

Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation

Sustainable Freight Transport Systems: Opportunities for Developing Countries

14-16 October 2015

SUSTAINABLE FREIGHT TRANSPORTATION: PERSPECTIVES OF WEST AND CENTRAL AFRICAN PORTS SECTOR

by

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Sustainable Freight Transportation: Perspectives of West & Central Africa Ports Sector

**4th Session of UNCTAD's Multi-Year Expert Meeting on
Transport and Trade Facilitation –
Theme: Sustainable Freight Transport Systems:
Opportunities for Developing Countries
Geneva, 14 – 16 October 2015**

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“Perspective of West and Central African Ports Sector”

By Michael LUGUJE

Secretary General,

Port Management Association of West & Central Africa

(PMAWCA)



Sustainable Freight Transportation: Perspectives of West & Central Africa Ports Sector

OUTLINE OF PRESENTATION:

1. PMAWCA – an Introduction

2. THE PORT – THE ENVIRONMENT & SUSTAINABLE FREIGHT : CASE OF ADVANCED COUNTRIES

3. CASE OF WEST/CENTRAL AFRICAN PORTS/COUNTRIES

4. CONCLUSION / FOR WAY FORWARD

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The PMAWCA Region:

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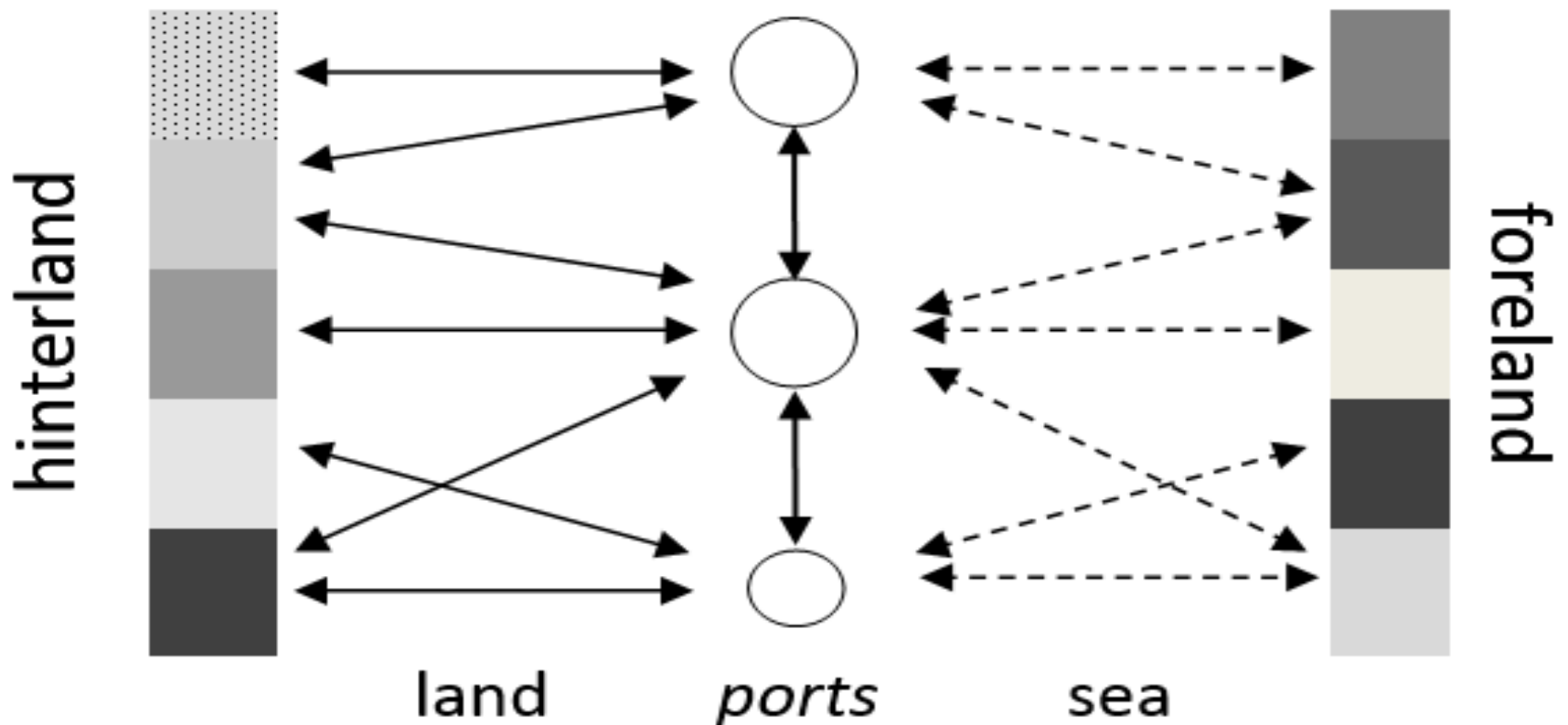
- 20 Coastal and 2 Landlocked member States;
- Over 11,983 km of coastline;
- 23 Port Authorities;
- total annual import/export traffic of over 250 million tonnes;
- extractive minerals exports :bauxite, manganese
- Heavy deposits of hydrocarbons (crude and gas).
- Angola, Congo, Nigeria, Ghana, Cote d'Ivoire, drilling and exporting crude in commercial quantities.
- Liberia and Sierra Leone to commence drilling soon
- Very rich fish stock





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The Port as the Node – connecting Hinterland and Foreland





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How does a Port contribute to environment Pollution?

a. Emissions (from ships, port equipment, industrial plants, cargo trucks, trains, etc)

b. Cargo operations (dust, noise, vibration, light, etc)

c. accidental pollution (oil spillage, ship's waste, industrial effluents, ship's ballast water, etc)





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How does a Port contribute to environment Pollution?

	1996	2004	2009	2013
1	Port Development (water)	Garbage / Port waste	Noise	Air quality
2	Water quality	Dredging: operations	Air quality	Garbage/ Port waste
3	Dredging disposal	Dredging disposal	Garbage / Port waste	Energy Consumption
4	Dredging: operations	Dust	Dredging: operations	Noise
5	Dust	Noise	Dredging: disposal	Ship waste
6	Port Development (land)	Air quality	Relationship with local community	Relationship with local community
7	Contaminated land	Hazardous cargo	Energy consumption	Dredging: operations
8	Habitat loss / degradation	Bunkering	Dust	Dust
9	Traffic volume	Port Development (land)	Port Development (water)	Port development (land)
10	Industrial effluent	Ship discharge (bilge)	Port Development (land)	Water quality



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Evolution of Port involvement in Environmental Management

1960-1980	1980	1990	2000	2010
<p>Generally low level of awareness</p> <p>Reactive response to incidents</p>	<p>Specific legislation</p> <p>Increasing awareness</p> <p><i>Ad hoc</i> local initiatives</p>	<p>EU Habitats directive</p> <p>1st ESPO code of practice</p> <p>Eco-information project</p> <p>Tenants and operators</p>	<p>Quality assured EMS</p> <p>ECOPOINTS tools and methodologies (e.g. SDM, PERS)</p> <p>Compliance plus – Environmental issues integrated into business plans</p>	<p>Port area as a major logistic node</p> <p>Ports facilitators in the logistic chain</p> <p>Integrated seaport area environmental management</p> <p><i>Potential for further integration of linear (transport modes) and area (logistic nodes) components in holistic logistic chain environmental management</i></p>

Increasingly proactive environmental management systems

Increasing environmental awareness

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Ports involvement environment management

In the developed countries, leveraging from deliberate government policies and regulations on the environment, the ports have instituted: “Deliberately formulated anti-pollution policies containing Regulations and Standards, which are Strictly Enforced, with accompanying objective financial Incentives and Penalties”

Some practical measures to reduce the carbon footprint and pollution of ports:

1. Cold ironing: Instructing ships not to use fuel oil in port and instead insist upon shore-side electricity. Examples:

- Melilla, the Spanish North African enclave, installed onshore power for its scheduled ro-ro services.

NB: The resultant reduction in ship's emissions from using onshore power is estimated at over 90 per cent (Ports & Ships 2014 - UNCTAD)



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What are Ports doing to prevent environment Pollution?

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Practical measures to reduce the carbon footprint and pollution of ports:
Cold ironing – provision of shore power/electricity

- In California, ships without a shore electricity connection will be banned from its ports from 2014;
- By 2020 80 per cent of the power used by a ship must come from the shore connection.
- In Europe, ships berthing for more than 2hrs are required to switch to a 0.1 per cent sulphur fuel or use alternative technologies (*Ports & Harbors*, 2013).

2. Subject port equipment to tests for Manufacturers to change their products, or introduce emission-control systems or diesel oxidation catalysts and particulate filters;
3. Install water catchment facilities which filter the debris contained in quayside storm water runoff and prevent it from entering into the sea/ river;
4. Introduce cargo netting or dust extraction technology to reduce the spread of dust during cargo operations



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What are Ports doing to prevent environment Pollution?

Some practical measures to reduce the carbon footprint and pollution of ports:

5. Utilize renewable energy sources where possible
6. Developing robust emergency-response plans to deal with spillages.
7. Offer financial incentives to more efficient (green) ships; Eg, Busan Port offers a 15 per cent discount on port dues for ships meeting a certain efficiency scoring

The scorings are based upon (IMO's MARPOL Annex VI) Environmental Shipping Index and Energy Efficiency Design Index (EEDI) to assess the amount of Nox and Sox produced by a ship. Membership: Over 30 ports and 2,500 vessels

Also, "A – G" GHG emissions system with info on over 70,000 vessels. A tool that enables ports to provide incentives without the need for extra paper work

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Challenges facing Africa's Ports

1. Poor level of awareness about the importance of a clean environment and the negative effects of pollution.
Matters of marine environment are largely conceived as remote and of little priority

2. Lack of deliberate policy for effective protection of the Marine environment.

Eg. Few PMAWCA Ports (GPHA -Ghana, Abidjan, Cotonou, NPA –Liberia, NPA-Nigeria, Sierra Leone PA, Doua Pointe-Noire) have dedicated Departments/Units to cater for port environment issues.

Of this number, many departments are not adequately resourced to effectively implement their environmental protection programmes





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Challenges facing Africa's Ports (cont.)

3. Weak national institutions mandated to regulate environmental protection (e.g. Ministries, Environmental protection agencies, Maritime Authorities, which sometimes do not encourage inter-agency cooperation

4. Ineffective inter-agency collaboration at the national level, and ineffective bilateral/multilateral cooperation to deal with Environmental protection

5. Consequence of the lack of effective sensitization and policy which is backed by adequate material and human resources: PMAWCA's /most African ports suffer from:

Lack of capacity to deal with marine pollution incidents Involving: dumping of toxic waste, oil spills, wrongful discharge of ballast water, disposal of dredged material, ships' waste reception, treatment and disposal, air pollution, traffic congestion, effluent discharge, hazardous cargo, dust, water quality, noise, etc.





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Evolution of Ports in Environmental Management : The sad truth is: Most of Africa is still at Stages 1 and 2

1960-1980	1980	1990	2000	2010
<p>Generally low level of awareness</p> <p>Reactive response to incidents</p>	<p>Specific legislation</p> <p>Increasing awareness</p> <p><i>Ad hoc</i> local initiatives</p>	<p>EU Habitats directive</p> <p>1st ESPO code of practice</p> <p>Eco-information project</p> <p>Tenants and operators</p>	<p>Quality assured EMS</p> <p>ECOPORTS tools and methodologies (e.g. SDM, PERS)</p> <p>Compliance plus – Environmental issues integrated into business plans</p>	<p>Port area as a major logistic node</p> <p>Ports facilitators in the logistic chain</p> <p>Integrated seaport area environmental management</p> <p><i>Potential for further integration of linear (transport modes) and area (logistic nodes) components in holistic logistic chain environmental management</i></p>

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Any solution? What is the way forward?

1. Technical assistance programme (UNCTAD, UNEP, IMO, etc) to build/
Strengthen institutional and human capacity of African countries and
ports for:
 - sustained sensitization on sustainable transport/freight
 - Effective National legislation and policies implemented by well
resourced institutions
 - National baseline studies on sustainable freight/Port operations and
environment ;
 - Development and effective implementation of policies on sustainable port
environment management
2. Framework to support African countries build capacity for sustainable
energy sufficiency and efficiency
3. Establish a permanent and efficient platform for port cooperation on
environmental protection. Learning from ESPO – Eco Ports, AAPA, etc.





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**« PORTS ARE READY TO LEVERAGE ON SOLID NATIONAL
POLICIES AND PROMOTE EFFECTIVE PARTNSHIPS FOR
A SUSTAINABLE FREIGHT TRANSPORT »**

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THANKS FOR YOUR KIND ATTENTION