# Private Sector Commemoration of 50 years of Independence:



Infrastructure Development and Investments in Tanzania

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- Background
- Roads
- Railways
- Marine Transport
- Air Transport
- Conclusion and Recommendations



# 1.0 Background

 The Prosperity of a country depends directly upon the development and expansion of infrastructure

 Infrastructure development is an essential pre-condition for increasing agricultural and industrial production in a country.



# 1.0 Background---(Cont.)

- Infrastructural facilities often referred to as economic and social overheads consist of:-
- a) Irrigation including flood control and the artificial application of water to land
- b) Energy: coal, electricity, oil, and nonconventional sources(solar, wind, etc.).



# 1.0 Background---(Cont.)

- c) Transport: railways, roads, shipping and civil aviation.
- d) Communications: posts and telegraphs, telephones, telecommunications, etc
- e) Banking, finance and insurance
- f) Science and Technology
- g) Social overheads: health and hygiene and education



# 1.0 Background---(Cont.)

If agriculture and industry are regarded as body and bones of the economy, transport and communications constitute its nerves which help the circulation of men and materials



#### Economic infrastructure:

- Power, telecommunications, water supply, railways, urban transport, seaports & waterways, airports etc.
- Very crucial for economic growth & sustainability

#### At Independence:

- Poor economy -poor infrastructure
- 1<sup>st</sup> & 2<sup>nd</sup> Five Year Development Plans 1964 1974
- 1967 Nationalization
- Economic reforms ERPs (including infrastructure)
  - Road Sector
  - Air Transport



- Current plans-Medium Term Public Investment Plan(MPIP-2011/-2014/15) and Medium Term Development Plan (MDP-2011/12-2015/16) Address the following areas in Transport Infrastructure:
  - Direct investments on roads in regions with highest economic potential(e.g agriculture, mining, tourism) and harnessing regional integration advantages
  - Rehabilitation and upgrading of existing railway lines to standard gauges



# 1.0 Background---Cont.)

- Expanding cargo volume handling capacities of Tanzania's sea and Lake ports
- Upgrading and constructing strategic lines as a way of facilitating Tanzania becoming a **Hub** in transport infrastructure
- Encouraging private investment in the provision of marine transport services and addressing traffic congestion in urban areas



# 2.0 Road Transport

Roads play a pivotal role not only on aiding economic and social development but also in creating new links between towns and villages thereby bringing the rural areas into the mainstream of economic life.



- Sector-wide development & rehabilitation-1990s
  - Classified road networks in TZ mainland is 86,472 kms
    - trunk roads 12,786 kms and regional roads 20,226 kms
    - 53,460 kms of urban, district and feeder roads managed by PMORLG
  - First and second Integrated Roads Projects (IRPs) addressing road transport problems;
  - TANROADS established in 1997 (Manages trunk & regional roads)



# 2.0 Road Transport---(Cont.)

- Roads Tolls (Amendment) No. 2 Act 1998 established the Roads Fund for road maintenance.
- Plans underway to set fund for development projects
- Trunk roads are of strategic importance for:
  - socio-economic performance of the economy
  - fostering market linkages



#### **Situation Analysis**

#### **Performance Indicator**

- Density/quantity –total road length relative to arable land surface;
- Accessibility –percentage of rural population living within a short distance (2-kms) of an allseason passable road;
- Quality –percentage of paved roads in total road network.

#### **Actual**

- Road density in Tanzania is low at 55 kms per 1000 square kms;
- Only 28% of the rural population is living within 2 kms of an all-weather road;
- 40% of the trunk roads are paved. Less than 9% of classified network is paved, (compares poorly with other developing countries).



#### 2.0 Road Transport---(Cont.)

#### Success

- low percentage of paved roads, but remarkable improvement
- Trunk and regional road network improved significantly from 65% (in good and fair condition) in 2001 to 82% in 2005 and further to 96% in 2009
- Since 2005, rural roads improved, from 50% (in good and fair condition) to 58.5% in 2009



#### 2.0 Road Transport---(Cont.)

#### Opportunities

- Regional integration and the growing economies of landlocked countries
- EAC Road Master Plan it easy to access financial resource;
- Existence of Public-Private Partnership (PPP) legal and institutional framework;
- Government's commitment to allocate 1% of GDP to R&D.



# Challenges

- Roads overburdened due to poor railway system;
- The road fund is not sufficient to address full maintenance needs and is not being utilized effectively;
- Inadequate integration of the road networks to markets and productive areas;
- Unplanned urbanization and traffic congestion in urban areas;



#### Challenges---(Cont.)

- Poor storm water drainage, especially in urban areas;
- Institutional weaknesses in management of district and feeder roads;
- Inadequate capacity and capability of the local construction industry; and
- No room given to private developers –the government is literally doing everything

#### Still high percentage of unpaved roads

(vulnerable to damages during rainy seasons)





#### Way Forward (roads)

- Implement the road master plan;
- Develop and maintain feeder roads to connect rural areas to markets;
- Institute more efficient modalities/strategies for use of road funds;
- Overcome poor track records in infrastructure PPPs;

# Way Forward (roads)----(Cont.)

- Strengthen supervisory role;
- Enhance capacity to negotiate;
- Improve road management;
- De-clog the urban centers' traffic jam
- Open up room for private sector



# 3.0 Railway Transport

- Railways constitute the kingpin of economic development of a country
- By serving the needs of industries in the shape of transport of raw materials and finished products, they function as arteries in the communication system.



- Ideal for bulk goods and large numbers of people
- Has a low unit cost and better safety performance
- Longest serving mode of transport in Tanzania
- At independence all major railway lines were in place
  - Tanga-Mombo (1905), to Moshi (1911) and Arusha (1929).
  - Central line Dar-Tabora (1912) to Kigoma in 1914, Tabora–Mwanza (1928)
  - Kaliuwa–Mpanda (1949).
  - Branches Voi–Kahe (1924), Manyoni–Singida (1932-33), Masagali–Kongwa (1947-49) and Nachingwea Ruo–Chiluga (1949-58), and Kilosa–Kidatu (1965).
- The TAZARA Railway (Uhuru Railway) built 1970-75
  - Standard gauge 1,860 km railway line Dar –Kapirimposhi, Zambia
  - Link land locked Zambia to DSM port



- East African Railway & Harbours Corporation (1947-67)
- East African Railways operated in 1967-1977
  - Targeted passengers and goods in the three EA countries and neighboring land locked countries
- Tanzania Railways Corporation (TRC) formed in 1977
  - Heavy investment was needed to replace the EA Railways
- The EA Railways and TRC operated fairly well until 1980s.
- TRC faced serious operational problems:
  - shortage of equipment and poor maintenance
- In 1998 government specified TRC for privatization

- In 2002 -Financial & technical assistance form CIDA, KFW, DIFD, and the EU:
- TRC recovered and improved its operational performance
  - Freight improved steadily and peaked at 1.5 million tons in 2002
- TRC divestiture took 10 years
  - All financial and technical supports withered
  - railway infrastructure and rolling stock deteriorated steadily
  - a peak performance of about 1.5 millions tons of freight in 2002 dropped to merely 0.57 tons in 2007
- October 2007 TRC was conceded to a private operator,
   Tanzania Railways Limited (TRL)

#### **Situation analysis**

- RITES/TRL projections: (business plan)
  - To increase the annual freight traffic transportation to 3.14 million tones in the first ten years
  - To make profits right from the first year of its operations

#### **Actual**

- Cargo and passenger freights declined by 45% and 27% percent, respectively, in 2009
- Operational performance was 0.28 million tons in 2010, which is a 19.4% of the performance in 2002.
- No improvement as envisaged



- June 2009 RITES revised its business plan downwards from the initial targeted levels
  - The plan slashed the annual traffic freight targets to 2.0 million tons
- The new business plan was rejected and the government decided to repossess the company by buying 51% of the shares in TRL
- GoT pays staff salaries and very little amount goes to other requirements.

- Substantial decline in financial support evidenced through:
  - Dilapidated infrastructure and rolling stock;
  - Train speed has been reduced from 56kph to 30kph;
  - Mainline locomotive fleet decreased form 44 when TRL took over in 2007 to 27;
  - Unreliable locomotives due to lack of maintenance;
  - Freight wagon fleet is reduced from 1,039 wagons to 638 with poor reliability;
  - Passenger coaches fleet is reduced from 61 in 2007 to 45; and
  - The workforce is highly bloated

# Dilapidated infrastructure and rolling stock





#### Opportunities:

- Growing domestic economy and economies of the land-locked countries;
- Existing funding instruments for regional projects from multi-lateral financial institutions and PPP frameworks;



#### Way forward (railway)

- Need comprehensive plan to develop railway system;
- Push for more investment in the rolling stock (building railway wagons) –to promote employment for local engineers;
- Priority: invest in the central railway line that connects the Dar port with central, western and northern Tanzania, and with landlocked countries;
- Separating ownership and operation cum management of the railway: the government should own and maintain the infrastructure while leaving the private sector to operate;
- Rebuild (std gauge) and electrify the central line;
- Explore the possibility of electrifying TAZARA



- Ports are vital links in a country's transport resources
- Ports history closely linked with railway construction
- Tanga railway & port developed in 1893, Dar port (1905), Kigoma (1912); Mwanza, Musoma and Bukoba (1950) and Mtwara (1954)
- East African Railway & Harbours Corporation (1947-67)
- EA Harbour Corporation operated 1967-77 when EAC collapse in 1977
- Tanzania Harbours Authority (THA) was established
- The EA Harbours Cor. & THA operated fairly well until 1980s.



#### Ports cont.

- THA in financial problems -like other Parastatals
- THA was specified by PSRC for privatization in 1998, later de-specified
- Tanzania Ports Authority (TPA) formed by act Act No.
   17 of 2004 –operational in July 2006
- Main functions of the agency include:
  - Managing, developing and improving ports; managing ports;
  - Promoting the use of ports and licensing/concession of port services through PPP arrangements.
- The TPA strategy is guided by the 20 year Port Master Plan (2009-2028)



#### **Situational Analysis**

- In 1998, the entrance channel of DSM port was upgraded to a draft of 10.5 mt & widened to 140 mt accommodate ships with lengths of 234 metres
- In marine transport, efficient and cost effective services should aim at:
  - Shortening cargo dwelling time and ship's time at the port;
  - Increasing capacity utilization (adequate, optimal, & economies of scale); and
  - Higher quay and yard productivity.



#### **Efficient service indicators**

- Slight improvements
  - Ship turn around time: averaged 0.9 days (2005) worsened to 3.9 days (2008), improved to 2.3 days (2010)
  - Waiting time followed the same trend at 3.1, 6.9 and 5 days during the same period
  - The number of tons per gang per shift in 2010 doubled compared to year
     2000
  - Average berth occupancy (utilization indicator) improved to 50% down from 60% in 2008-2009. The desirable level is 50-60%.
- Impressive performance with the PPP through TICTS:
  - Productivity per crane has improved from 20–23 moves/hour/crane; dwell time has improved to 11 days in 2010 from 25.4 days in 2008
- Due to current significant increase in traffic:
  - Terminal capacity is exhausted, leading into congestion
  - Calls for additional capacity



#### **Challenges:**

- Traffic has increased significantly, putting pressure on the terminal capacity of DSM port;
- Lack of enough resources;
- Lack of priorities;
- Poor management;
- Flaw in procurement process (value for money not realized);
- Poor planning and implementation;
- Lack of alternative sources of funds e.g. access to stock market;
- PPPs strategy not clear

# An Inefficient Port





#### Opportunities:

- Potential of serving as a regional logistic **hub** to growing economies of the land locked countries;
- Outlet for outputs from agriculture and mining to regional and international markets; and
- Existence of PPP legal and institutional framework.



#### Way forward

- Implement Port Master Plan;
- Improve railway transport (the two go together)
- Prioritize activities in the master plan;
- Scale up resources and explore different financial sources;
- Explore possibility of separating the infrastructure from the operator; and
- Scale up involvement of PPPs



## 5.0 Air Transport

 Air transport has a significant role to play in economic development.

 It offers saving in time that cannot be matched by surface transport over long distances



## 5.0 Air Transport—(Cont.)

- Greater demand for air-transport is an indicator for growth in the service industry
- Ports-Railways-Roads are drivers of primary and secondary sectors( agriculture, manufacturing).
- Air-Transport is a driver and indicator of service industry.



### **Basic questions on Air Transport**

- Is air transport important for Tanzania?
- Is there a need for national airline?
- What are the requirements for national airline?
- Ownership structure (wholly government owned, mixed public/private, wholly private)?
- What role should the government play (equity stake, regulatory & service support)?



## **Basic questions on Air Transport--- (Cont.)**

- Is there a need for foreign participation (minority/majority stake, airline-non airline entity, as an operating/managing partner)?
- What step should Tanzania take to establish a national airline (an investor consortium of founder members (local?); creation of an operating vehicle and nucleus of the consortium; raising capital through IPO)?



#### 6.0 Conclusion & Recommendations

#### **6.1 Conclusions**

- Transport infrastructure development falls short of what is desirable for accelerated growth and speedy poverty reduction.
- A comprehensive approach of infrastructure development is needed as well as the scaling-up of investment to close the existing infrastructure gap which requires sizable resources
- Tapping more resources from the abundant natural resources is necessary



## 6.1 Conclusions—(Cont.)

- Private sector participation —through PPPs has to be promoted and appreciated
- Some infrastructure components to be done by the state, while others by the private sector.



### 6.1 Conclusions—(Cont.)

- High-level government support and commitment along with an appropriate policy and regulatory framework is necessary
- The private sector applauds the government for resorting to a planning horizon both in the medium and long term



#### 6.2 Recommendations

On the basis of the presentation and conclusions made the following recommendations are pertinent:



1. Increase spending on Transport Infrastructure.

The current level of transport infrastructure falls short of what would be desirable for accelerated growth and speedy wealth creation. In this regard, it is recommended that increased spending is directed towards transport infrastructure



#### 2. Scale-up Investment Towards Transport Infrastructure

To close the existing infrastructure gap requires sizable resources much more than what is currently available.

In this context it is recommended to:

- a) Tap abundant natural resources through reviewing the current contracts as well as legislative measures so as to empower the citizens
- Promote private sector participation through Public Private Partnerships(PPP) or Direct Investments in the sector



- 3. Implement the road master plan and De-clog the urban centers' traffic jam
- 4. Implement Port Master Plan
- 5. Shorten cargo dwelling-time and ship's time at the port;
- 6. Electrify both Tanzania Railways Corporation (TRC) and Tanzania-Zambia Railway Authority (TAZARA)



- 7. Push for more investment in the rolling stock (building railway wagons) —to promote employment for local engineers;
- 8. Invest in the Central Railway Line that connects the Dar port with Central, Western and Northern Tanzania, and with landlocked countries



- Make the port of Dar-es Salaam a unique hub for trade and commerce for the landlocked countries
- 10. Scale up involvement of PPPs



- 11. Implement the infrastructure components in the recently launched Medium Term Development Plan (2011/12-2015/16), which include:
  - Direct investments on roads in regions with highest economic potential and that harness regional integration advantages
  - Rehabilitation and upgrading of existing railway lines to standard gauges



- Expanding cargo volume handling capacities of Tanzania's sea and Lake ports
- Upgrading and constructing strategic lines as a way of facilitating Tanzania becoming a **Hub** in transport infrastructure
- Encouraging private investment in the provision of marine transport services and addressing traffic congestion in urban areas



## 12. Question

# Is air transport important for Tanzania?



#### **Asanteni Kwa Kunisikiliza**