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# Supporting Port Transformation in Africa

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*A view of the Port of Dakar*

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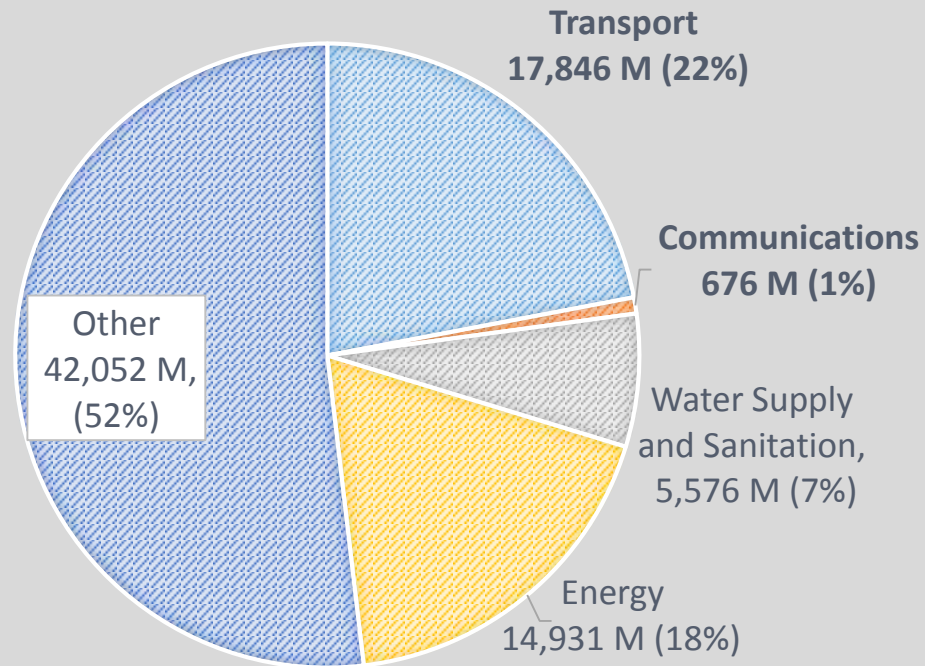
# AfDB Missions and Achievements in Supporting Transport Systems



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# The AfDB is the 1st Multilateral Development Institution in Africa (in volume lending)

AfDB committed USD **81 billion** of loans and grants in the last 20 years, 7.2 billion in 2015



1995 – 2015 Bank's group loans and grants distribution (USD)

3 main tools:

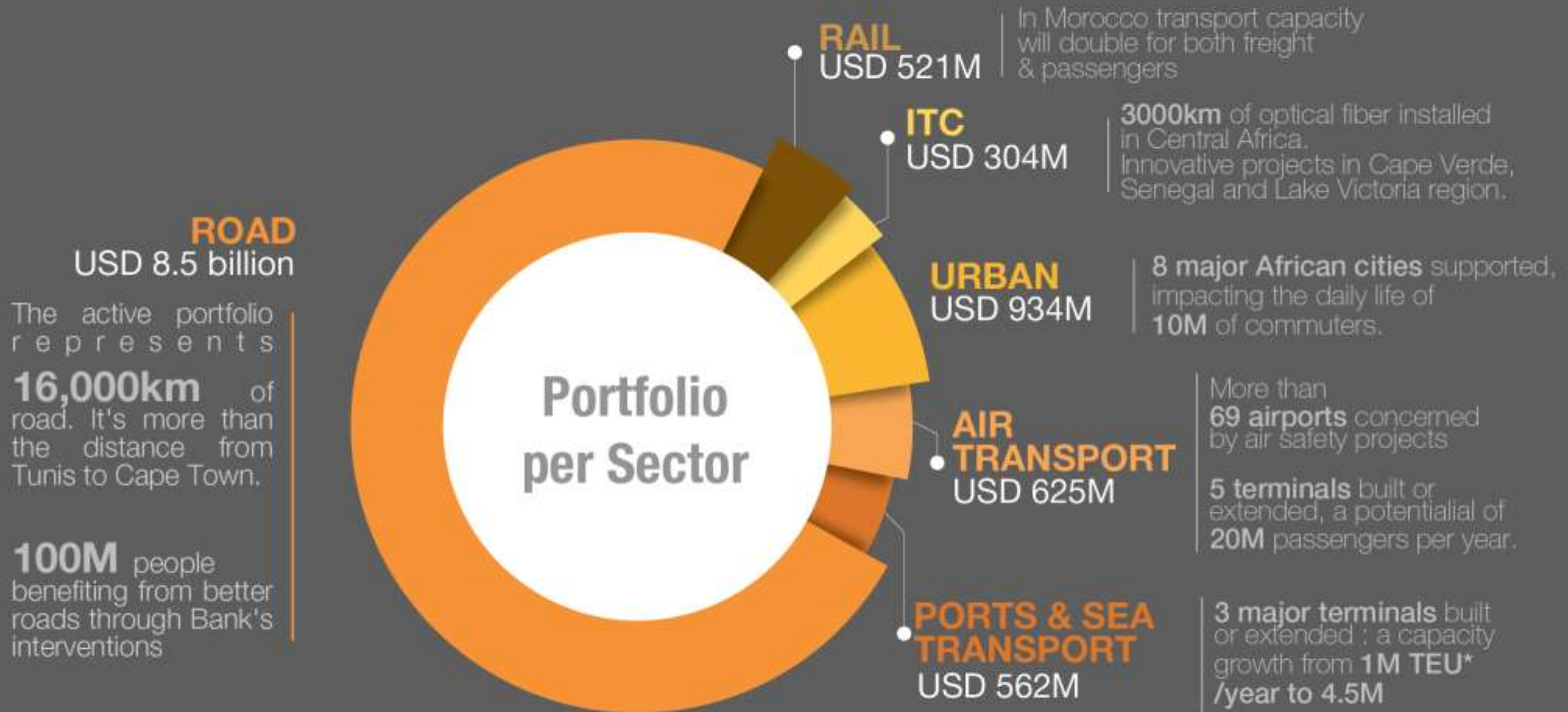


# Transport & ICT – Active project Portfolio (1<sup>st</sup> Jan. 2017)

- ✓ USD 12 billions
- ✓ 118 projects
- ✓ 45 countries



# Transport & ICT – Active project portfolio (1<sup>st</sup> Jan. 2017)



\*Twenty foot equivalent unit

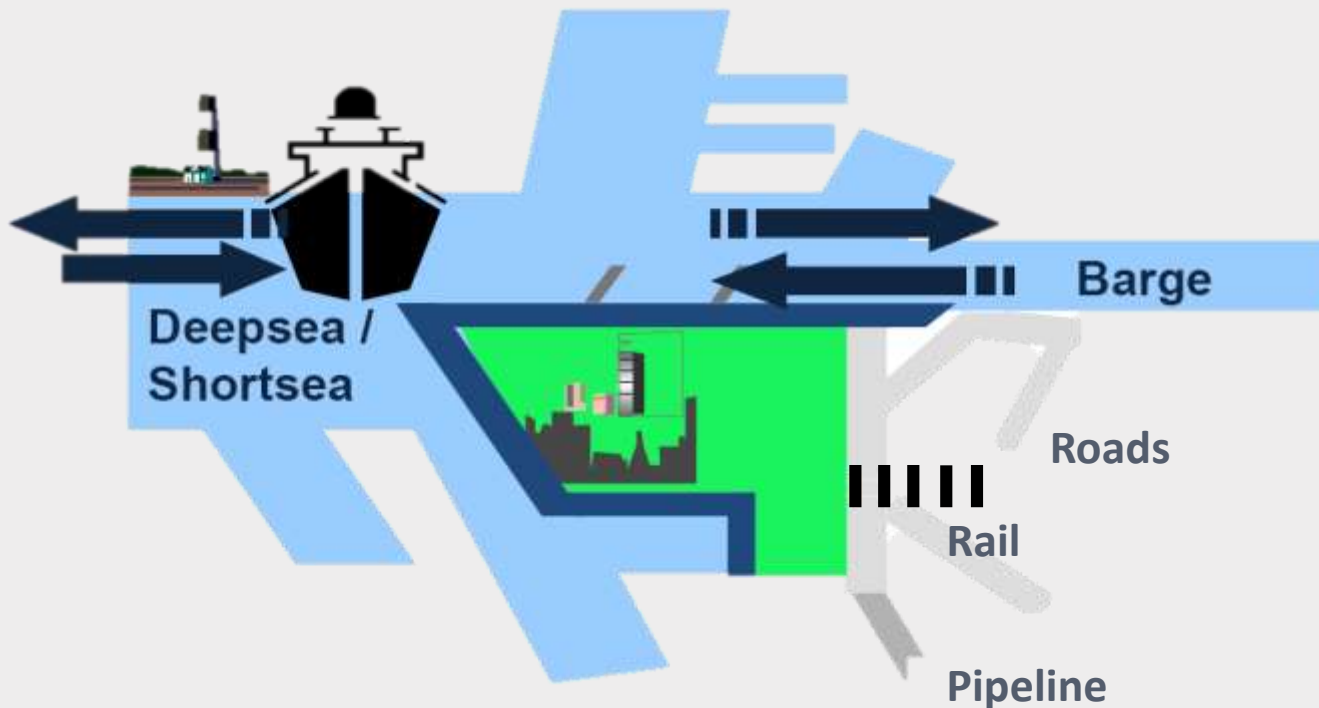
# AfDB role in supporting ports



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## AfDB role in supporting ports

Positioning ports in the supply chain to facilitate multi-modal



The Bank is involved:

- ✓ Port studies (e.g. master plan, feasibility , planning, engineering, transaction preparation etc....)
- ✓ Port side infrastructure
- ✓ Land side infrastructure
- ✓ Facilitation (e.g. OSBP, IT, regulation, agreements...)
- ✓ Road (corridor)
- ✓ Rail (corridor)
- ✓ Waterways (engaging)



## AfDB role in supporting ports

USD 920M invested in the past 10 years

Port sub-sector has been strongly supported by the Bank, in particular **through PPP.**

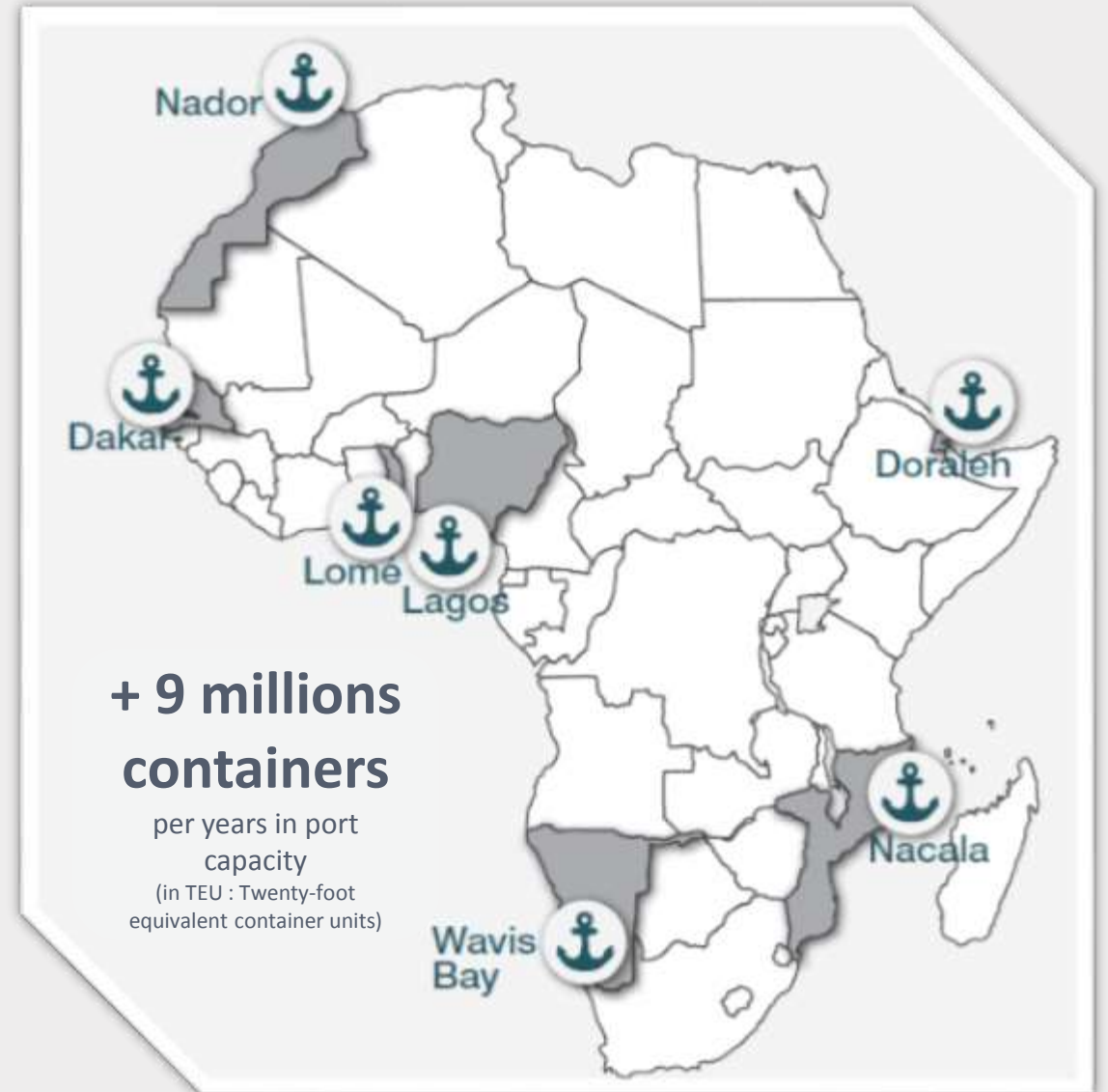
During the past decade the Bank supported investments in **new container terminals** in Djibouti, Togo and Namibia, as well as equipment modernization in Senegal.

In northern Morocco, Nador West Med port will become a leader of shipping, and will host a new **performing logistic platform.**

In Mozambique, Nacala's new coal terminal takes part in a global integrated project **combined with rail transport.**

Road corridors improvement and urban road projects also facilitate **port accessibility**, like in Mombasa (Kenya), Kribi (Cameroon) or Lomé (Togo).

AfDB **financed also various studies**, like in Mauritius, for the Port-Louis port extension.



# AfDB role in supporting ports

## Dakar Port (Senegal)

USD 64M loan  
2007

Dakar port handles 90% of the total value of Senegal's foreign trade. The recent extension of the container terminal, through **public-private partnerships** improved efficiency and lowered the delivery cost of both imported and exported goods.

Outputs:



Extension of port capacity  
14,500 TEU s>> 31,735 TEUs



Waiting time for trucks  
Several hours > 30min

# AfDB role in supporting ports

## Lomé Container Terminal (Togo) EUR 60M loan 2011

The project pertains to the construction, development and operation of a **new transshipment container handling terminal**



In 2012, the AfDB also financed access road and expressways through a separate road project, seeking to facilitate movement of people and goods between the Lomé's ports and the hinterland

**Outputs:**



Extension of port capacity  
+ 1.5 million TEUs



# AfDB role in supporting ports

## Walvis Bay (Namibia)

USD 338M loan  
2013

*A view of the construction – August 2015*

The project scope comprises the construction of a **new container terminal** on reclaimed land from the Walvis Bay channel supported by complementary initiatives on logistics and capacity building.

Namibia aims to maximize its potential and strategic location to become a trade hub for the region thereby enhancing trade and regional integration.

**Outputs:**



Extension of port capacity  
355,000 TEUs >> 1M TEUs



Anchorage  
14 days >> 8 days



Berthing moves  
per hour (BMPH)  
20 >> 60

# AfDB role in supporting ports

## Lekki Port (Nigeria)

USD 150M loan  
2014

Lekki is a **greenfield port** 60 km east of Lagos (in the Lagos Free Trade Zone).

The project includes construction of **all port infrastructures** such as breakwaters, quays, approach channels, dredging of the basin as well as all captive utilities such as water and power.



### Outputs:



3 container berths:  
2.5M TEUs capacity



3 liquid berths  
16.7 MT of liquid cargo



Bulk berth:  
+ 4.5 MT of dry bulk

# AfDB role in supporting ports

## Nador Port

USD 127M loan  
2015

- The building of a new terminals (2 containers / 1 hydrocarbons) seeks to:
- (i) take advantage of Morocco's geostrategic position on the Strait of Gibraltar to attract part of global shipping activities;
  - (ii) firmly establish Moroccan value chains in the global economy and develop the hinterland; and
  - (iii) secure the supply of energy commodities to Morocco.

**Outputs:**



Extension of port capacity  
700,000 TEUs >> 3M TEUs



Various goods  
treated  
8M tons >> 33M tons



# The economical sector work: vision and challenges



The 66 selected ports captured in a port databook



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## The economical sector work: vision and challenges



The Bigger Picture – An Overview of the African Maritime and Port Sector Trends



## An Overview of the African Maritime and Port Sector Trends

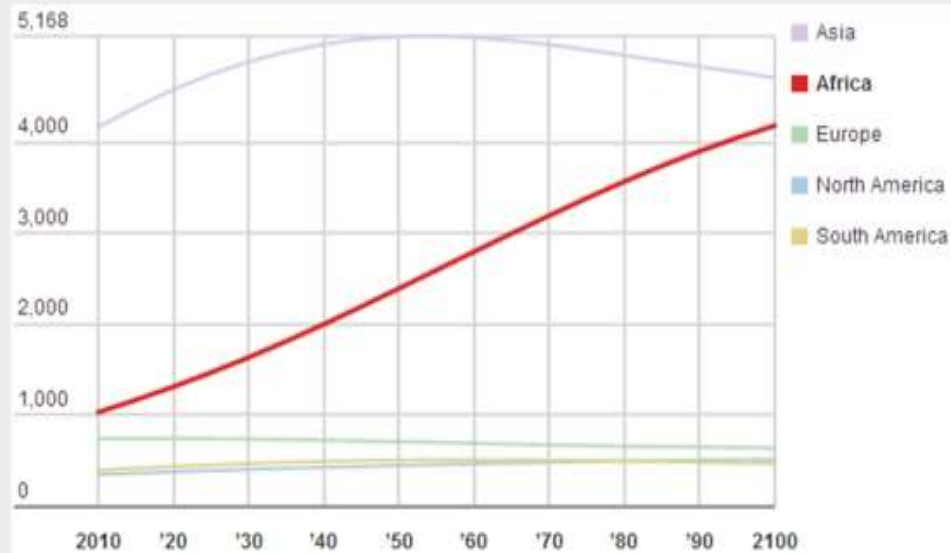
Several elements have substantially impacted and shaped the African maritime and port sectors.

- Several elements have substantially impacted, and will have a substantial impact on, the African maritime and port sectors. Among the most influential of these trends are:
  - Strong predicted population growth in Africa in the 21<sup>st</sup> Century;
  - Continuous strong economic growth in the region;
  - Varying economic structures of African countries; and
  - Continuous increase in cargo volumes and cargo vessel sizes.

# Population Growth

The African population is predicted to quadruple in the 21<sup>st</sup> century, spurring maritime trade.

## Predicted population by continent, in millions



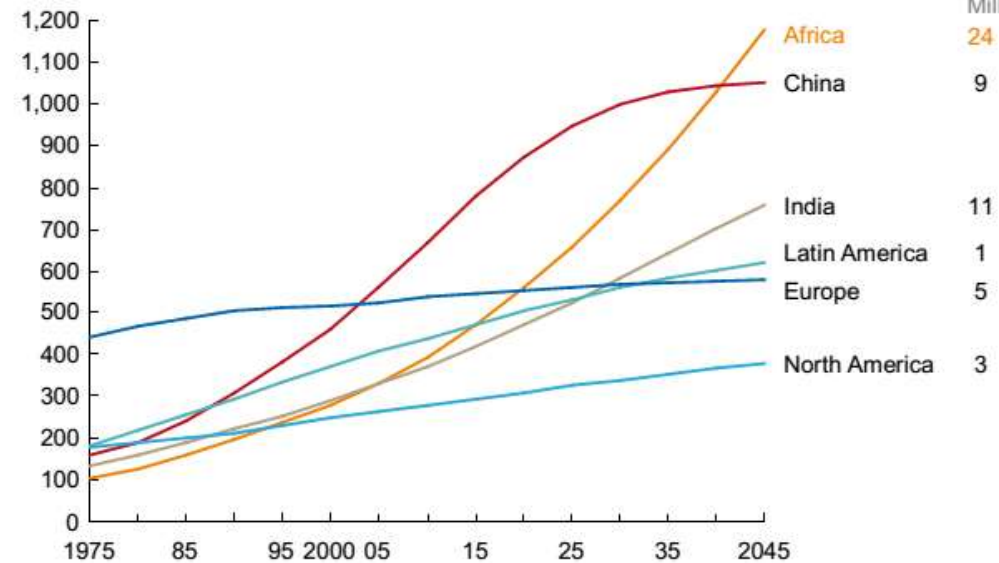
## Africa is the world's fastest urbanizing region.

From 2015 to 2045, African cities will gain 24 million more people each year, topping 1.2 billion urban dwellers by 2045.

### Africa is urbanizing faster than any other region; its cities are expected to gain 24 million people each year until 2045

#### Size of the urbanized population<sup>1</sup>

Million



#### Additional people living in urban areas per year, 2015-45

Million

Africa	24
China	9
India	11
Latin America	1
Europe	5
North America	3

#### Africa urbanized



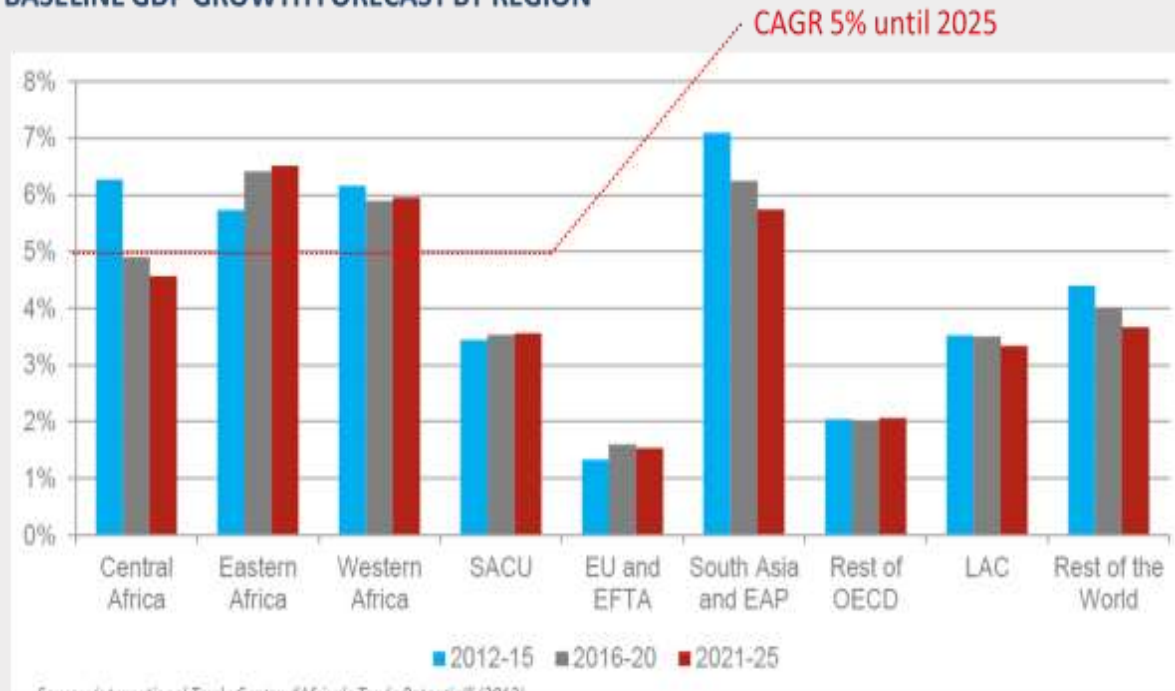
<sup>1</sup> Population living in urban areas. UN forecasts last adjusted in 2014.

(Source : Mckinsey Global Inst. Sept 2016)

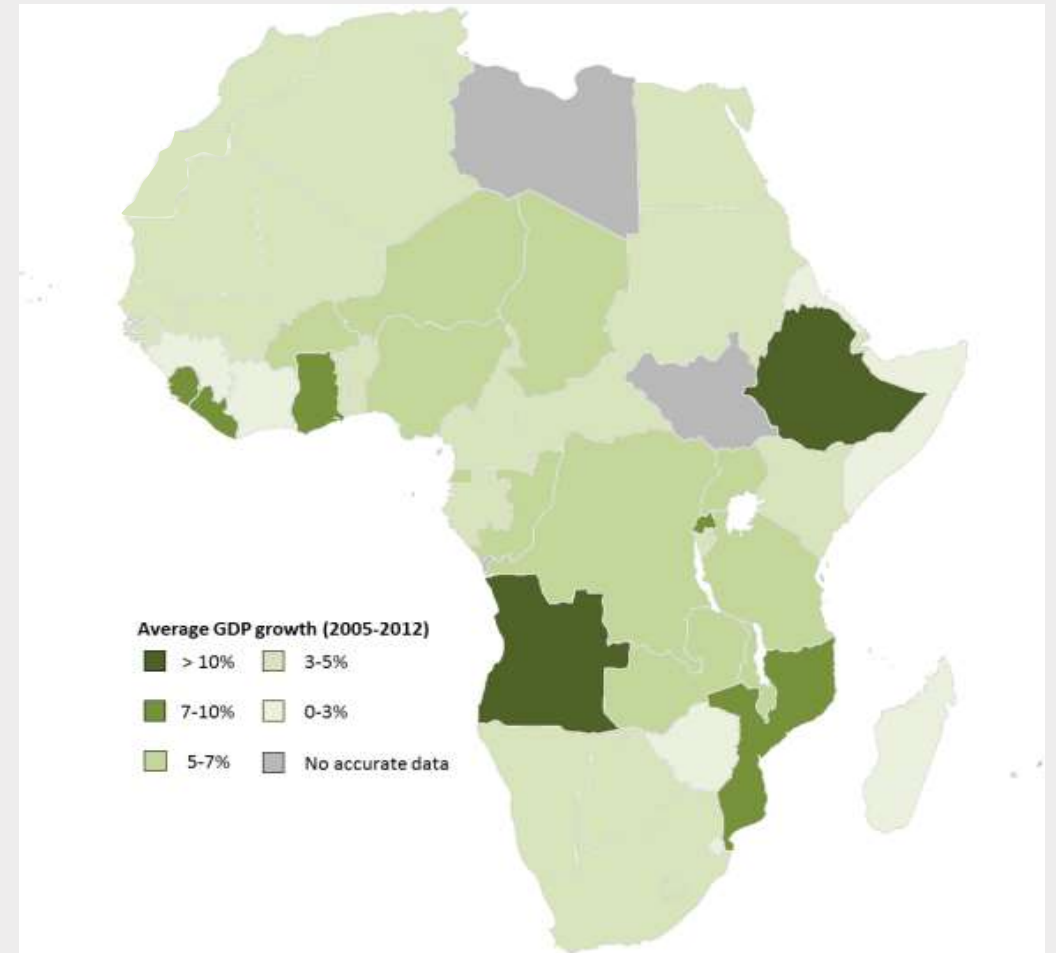
# Economic Growth

The trade volumes in African ports have grown by Compound Annual Growth Rates (CAGR) of almost 10%, whereas the GDP for Gross Domestic Product was roughly 5%.

## BASELINE GDP GROWTH FORECAST BY REGION



Source: International Trade Centre: "Africa's Trade Potential" (2012)

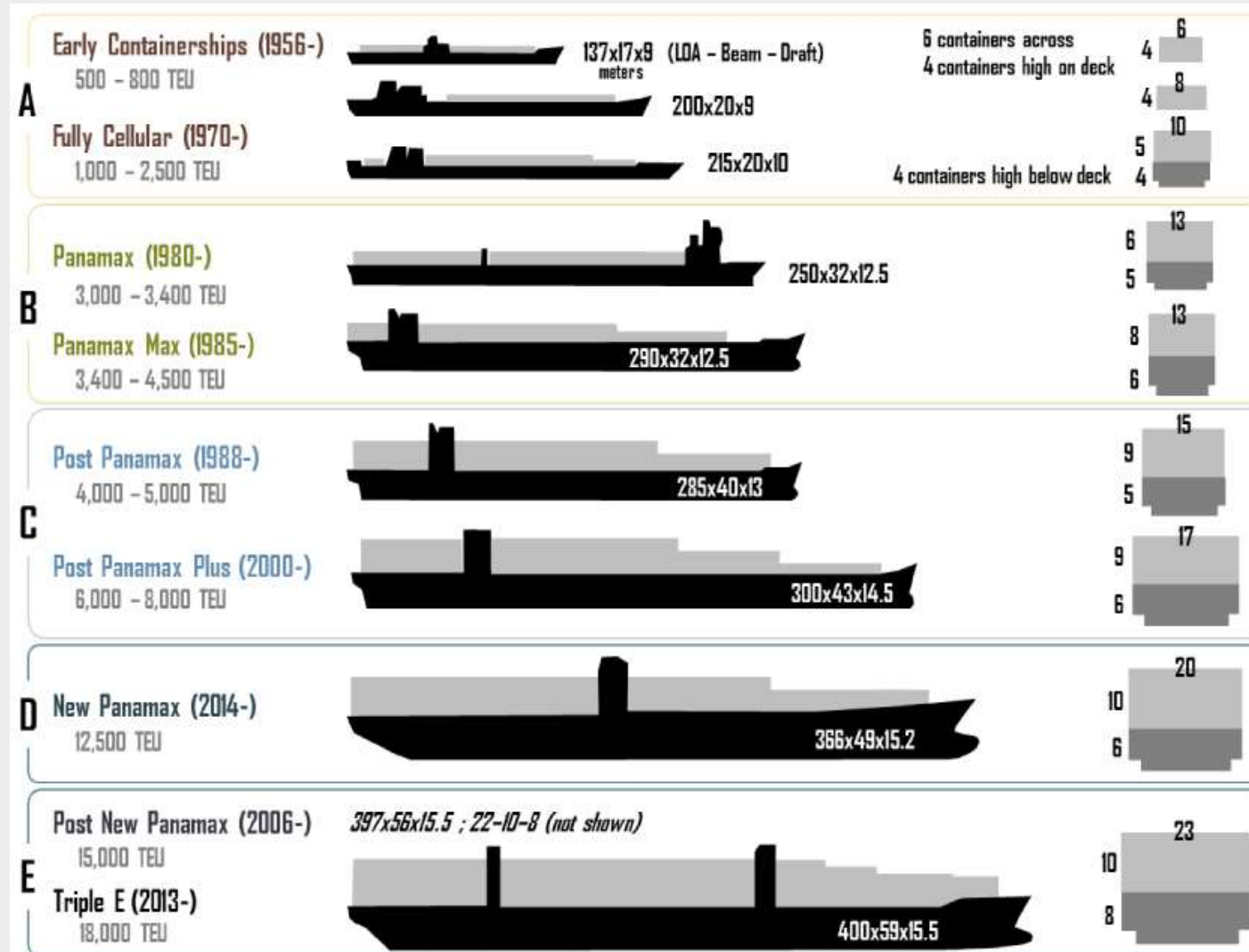


In Sub-Saharan Africa the average GDP Growth was 5% during the last decade, generating a TEU growth rate of 10%.

Now the economies matured and growth slowing down : the GDP growth decreased to 3% and the TEU growth rate declined to 3.6%

# Growth of the Maritime Sector

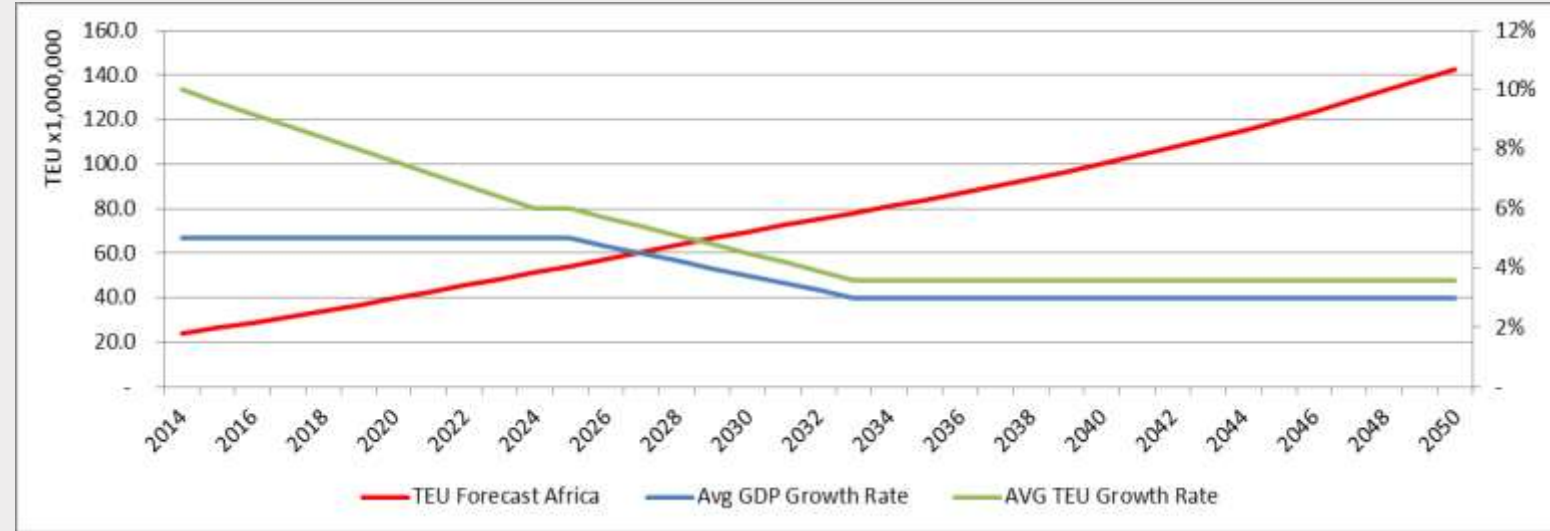
Larger cargo volumes and cargo vessels entail construction of larger port facilities.



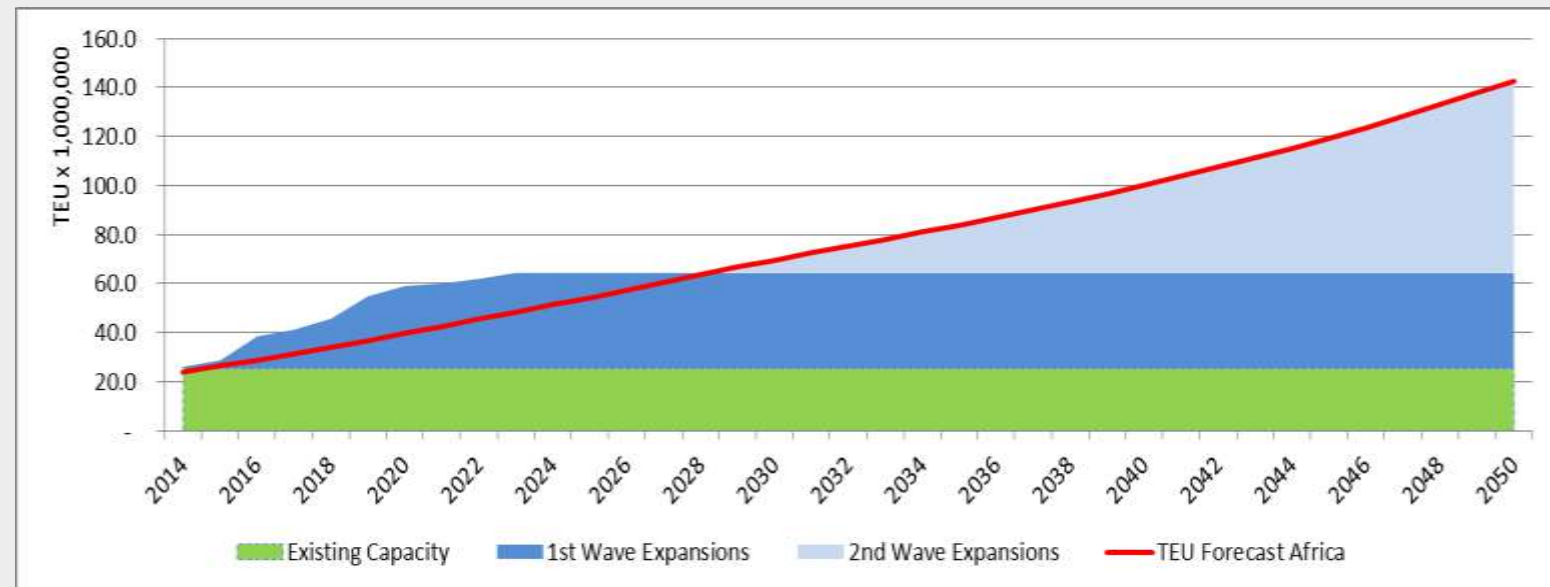
# Forecasting Port Investments

African containerized cargo demand is forecast to grow to 140 million TEU by 2050, resulting in a wave of port expansion projects.

- As the graph shows, the implications of these economic assumptions are that the TEU forecast shows an increase of annual throughput from 22 million TEU (2013 est.) to 140 million TEU in 2050 for the African continent.



- Consequently, numerous port expansion plans have recently been announced, resulting in an investment wave. However, as the following TEU supply & demand graph demonstrates, the “first wave” of port capacity expansion projects is necessary to provide the continent with sufficient port capacity to meet demand.

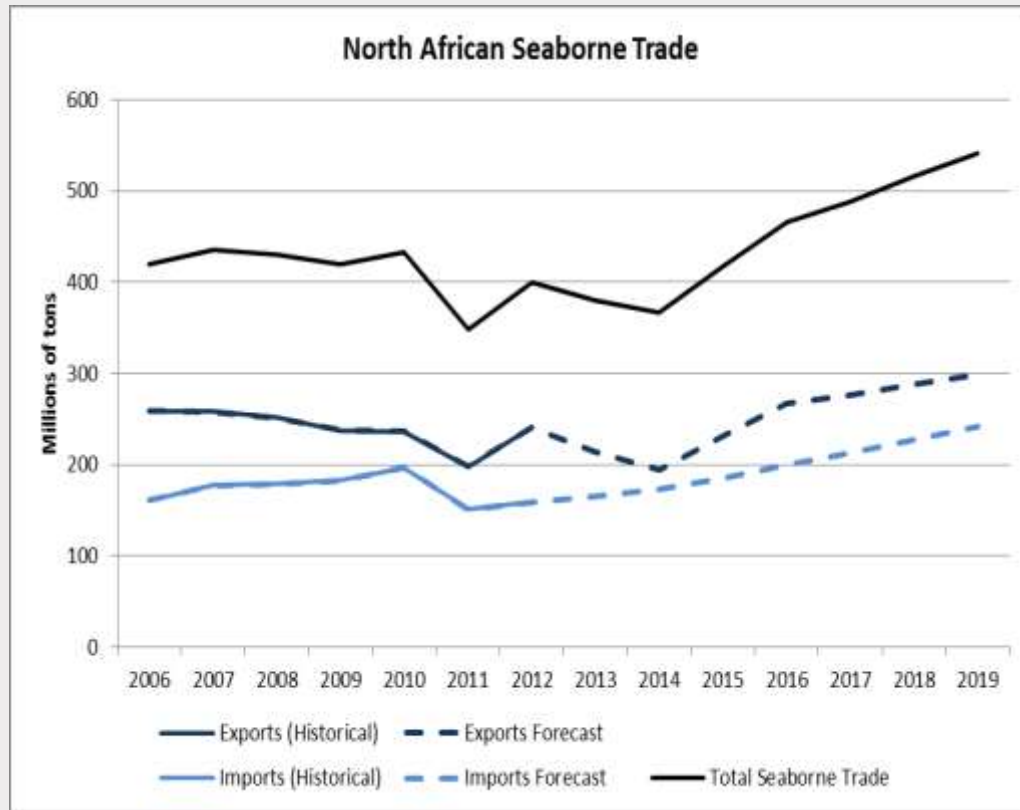


# The economical sector work: vision and challenges



Zooming In – Regional and Country Level Port Sector Analysis

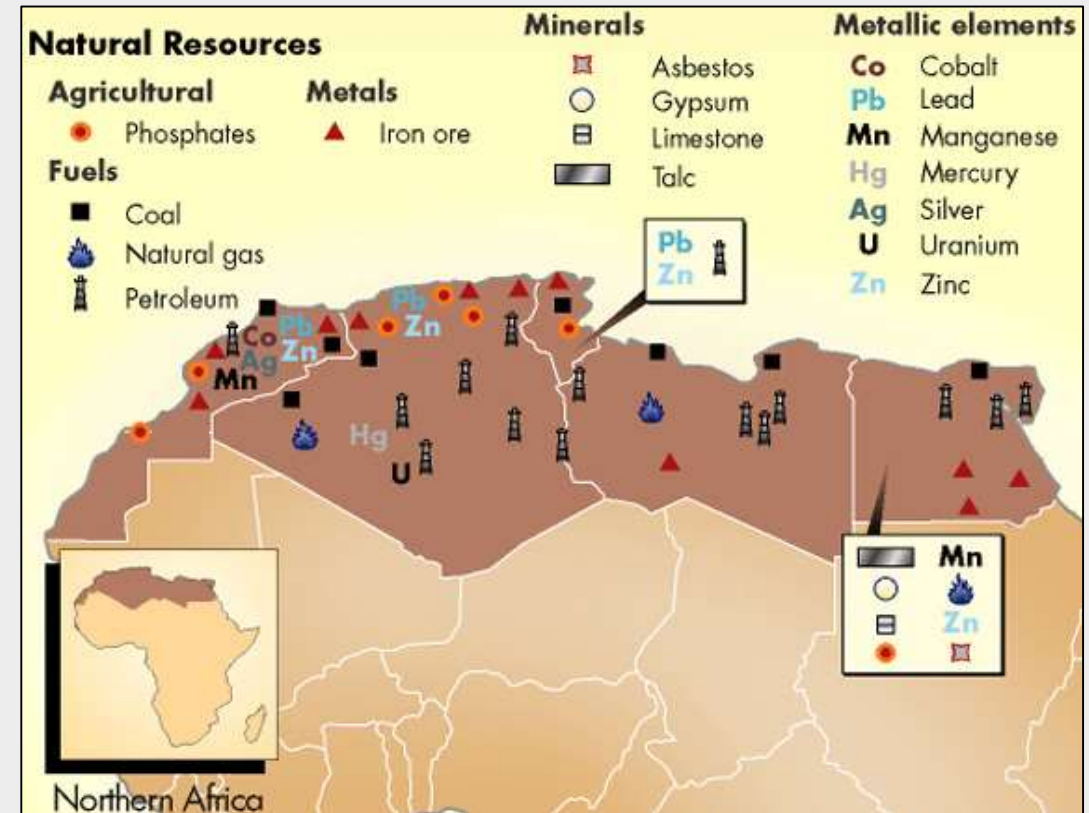
# Regional Port Sector Analysis – Northern Africa



- North African seaborne trade is expected to increase to more than 500 million tons in 2019.

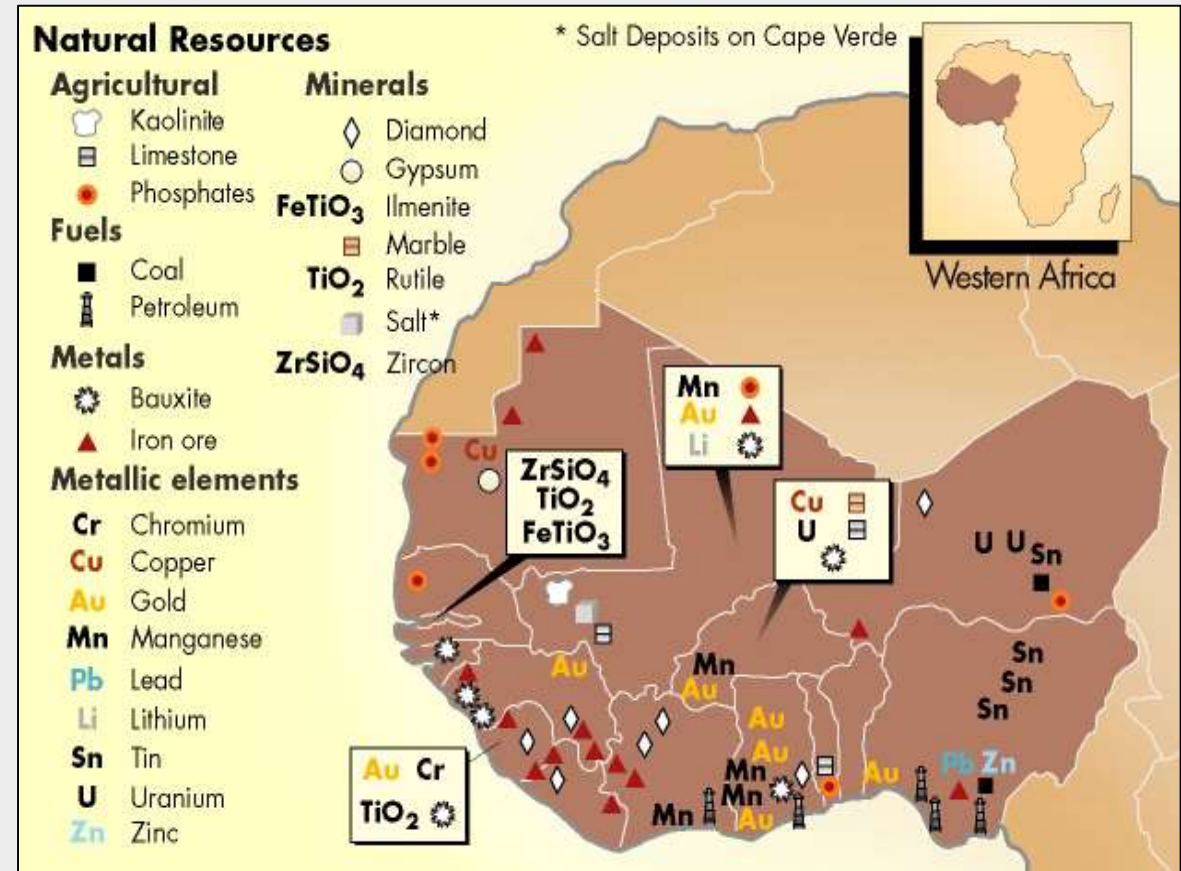
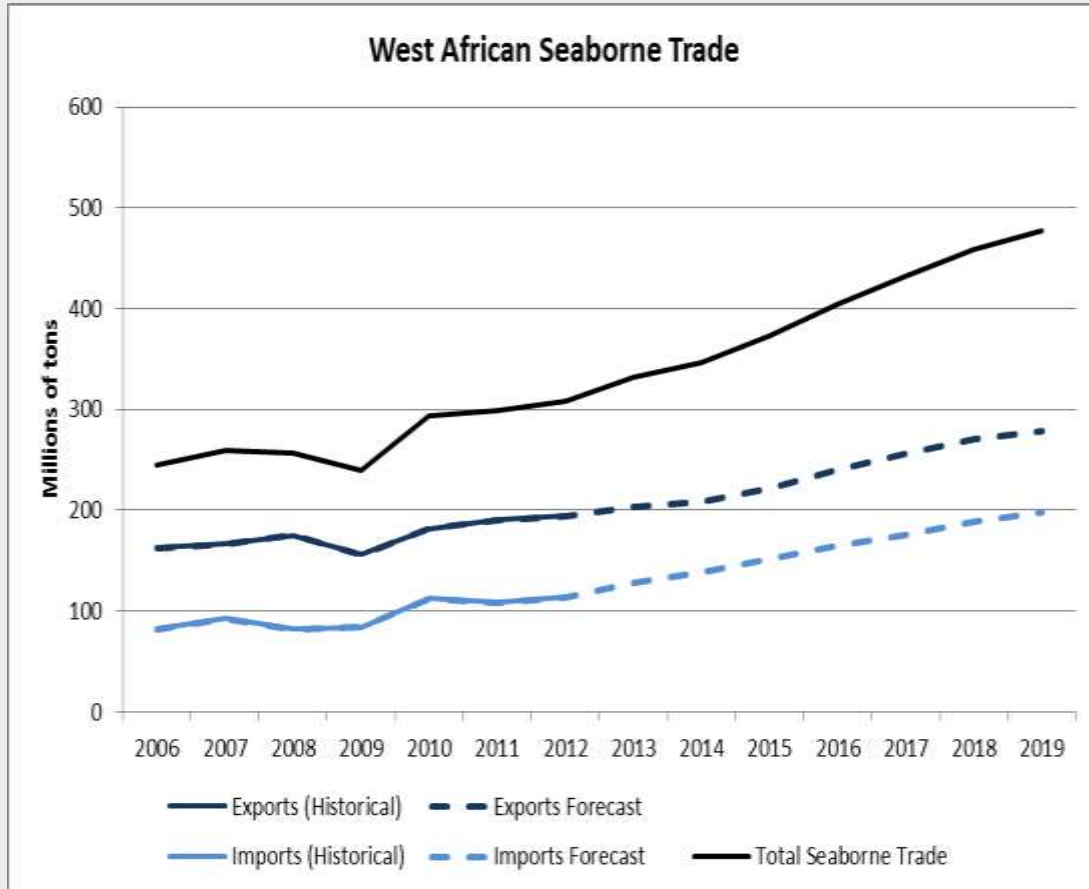
#	Port	Country	TEU	Year
1	Port Said	Egypt	4,653,694	2013
2	Tanger Med	Morocco	2,558,426	2013
3	Alexandria	Egypt	1,679,367	2013
4	Casablanca	Morocco	825,189	2013
5	Algiers	Algeria	737,000	2013
6	Damietta	Egypt	676,036	2013
7	Alexandria	Egypt	591,656	2013
8	Sokhna	Egypt	470,109	2013
9	Rades	Tunisia	354,644	2013
10	Béjaia	Algeria	248,984	2013

Source: Consultant based on multiple sources



- Liquid Bulk: North African ports are also used to **export large quantities of liquid bulk** : oil and refined products, as well as natural gas are substantial cargo flows.
- Dry Bulk: North African region is known to be a relatively **large producer of iron ore and phosphates**. Additionally, the North African region is characterized by its **large grain imports**, as a result of the region’s limited agricultural production capacity

# Regional Port Sector Analysis – West Africa



- Total seaborne trade in West Africa is expected to increase from approximately 300 million tons in 2012 to just under 500 million tons in 2019.

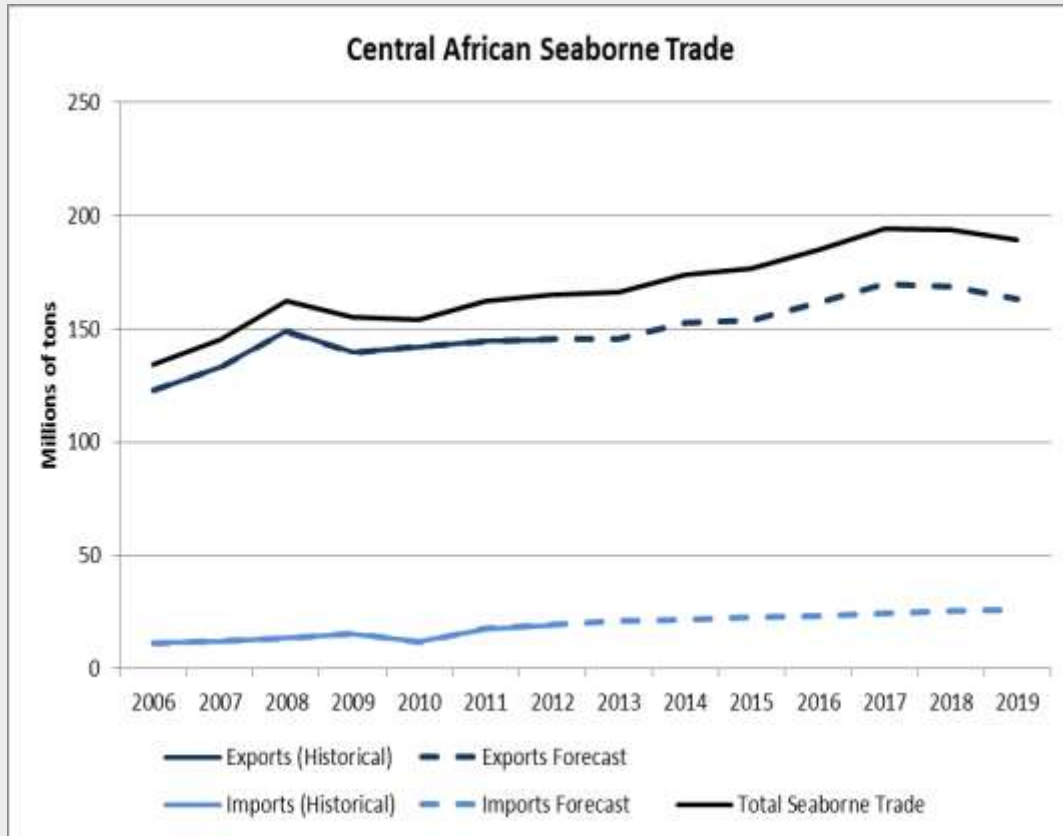
#	Port	Country	TEU	Year
1	Lagos	Nigeria	1,400,000	2013
2	Tema	Ghana	841,989	2013
3	Abidjan	Cote d'Ivoire	650,000	2013
4	Dakar	Senegal	420,000	2013
5	San Pedro	Cote d'Ivoire	333,334	2013
6	Lomé	Togo	311,470	2013
7	Cotonou	Benin	250,000	2013
8	Onne	Nigeria	216,000	2013

Source: Consultant based on various sources

- Liquid bulk primarily consists of the export of **crude oil from Nigeria and Ghana**.
- West Africa's dry bulk trade mainly takes place in Guinea, Sierra Leone, Liberia and Cote d'Ivoire, where substantial **reserves of iron ore and bauxite** have been found.



# Regional Port Sector Analysis – Central Africa

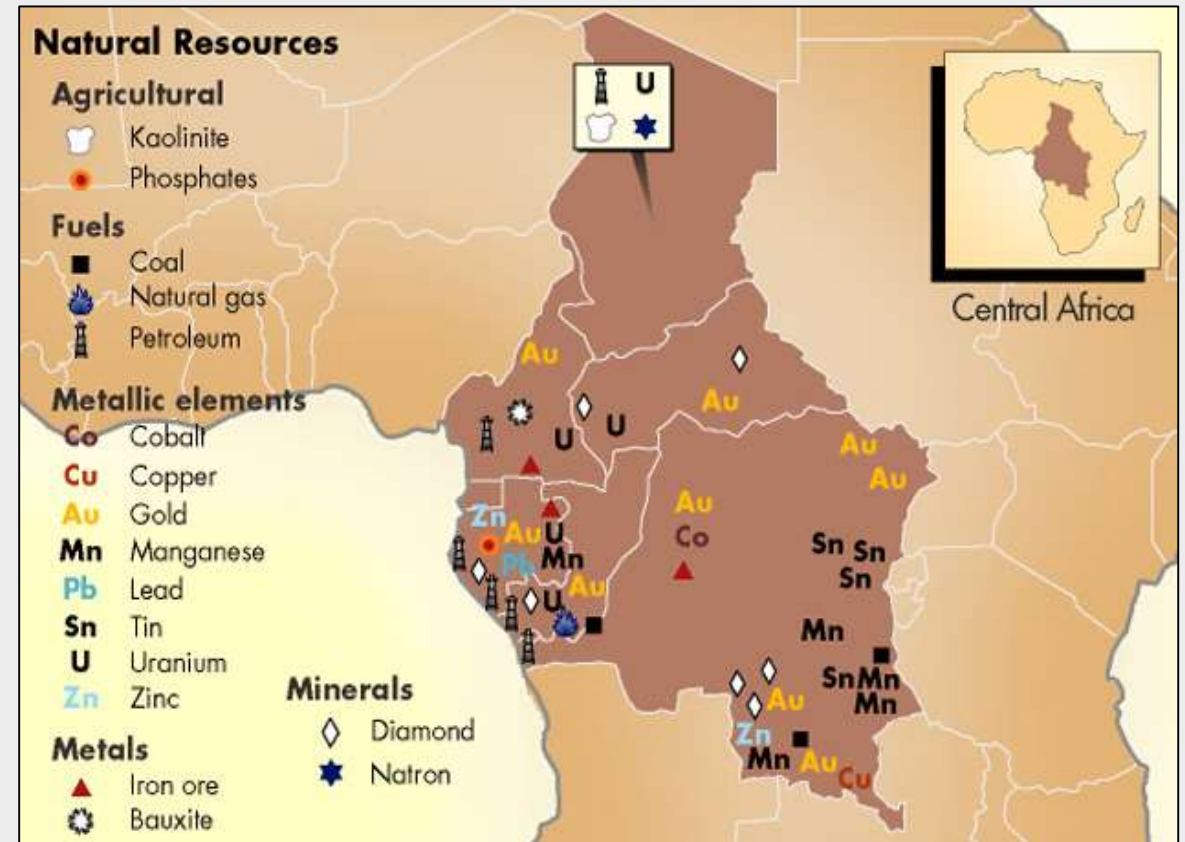


- Total seaborne trade in Central Africa is expected to increase from approximately 150 million tons in 2012 to just under 200 million tons in 2019.

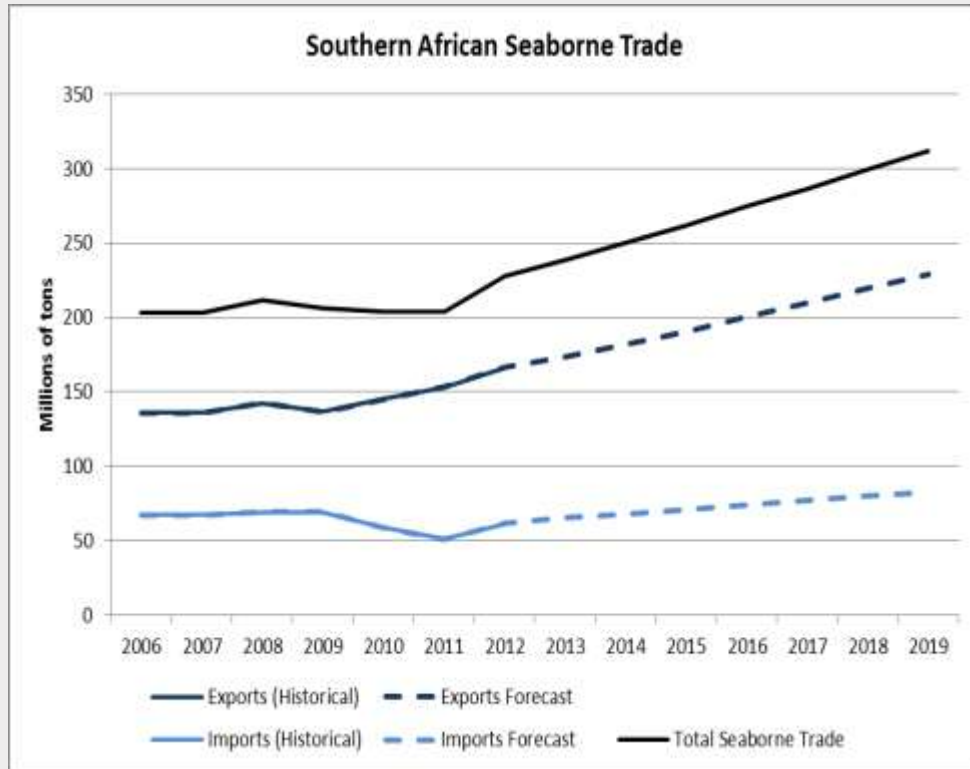
#	Port	Country	TEU	Year
1	Pointe Noire	Republic of Congo	575,000	2013
2	Douala	Cameroon	365,000	2013
3	Libreville	Gabon	306,460	2013

Source: Consultant based on various sources

- Liquid Bulk: **crude oil exports** from Cameroon, Gabon, and the Republic of Congo form the most important liquid bulk cargo flows.
- Dry Bulk: cargo flows are limited compared to the crude oil exports; however, in recent years there has been an **increase in mining activities**, resulting in a growth of dry bulk exports.



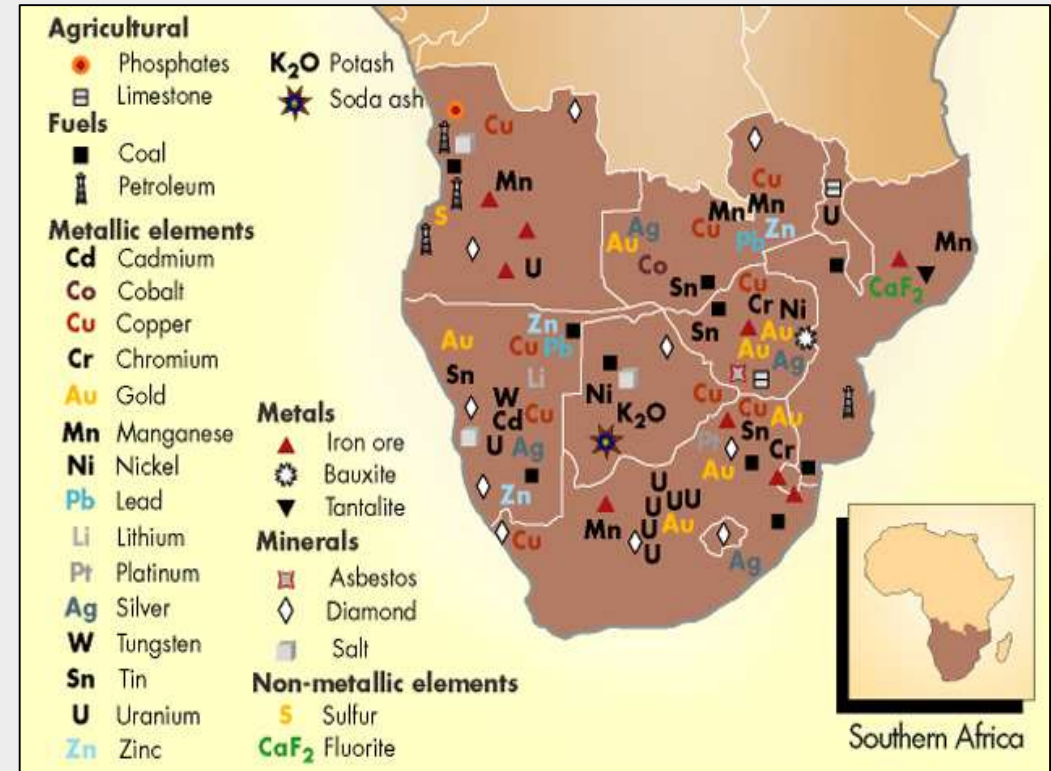
# Regional Port Sector Analysis – Southern Africa



- Exports in the Southern African region are expected to increase from approximately 170 million tons in 2012 to approximately 230 million tons in 2019.

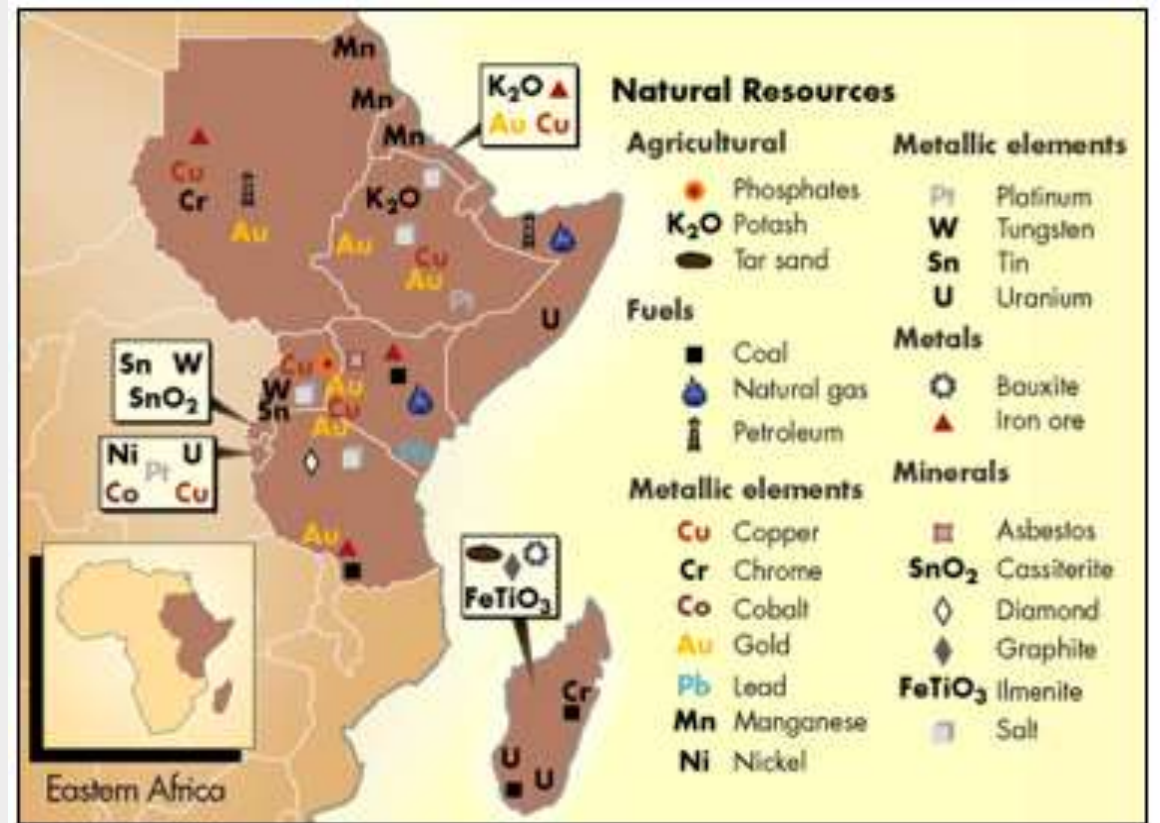
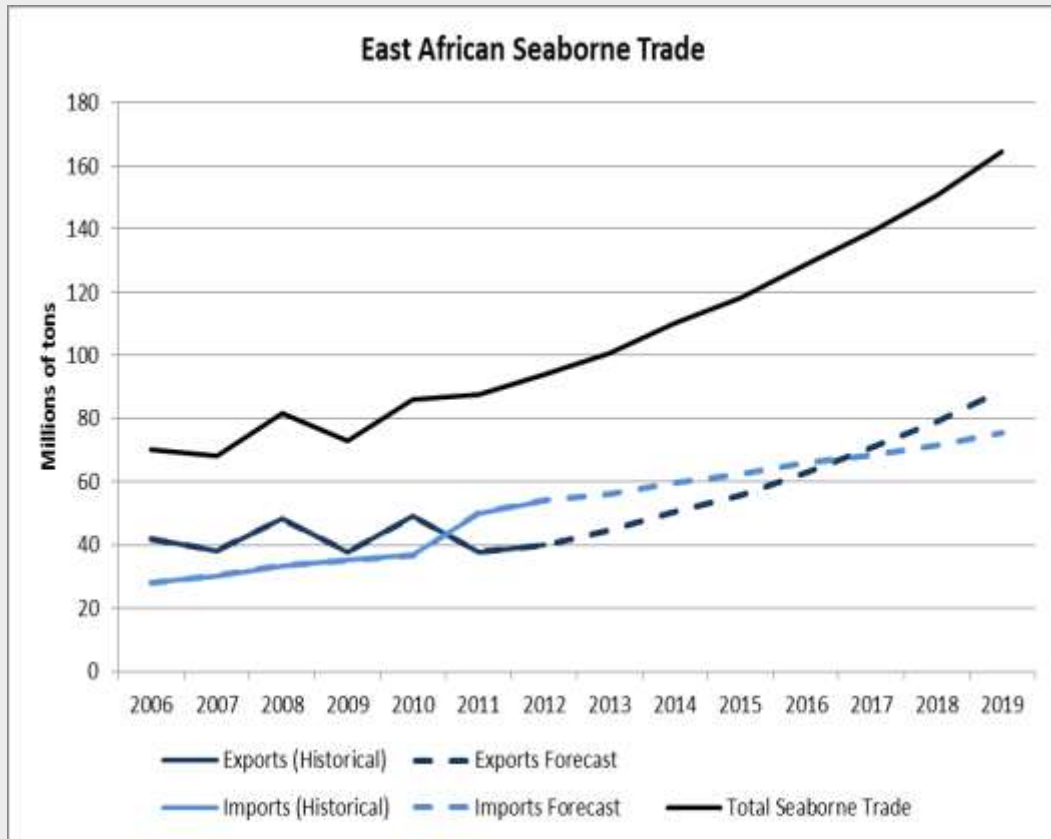
#	Port	Country	TEU	Year
1	Durban	South Africa	2,660,146	2013
2	Luanda	Angola	912,898	2013
3	Cape Town	South Africa	907,796	2013
4	Nggura	South Africa	713,306	2013
5	Port Louis	Mauritius	385,326	2013
6	Walvis Bay	Namibia	350,000	2013
7	Beira	Mozambique	184,000	2013
8	Toamasina	Madagascar	140,000	2013
9	Port Elizabeth	South Africa	131,086	2013
10	Maputo	Mozambique	113,000	2013

Source: Consultant based on various sources



- Liquid Bulk: In Durban, Africa's largest port, almost 70% of total throughput consists of **crude oil imports**, while 25% of exports are also crude oil. In Angola, recent oil finds have also boosted liquid bulk exports.
- Dry Bulk: Southern Africa has an **abundant supply of natural resources**, with large deposits of iron ore, coal, diamonds, and uranium. As not all of the resources are currently being exploited, **only a few regional ports** handle substantial amount of dry bulk cargo; the main dry bulk are in South Africa, and Mozambique (Maputo).

# Regional Port Sector Analysis – East Africa



- In the East African region, seaborne trade is expected to grow from just over 90 million tons in 2012 to just over 160 million tons in 2019.

#	Port	Country	TEU	Year
1	Mombasa	Kenya	894,000	2013
2	Djibouti	Djibouti	794,731	2013
3	Dar es Salaam	Tanzania	553,052	2013
4	Port Sudan	Sudan	465,000	2013

Source: Consultant based on various sources

- Liquid Bulk: in all major ports, dedicated facilities are in place to **import crude oil** and refined oil products.
- Dry Bulk The East African region has **substantial deposits** of fuels, metallic elements, and minerals. However, when it comes to the dry bulk export of these natural resources, the **East African region is underdeveloped**. **Import of clinker and cement** is another important cargo flow, as well as **grain**.

# The way forward

Working together with countries to find what port management model is best suited (case by case approach).

Port management model	Private participation	Regulation	Infra	Superstructure	Equipment	Labour	Nautical services
Public service port	Zero	Public	Public	Public	Public	Public	Public
Tool port	Very low	Public	Public	Public	Public	Private	Public or private
Landlord + Public-private terminal	Medium	Public	Public	Public Private JV	Public Private JV	Public Private JV	Public or private
Landlord port	Medium	Public	Public	Private	Private	Private	Public or private
Landlord + DBFM	High	Public	Public & Private <sup>2)</sup>	Private	Private	Private	Public or private
PDMC	Very high	Public	Public Private JV	Private	Private	Private	Private
Private port	Maximum	Public or private	Private	Private	Private	Private	Private

- Disseminate best practices and bring reform assistance to improve regulatory frameworks, securing the existing projects and attracting new investors.
- Work closely with Port authorities and investors to rise up the bare for project preparation and identify fair and bankable opportunities.

# Thank you

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**African Development Bank Group**

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