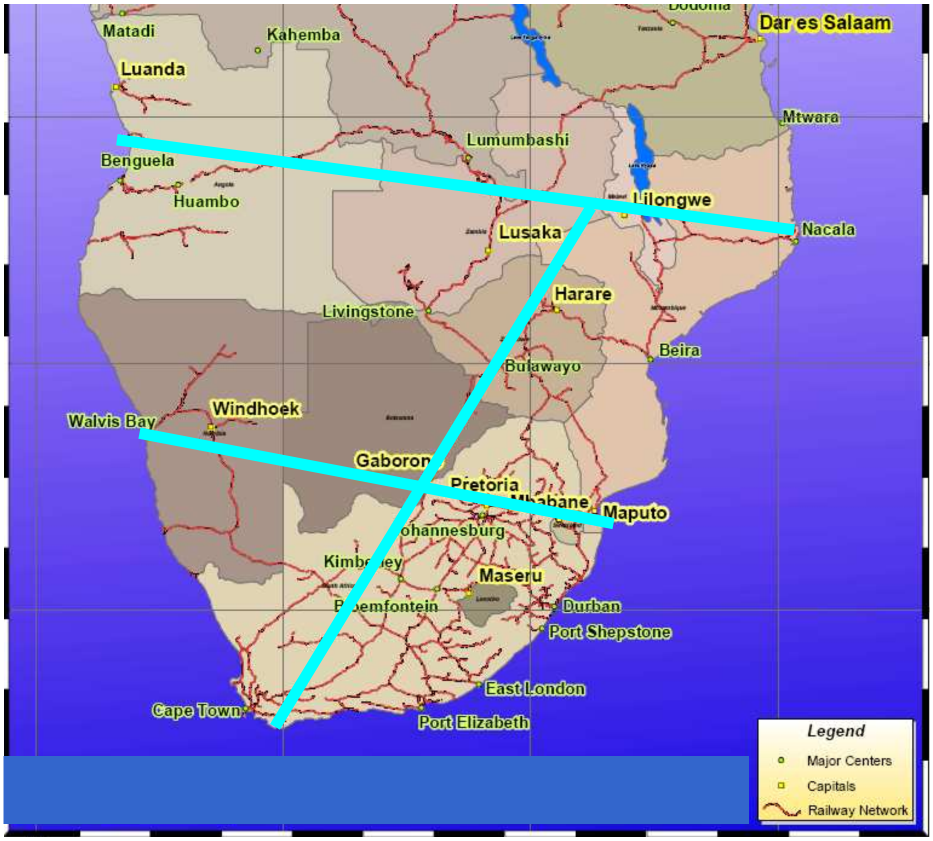
➢ Thirdly, to develop a long-term plan to integrate the two East-West corridors with the North-South corridor. This approach is anchored in the establishment of international port nodes (i.e. Lobito, Nacala, Walvis Bay and Maputo) and inland African rail nodes (Bulawayo, Livingston, Kabwe and Kapiri Mposhi).

Key assumptions for the effectiveness of these strategies are as follows:

➢ Firstly, to improve Transnet's internal operational effectiveness and efficiency in order to be leveraged to countries external to South Africa

➢ Secondly, Transnet should participate and influence the African Transport Master Plan initiative.

It is also important for Transnet to influence the alignment of the various RECs in Africa and to bring this in line with donor objectives.



Source: Relogs regional logistics

Figure 20: Southern Africa railway network

The recommended next steps in the development of a strategy are as follows:

- Conduct a pre-feasibility study for Transnet's participation in the development of the ports of Nacala and Lobito
- Assessment of missing links in the rail network system to support the above strategy (e.g. Walvis Bay, Nacala to Lobito)
- Identify specific regulatory issues as they relate to the proposed plan.

A logical point of departure for Transnet is to leverage its core competencies into new opportunities in the region. These include port developments, corridor network design and bulk long haul. The key entry strategy is possibly the development of physical infrastructure in the ports of Lobito and Nacala, the network design between the ports and the physical transportation through this corridor.

13.1 Matching of potential opportunities in SSA and Transnet's core competencies

Development assistance is necessary if Africa is going to overcome extreme poverty. However, this alone will not solve the problem. Africa must have a combination of targeted and well-structured development assistance, excellent investment, sound trade policy and strong leadership to put poor countries on the path to sustainable growth. Business in SSA needs healthy, educated workers, banking and finance systems that work, legal systems to enforce contracts and infrastructure. All this takes money and expertise, which Transnet can provide.

SSA economies are growing, albeit from a low base. This growth is primarily fuelled by the export of raw materials to the developed and developing world. The growth is impeded by the lack of infrastructure which creates an opportunity for Transnet.

13.1.1 Transnet's core competencies

The company is recognised as a dominant player in the southern African transport infrastructure. Its activities are not restricted to southern Africa but extend beyond its borders into Africa and the rest of the world.

Transnet Limited consists of eight main divisions, a number of subsidiaries, and their related businesses:

- Transnet National Ports Authority (NPA)
    - The custodian of the country's primary trading hubs, managing the most vital conduits of the country's imports and exports. Eight of the country's major seaports are controlled and managed by the NPA namely; Richards Bay, Durban, Saldanha, Cape Town, Port Elizabeth, east London, Mossel Bay and Ngqura (Coega) in the Eastern Cape.

- Transnet Port Terminals
    - Handles cargoes from six largest ports in South Africa but implements logistics management solutions for its container, bulk, break-bulk (multi-purpose) and car terminal operations.
- Transnet Rail Engineering
    - Comprises of eight product-focused business units which provide services, ranging from refurbishment, conversion and upgrades, to the manufacturing of rail related rolling stock.
- Transnet Pipelines
    - The custodian of the country's strategic pipeline assets, is currently servicing two key industries (fuel and gas) by transporting petroleum and gas products over varying distances.
- Transnet Freight Rail
    - The largest division of Transnet. TFR bases its core competency on the transportation of freight, containers and mainline passengers on rail.

Transnet handles 495 million tons (mt) of freight per year:

- Transnet Freight Rail (TFR): 181 mt
- Transnet Port Terminals (TPT): 103 mt
- Transnet National Ports Authority (TNPA): 211 mt.

Note: The stated volumes include conversion factors of 11.3mt per containers and 1.5 tons per vehicle.

13.1.2 Transnet's strengths meeting the SSA opportunities

The table below maps Transnet's strengths against opportunities that are open to investors in SSA.

Table 16: Transnet strengths vs. SSA opportunities

Opportunity	Transnet's strength
Rehabilitation of roads, rail networks, and ports (including container terminals)	Transnet has: ➢ Very efficient dry bulk ports i.e. Saldanha and Richards Bay ➢ The best rail network in Africa and the best bulk long haul rail lines in the world
Operational capabilities	Transnet has the know-how through current and completed projects
Development of transport infrastructure	They have the operational know-how through current and completed projects
Investment in transport infrastructure	Transnet has the know-how on structuring financing for infrastructure
Maintenance and preservation of infrastructure	Transnet has developed methods on how to prioritise maintenance in order to maximise volume throughput
Network design	Transnet has extensive experience in corridor development
Market development	Transnet has experience in opportunity identification and integrated solutions development

Source: Compiled by author

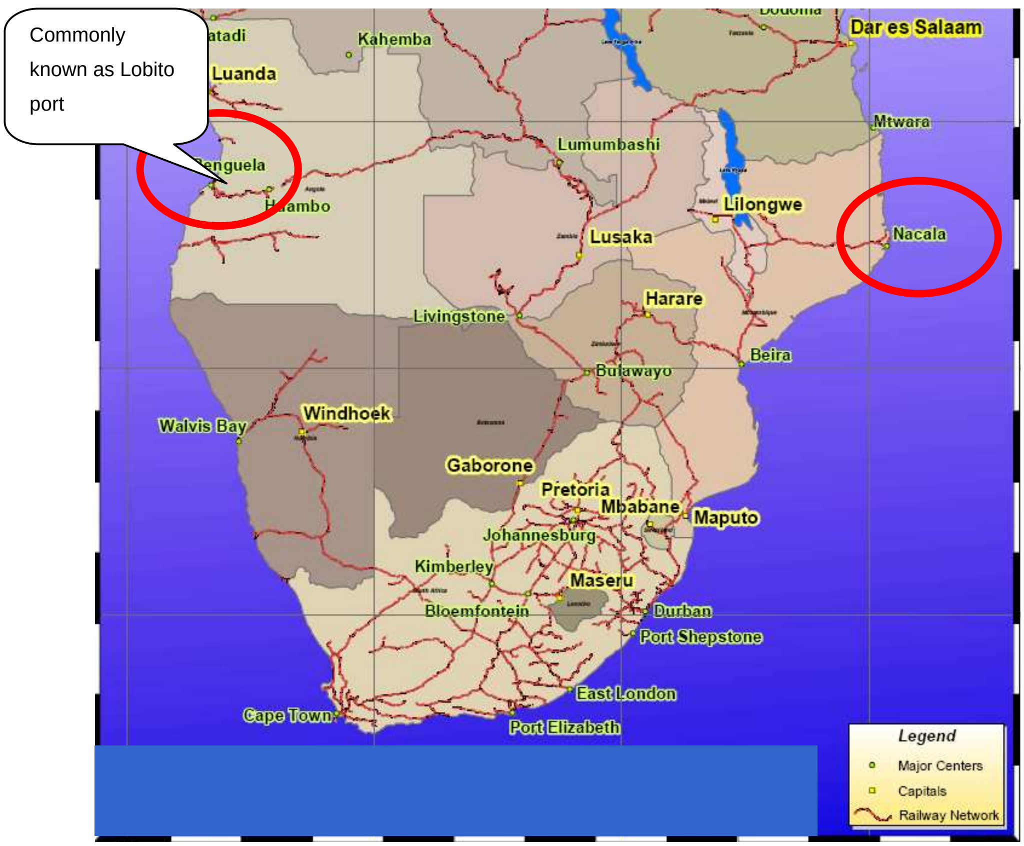
13.2 Transnet's participation

The rationale for a Transnet's proposed SSA strategy is as follows:

- The strategic role played by ports in each country's transport network (in many cases, a single port handles the majority if not all of the country's international exports/imports)

- The importance of the hard currency business generated by port operations
- The perceived profitability of ports
- The volume growth of ports in SSA (unlike railway activities before privatisation)
- The relatively limited needs of ports for significant infrastructure investments.

The key entry strategy for Transnet is to participate in the rehabilitation of the ports of Lobito and Nacala. When considering the two ports Transnet must be mindful of the activities at the Namibian ports which in some instances have the SADC support.



Source: Relogs regional logistics

Figure 21: Railway network of Southern Africa

The Nacala port (Mozambique) and Lobito port (Angola) present investment / participation opportunities for Transnet.

13.2.1 Nacala Port

The port of Nacala boasts the deepest (60m) bay in Africa, with a width of 800m. The port is situated in a suitable position in relation to commodity (crude oil and raw materials) main routes; and has export and import capacity.

Nacala Port is located in a zone of intense maritime traffic. The port's natural conditions and geographic position are not only beneficial to the hinterland. The port is also suitably located along the market and commercial routes, acting as a "Turn Bridge" and support point to the traffic that can use it.

The port rehabilitation will be a socio-economic project. The influence of the port on the regions it serves and the inverse are important factors to consider. Nacala Port is currently promoted more for the export of agricultural goods. Given the export from and imports to the areas served (i.e. northern Mozambique, Malawi and Zambia), the port also has the potential for exporting mining products; and container terminals for exports and imports (Nacala Port business case, 2005).

13.2.2 Lobito Port

Lobito port is one of Angola's main ports, and one of the best natural harbours on the west African coast with a wide and deep entrance channel from the Atlantic Ocean. Previously, the Benguela railway was closed to regional transit cargo due to security issues in Angola. Ports were neglected and sometimes attacked during the civil war that devastated Angola's economy. Before closure, Lobito was the main terminal on the Atlantic Ocean for the railways and was one of its key hubs. The port of Lobito was built to serve Angola, the DRC, Zambia and Botswana (Reuters, August 2007).

Angola is seeking more investment for the rehabilitation and upgrading of the Lobito Port Transport System. As a start, the key railway linking Angola to neighbouring landlocked countries is being reconstructed. It is hoped that the Benguela Railway will increase its capacity to roughly 3 million tones per annum. It is expected that Zambia will direct at least 20 percent of its export / import trade with Western Europe and America to this route if it operates efficiently. Currently, port–related problems are many, and unless attended to, threaten to compromise the inland transport advantage that the route has over most of Zambia's other trade outlets (Reuters, August 2007).

13.3 Activities at the Namibia Ports

The Walvis Bay Corridor, built to improve transport links between South Africa and the Namibian port of Walvis Bay, has recently attracted significant publicity. The Governments of Botswana and Zambia have started looking at Walvis Bay as an alternative exit for their exports.

When designing the solution, Transnet should take the activities at Walvis Bay into consideration.

a. Demand from Botswana

The Governments of Botswana and Namibia have agreed outline plans to construct a new 1,600 km railway from the Morepule coal mine in eastern Botswana to the Aranos coal mine (also in Botswana) and on to a new port at Shearwater Bay, south of Luderitz in Namibia. Estimated construction costs for the new port are around US$1bn.

The new railway would certainly provide an outlet for coal from both countries but would provide Botswana with an alternative to South African ports and should also encourage trade within the Southern African Development Community (SADC) (Africa Research Bulletin, No.17338, 2007).

b. Demand from Zambia

Traders in Zambia have traditionally looked either to Dar-es-Salaam (Tanzania) or the South African ports to act as conduits for the goods bound for export and sources of imports from overseas.

Zambia is currently considering Walvis Bay as an alternative. The completion of the Katima Mulilo Bridge over the Zambezi River in Zambia's Southern Province earlier in 2007 has put the most important link in the Trans Caprivi

Road Corridor (TCRC) in place. As a result, journey times from much of Zambia to Namibia have been reduced.

The Zambian Government has now announced that it is to develop a dry port at Walvis Bay to handle Zambian freight on site (Africa Research Bulletin, No.17338, 2007).

c. Other activities (Africa Research Bulletin, No.17338, 2007).

The port's operator, Namport, has set up the Walvis Bay Corridor Group (WBCG) to promote Walvis Bay as a transit port for the wider Southern African region. Rail and road links with Angola, South Africa and Botswana are being improved and new capacity is being added to both container and bulk storage and handling facilities at the Namibian port. The Southern African Development Community (SADC) has also thrown its support behind the process, in the spirit of encouraging regional integration and reducing the level of economic and infrastructural reliance on South Africa.

Namport plans to invest US$70m in increasing the handling capacity of Walvis Bay on the back of a recent increase in demand from mining companies. New cargo handling equipment is required, new berths are to be developed and the water depth of the harbour is to be increased to allow larger vessels to dock at the port.

The EU funded a feasibility study into the Walvis Bay Corridor project and has agreed to provide €25m to help develop the project. Much of the money will be used to construct a dry port at Gobabis on the Trans-Kalahari Highway. Road haulers can transport containers from South Africa via road to Gobabis, where it will be transferred to rail. Along with the Trans - Kunene and Trans - Caprivi highways, the scheme should help to bring Namibia into the heart of the evolving SADC transport network.

All these activities provide further evidence of the growing importance of the Namibian port within Southern Africa.

It is recommended that Transnet explore this opportunity. However, it is cautioned that this be done against the background of a grand design with the participation of all important role players.

As part of the solution design Transnet should:

- Build on an existing demand base
  - Respond to existing local and international demand
- Mobilse support through extensive consultation
  - Transnet should collaborate with all key stakeholders (including public and private sector), on a national and regional basis, throughout the process.

14 Conclusion

The aim of this document and study is to provide insight in to the freight transport involvement options in SSA, specifically highligting the regulatory framework and the status and development approaches and initiatives to the transport infrastructure in SSA. For any South African company investing in SSA and specifcally for Transnet it is important to realise that the SSA strategy need to include a two-fold but interrelated approach of:

- Identifying opportunities for own economic benefit and to
- Participate in the development of African transport to alleviate growing pressure on South Africa's logistic system.

This recommendation is based on the fact that Africa's infrastructure is depleted, economic growth impeded and impact of the negative regulatory environment and challenges.

In terms of the countries studied the following should be considered and responding to this situation Transnet should therefore focus on specofc actions and recommendations as highligted :

:

For **Angola** to fully take advantage of its rich national resources - gold, diamonds, extensive forests, Atlantic fisheries, and large oil deposits - Angola will need to continue reforming Government policies and to reduce corruption. The Government has made sufficient progress on reforms recommended by the IMF, such as promoting greater transparency in Government spending, and continues to be without a formal monitoring agreement with the institution.

Angola has come to depend overwhelmingly on oil for its export earnings, with the United States of America being the main market for Angola's oil. Until recently, Angola has had few trade ties with other Southern African countries. However, now that there has been a change in the political climate, opportunities for trade with other countries in the region have opened up and should be exploited. The Angolan Government has started initiatives to revive infrastructure. The Government will focus on the Benguela Railway, which links the Port of Lobito with Democratic Congo and the rest of Southern Africa's Cape Gauge network. The main transport infrastructure is the port (Lobito), the Benguela Railway line and the roads to the DRC and Zambia. The need for regional integration is strongly supported by the Angolan Government.

The Angolan Government plans to offer rail services to the private sector under concession contracts in the medium term but first need to rehabilitate the networks. Various opportunities exist in the country and with China already involved, South Africa should ensure that they play an active, participative role in the development of the Angolan and the regional transport initiatives.

Transnet - with its expertise in rail and port development and operations - should actively seek to participate in the development of the Lobito port and the Benguela railway line.

Botswana's impressive performance is one of the success stories of development in Sub-Saharan Africa. It has won international recognition for its high rates of growth, prudent economic management, political stability and an efficient welfare system. Despite this progress, Botswana still faces significant economic and social challenges, including poverty, unemployment, the HIV/AIDS pandemic, and the need to develop the private sector further. The political turmoil in neighbouring Zimbabwe is also an ongoing concern for the region.

Botswana is however committed to developing the transport infrastructure in the country specifically from a regional integrative perspective and this is supported by its strategic location/position as the gateway to the SADC region.

The **Democratic Republic of Congo** offers many opportunities for foreign investors. The country is conveniently located in the continent. The countless natural resources form its foundation and the Government has committed itself to encourage new local and foreign investment to stimulate the economy and to uplift the social environment.

The collapse of the transport system in DRC is a result of the deterioration of both physical infrastructure and the poor performance of technical institutions in charge of its management and maintenance. None of the technical institutions functions at the levels required to adequately manage the transport system, and in particular to ensure its maintenance. This is mostly due to a lack of financial resources for ten consecutive years, which has resulted in outdated technical knowledge and management tools, lack of equipment, and drain of qualified and experienced staff. Institutional strengthening is therefore vital for the long term sustainability of any newly rehabilitated infrastructure in DRC.

The Democratic Republic of Congo faces a defining period in its history (following a peace agreement in 2003 and historic elections in 2006) this is the best chance DRC has had for decades to escape a cycle of conflict and suffering and realise its potential.

During the official visit by South African President Thabo Mbeki to the Democratic Republic of Congo (DRC) on 21 August 2007, three important cooperation agreements between the two countries were signed, in the areas of transport, health and defence. The DRC and South Africa committed themselves to working together on the reconstruction and development of the DRC. In support of this agreement Transnet could consider involvement in the DRC in terms of technical assistance/support, human resource and skills development and safety and regulatory assistance.

Until the elections in 2007, **Kenya** had managed to maintain political stability in the country. This spurred interest in international investors, donors and agencies. Keeping in mind that economic growth is closely linked to efficient transport systems, the Government of Kenya was (and still is) committed to relaxing its laws, reforming it policies in order to attract investment into its transport infrastructure development programmes.

Kenya has been progressively liberalising its trade regime since the mid-1980s. Kenya's access to international markets is comparable to the regional (SSA) average and slightly better than for the average low income country.

Kenya’s weakness is the quality of transport, as the country’s railway and port systems, for example, suffer from decreased investment and inadequate maintenance. There is also wide disparity between the skill sets desired by the growth sectors and those supplied in the market. The Government of Kenya recognises that getting the institutional and regulatory frameworks in order is not enough, privatisation is also paramount.

Transnet must carefully consider its participation in Kenya. If Transnet is going to participate in the Port of Mombasa, it must be mindful of all the transport modes and infrastructure facilities affecting port operation.

The current recommendation for Transnet is to wait for macro-economic and political stability; and infrastructure rehabilitation. Once these are in place Transnet can consider participation in freight rail and container terminals (both at inland ports and the port of Mombasa). Since Mombasa is congested it may be worth Transnet’s while to investigate investment at the minor ports on the Indian Ocean.

Malawi’s civil administration is committed to the principles of good governance, transparency and accountability. Malawi’s written constitution guarantees protection of investments, irrespective of ownership. The transport infrastructure challenges remain key concerns for foreign investors and freight transport companies. Although the regulatory environment is encouraging for foreign companies, Transnet should be mindful of the transport infrastructure limitations (including high transit costs) when considering projects that require transit through Malawi.

A decade ago, the Government of **Mozambique** embarked on a series of macroeconomic reforms designed to stabilise the economy. These steps, combined with donor assistance and with political stability since the multi-party elections in 1994, have led to dramatic improvements in the country's growth rate.

In spite of these gains, Mozambique remains dependent upon foreign assistance for much of its annual budget, and the majority of the population remains below the poverty line. Agriculture continues to dominate the country's economy and employ the vast majority of the work force. Hence, a substantial trade imbalance persists, even though the opening of large projects like Mozal aluminum smelter has increased export earnings.

Many challenges still remain in achieving the desired level of socioeconomic development, but there is no question that Mozambique is a shining example of post-conflict success. Its 18 main bilateral and multilateral donors recently gave the country a major vote of confidence by pledging US$583mn in aid for 2007. Corruption remains a major problem. Nevertheless, donors have sufficient faith in the Government's ability to manage aid funds adequately that Mozambique is one of a small number of nations where aid is paid directly into the general budget. It is too early to expect Mozambique to progress out of the least developed country category, but if current trends continue, and given its rich resource endowment and openness to foreign investment, a significant regional economic powerhouse is certainly in the making. Currrent activities are focusing on the development of the Nacala corridor, mainly the rehabilitation of roads and rail. Port developments are taking place at a slower pace. Transnet should therefore consider to :

- Target multilateral and bilateral agencies to support Transnet's strong business case for the Nacala port development
    - The port of Nacala has great potential as the deepest port in Southern Africa (albeit smaller than Saldanha). The port is strategically positioned in the Indian Ocean route. The port can accommodate ships of all sizes
    - Once the port has been rehabilitated and upgraded, it can be linked to the East African market by development of a new rail line to link the Dar es Salaam corridor to the Nacala corridor.

Due to historic ties and the South Africa Customs Union, the **Namibian** economy is still largely influenced and dependent on the South African economy. It is as a result closely linked to South Africa in terms of trade and investment. Namibia as member of SADC and COMESA is very focussed on regional integration and the establishment of Walvis Bay Port as a hub for the region has direct implication for the South African economy and transport system. Therefore South Africa will have no choice but to be closely involved in any developments and initiatives in Namibia. All these activities provide further evidence of the growing importance of the Namibian port within Southern Africa. When designing the solution, Transnet should take the activities at Walvis Bay into consideration.

The long term development goal of **Tanzania** is to raise the standard of living and/or quality of life of the people through the enhancement of both the productive and non-productive sectors of the economy. To achieve this, the transport sector will need to play a critical and crucial role. The conflict in Kenya is creating a huge opportunity for Tanzania – specifically Dar-es-Salaam to enhance and direct transport through the port. Dar-es-Salaam Port handles more than three quarters of Tanzania's trade, averaging about 40 million tonnes a year, and is the largest industrial centre and business capital in Tanzania. It has rail and road links to Burundi, Rwanda, Zambia, Malawi, Zimbabwe and parts of the DRC. It also serves as a major logistics gateway to these countries because they are landlocked. As the port of Mombasa is battling with a severe congestion crisis, most shipments are being diverted to Dar es Salaam. This could see the position of the Dar es Salaam port changing drastically in the Eastern and Southern African markets. There are even predictions that it could overtake Mombasa as the main container port in East Africa. Dar es Salaam port has also been hailed as one of Tanzania's biggest success stories of privatisation.

Uganda has a reasonably well developed infrastructure comprising of a network of road, rail, and airports. The country is fairly adequately connected to its neighbours as well as the COMESA member states by rail, road and air.

The Ugandan economy has been one of the fastest growing economies in the world, with an average of 6.4 percent for the last 8 years. This reflects an increase in the potential market for communication and infrastructure-related projects; Uganda also has a fully liberalised foreign exchange regime with no restrictions on the movement of capital. 100 percent ownership of projects by foreign investors is allowed. Uganda is committed to the principles of good governance, transparency and accountability; and guarantees protection of investments, irrespective of ownership. The transport infrastructure challenges remain key concerns for foreign investors and freight transport companies. Participating in the Ugandan business opens the EAC and COMESA markets for most investors. This implies an increase in demand for most freight forwarders. The recommendation is for Transnet to note any opportunities for investment or transit in Uganda.

As **Zambia's** geographical position is in the heart of Southern Africa and is sharing borders with eight countries – Democratic Republic of Congo, Angola, Namibia, Botswana, Zimbabwe, Mozambique, Malawi and Tanzania – Zambia's focus is on positioning itself as a transit country. An important element of the adoption and implementation of a transit strategy is the development of the concept of trade and transport corridors. The most important corridors used at the moment are Copper belt-Lusaka-Johannesburg/Durban via Chirundu and Livingstone; and Lusaka/Copperbelt-Kapiri Mposhi-Dar-es-Salam. New potential corridors that could be explored are South Africa / Zimbabwe-Lusaka-Lubumbashi-Angola; Lusaka-Sesheke / Katima Mulilo-Walvis Bay Namibia; linking the TAZARA railways with the inland port of Mpulungu at Lake Tanganyika; Lusaka-Chipata-Lilongwe Malawi-Beira/Nacala Mozambique. Although the regulatory environment is encouraging for foreign companies, Transnet should be mindful of the transport infrastructure limitations (including high transit costs) when considering projects that require transit through Zambia.

Zimbabwe's recent political and economic problems have turned off the tap of foreign investment and Zimbabwe has enormous challenges facing the economy. Hardships have manifested themselves in rising inflation, erosion of real incomes, critical foreign exchange shortages, decline in savings and investment, capacity underutilisation, company closures and high unemployment, with rising incidences of corruption in both private and public sectors. Zimbabwe is however strategically located as a transit point for transportation within the region and through its membership with SADC and COMESA supports the drive for regional integration in the transport industry.

Although the political and regulatory environments are discouraging for foreign companies, Transnet should be mindful of the advantages a "working Zimbabwe" can offer. Zimbabwe has an extensive rail and road transport network linking it to principal ports in Mozambique and South Africa and to all neighbouring countries.

It is important for Transnet and the South African Government or any other South African Transport or Logistics Industry player to understand that the proposed solution to the infrastructure problems in SSA can only influence and not owned by the South African Freight Transport Industry.

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Addendum A

International Organisations adhering to the Paris Declaration are:

African Development Bank, Arab Bank for Economic Development in Africa, Asian Development Bank, Commonwealth Secretariat, Consultative Group to Assist the Poorest, Council of Europe Development Bank (CEB), Economic Commission For Africa (ECA), Education For All Fast Track Initiative, European Bank for Reconstruction and Development, European Investment Bank, Global Fund to Fight Aids, Tuberculosis and Malaria, G24, Inter-American Development Bank, International Fund For Agricultural Development (IFAD), International Monetary Fund, International Organization of the Francophonie, Islamic Development Bank, Millennium Campaign, New Partnership for Africa's Development, Nordic Development Fund, Organisation for Economic Co-operation and Development (OECD), Organisation of Eastern Caribbean States (OECS), OPEC Fund For International Development, Pacific Islands Forum Secretariat, United Nations Development Group (UNDG) and the World Bank

Participating countries

Albania, Malawi, Australia, Malaysia, Austria, Mali, Bangladesh, Mauritania, Belgium, Mexico, Benin, Mongolia, Bolivia, Morocco, Botswana, Mozambique, Brazil, Nepal, Burkina Faso, Netherlands, Burundi, New Zealand, Cambodia, Nicaragua, Cameroon, Niger, Canada, Norway, China, Pakistan, Congo D.R., Papua New Guinea, Czech Republic, Philippines, Denmark, Poland, Dominican Republic, Portugal, Egypt, Romania, Ethiopia, Russian Federation, European Commission, Rwanda, Fiji, Saudi Arabia, Finland, Senegal, France, Serbia And Montenegro, Gambia, The Slovak Republic, Germany, Solomon Islands, Ghana, South Africa, Greece ,Spain, Guatemala, Sri Lanka, Guinea, Sweden, Honduras, Switzerland, Iceland, Tajikistan, Indonesia, Tanzania, Ireland, Thailand, Italy, Timor-Leste, Jamaica, Tunisia, Japan, Turkey, Jordan, Uganda, Kenya, United Kingdom, Korea, United

States of America, Kuwait, Vanuatu, Kyrgyz Republic, Vietnam, Lao PDR, Yemen, Luxembourg, Zambia and Madagascar.