



# Railways in Sub-Saharan Africa

World Bank Strategic Approach

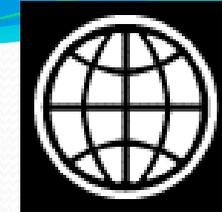
Henry des Longchamps



# The challenges

Despite large investment by both national governments and the private sector, the revival of railways sector in Africa is fragile and features:

- Limited capacity
- Poor reliability
- Weak financial performance
- Poor infrastructure density
- Under-performing concessions



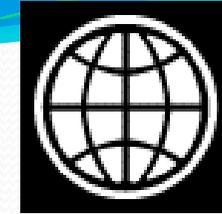
# The challenges

## In the African context

- Inadequate railways infrastructure and logistics connectivity
- Low traffic volumes
- Low productivity of assets
- Low productivity of labor
- Strong competition from road

## In the concessioning of railways systems

- Underestimation of investment needs
- Overestimation of traffic volumes
- Undercapitalization
- Inadequate human resources
- Inadequate marketing approach to transport demand



# The challenges

## In Governance

- Inadequate regulation
- Inadequate concessions contract and fees
- Inconsistencies or weaknesses in transport policies
- Unrealistic expectations
- Shortfall in financial obligations

## In previous Rail projects

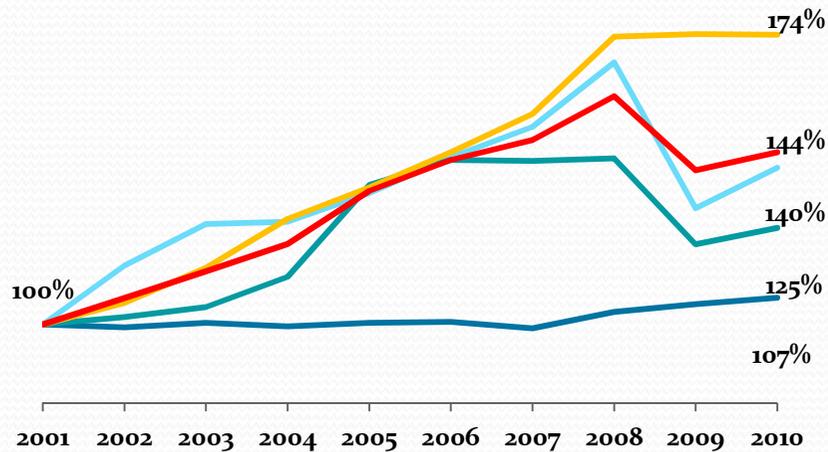
- Systematic PPP/concession strategic approach
- Shortfall in transport integration (logistics) strategy
- Shortfall in indicators and incentives for the economic sustainability of projects

# Is the rail a meaningful transport system?



## freight

Freight Traffic Evolution

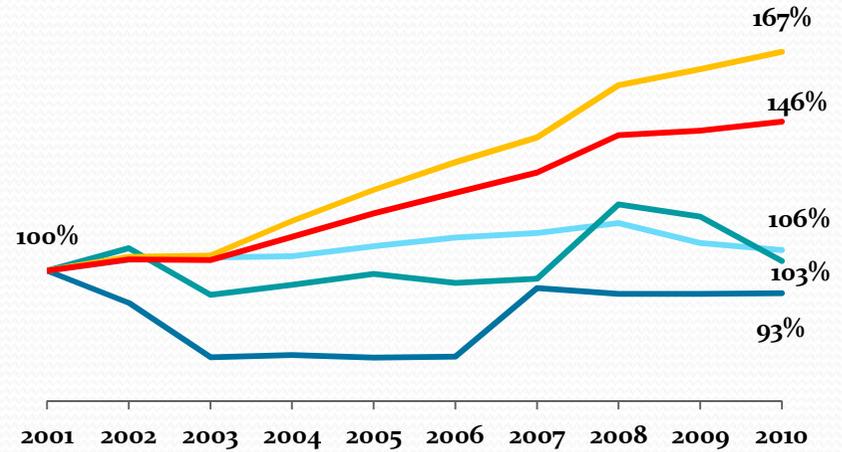


— Europe      — Africa      — America  
— Asia            — WORLD

Source: UIC Statistics 2010

## passengers

Passenger Traffic Evolution



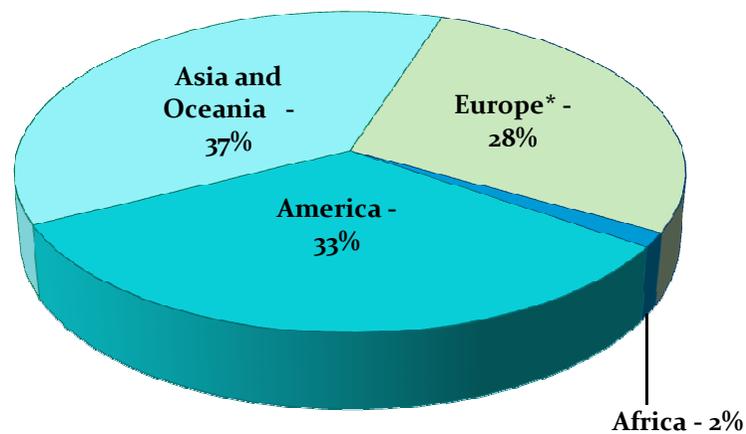
Source: UIC Statistics 2010

# How does Africa's rail traffic compare to the rest of the world?



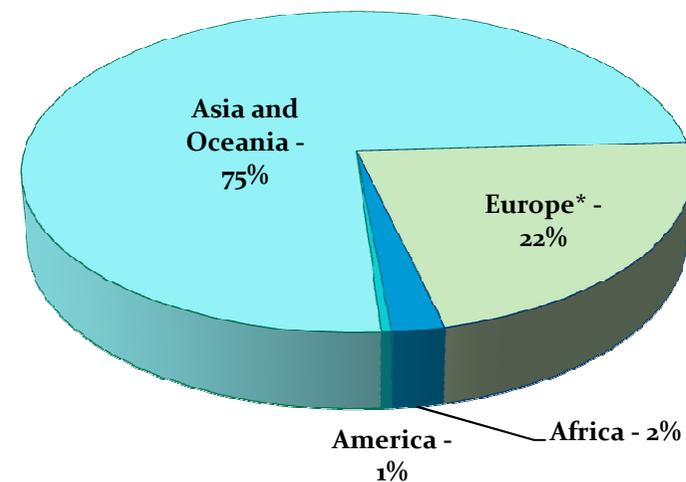
## freight

Volume of freight transported by rail in 2010 [billion ton-km]



## passengers

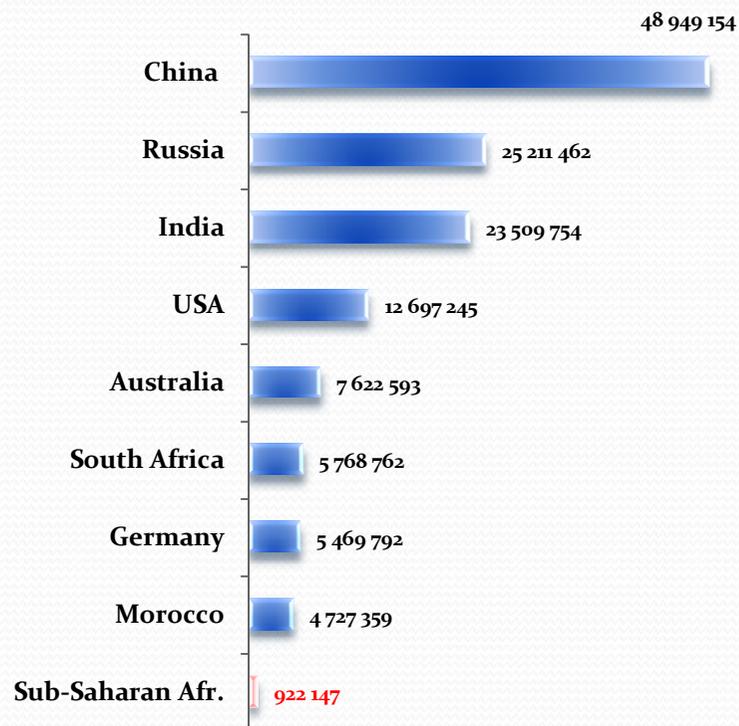
Passengers transported by rail in 2010 [billion pass-km]



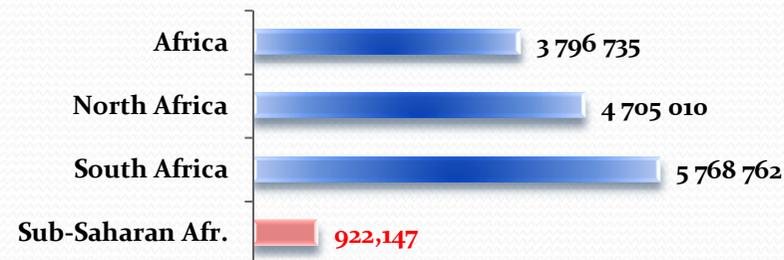
# How are the Sub-Saharan African railways performing?



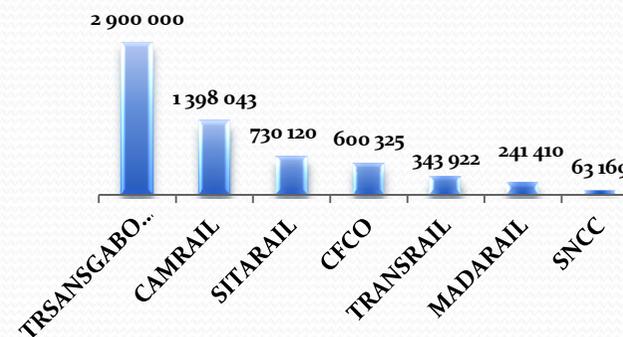
Traffic Intensity Comparison



Traffic Intensity Benchmark in Africa



Traffic Density in various sub-Saharan Railways



All charts from the UIC Statistics – 2010 and statistic data about concession railways in SSA collected yearly by the World Bank (Pierre Pozzo di Borgo)

# How are the rail concessions performing in SSA?



Concession	Countries	Year of concession	Current Performance		Investment responsibility		Canceled concessions
			Operational	Financial	Infrastructure	Rolling Stock	
Sitarail	Ivory Coast, Burkina Faso	1995	A	C	Public	Private	
Camrail	Cameroon	1999	B	A	Public	Private	
CEAR	Malawi	2000	D	D	Private	Private	X
RSZ	Zambia	2002	C	C	Private	Private	
Madarail	Madagascar	2003	B	C	Public	Private	
Transrail	Senegal, Mali	2003	C	D	Private	Private	
CCFB (Beira)	Mozambique	2005	C	D	Private	Private	X
TransGabo nais	Gabon	2005	B	C	Public	Private	
Nacala	Mozambique	2005	C	D	Private	Private	X
KRC-URC	Kenya-Uganda	2006	C	D	Private	Private	
TRC	Tanzania	2007	D	D	Private	Private	X
SNCC	DR Congo	2011	D	D	Public	Priv./Public	

## Operational:

A = best in class

B = average

C = below average

D = worse in class

## Financial

A = strong positive cash flow  
sustainable debt load

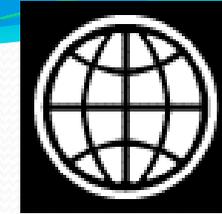
B = positive cash flow  
average debt load

C = positive cash flow  
negative income, higher  
than avg debt load

D = negative cash flow  
negative income  
high debt load

Source : WB - P. Pozzo di Borgo  
(2010)

# Prioritizing and adjusting rail developments to reality



- Affordable investment levels
  - Long distances in Africa = high infrastructure costs, high maintenance costs => need to prioritize and target
  - Single track vs double track, standard vs narrow => need to adjust investment to real market potential
- Existing operations standards
  - old fashioned rail ops = low labor productivity
  - local traditional markets = low transport productivity
  - Africa specificities = high wear and tear, high maintenance costs

# Designing new approaches to Rail developments



- Re-assessing transport market
  - High end profitable segments : containerized goods, minerals
  - Low end non solvable segments : non bulk-non container general cargo, passengers
- Re-assessing rail operations
  - High efficiency, low cost: containerized goods, minerals
  - Low efficiency, low cost: bulk freight, long distance
  - Low efficiency, low revenues and high costs: non bulk/local freight, passengers
- Re-assessing the rail into the transport sector:
  - As an element of the logistics chain for businesses and industries
  - As an element of the intermodal transport system for freight
  - As an element of social and human development for passengers services



# Understanding the financial basics

- High infrastructure costs => high levels of capex and high levels of debt servicing for next generations
- Consumer market segments (passengers, non-bulk freight) = low productivity, negative operating cash-flow
  1. Rail systems should be primarily dedicated to core solvable/profitable segments
  2. Non-profitable, non-solvable segments can only exist if subsidized at same level as road transport
  3. Concessions agreements and KPI to be linked to :
    - (i) operating and financial performance on core segments
    - (ii) service levels on subsidized “service obligations”

# Building an efficient institutional environment for rail systems



- Strong Rail regulation is essential
- Concession is not (always) an answer
- Rail strategy should be progressive and sustainable
- Private investment requires long term guarantees and strong institutional frameworks
- Governments should honor their financial commitments
- Cash flows identification and transparent revenues transfer / management is a key element of a successful rail strategy



# Challenging common place views

- “Road transport is the main competitor”

*false: road only supplies what rail cannot deliver - road can have a powerful leverage on rail developments (linkages)*

- “Concessions will attract and develop private investment”

*true: mining related or industry dedicated rail developments will attract investors*

*false: non-mining/passengers concessions are cash-suckers*

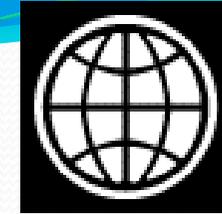
- “Rail gauge is critical”

*false: there is no traffic forecast in SSA that existing Cape/narrow gauge cannot handle (with some rehabilitation)*

- “Rail capacity on single track systems is limited”

*false: double track primarily facilitates intensity, not capacity*

# Key elements of World Bank approach to rail projects



- Focus on rail operations : ultimately the customer wants a reliable service!
- Focus on the solvable market : evidence shows that freight is where the rail can find value.
- Design projects around the economic sustainability of the system : long term maintenance of infrastructure and reliability of operations.
- Support strong rail regulation and regulator.
- No ideological approach to engagement.

Thank you !

