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

Trade Logistics and the 2030 Agenda for Sustainable Development

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by

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Achieving the Sustainable Development Goals with Sustainable Freight Transport

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Agenda

• What is Sustainable Freight Transport?
• Is it a prerequisite for SDG’s?
• How to implement Sustainable Freight Transport?
Economic Development & Freight Transport

- Improvements to transport infrastructure – mainly road
  - Centralisation
  - Wider sourcing
  - Increased length of haul
  - Increased freight transport intensity: ratio of tonne-km to output
  - Growth in output

- Economic development
  - Industrialisation
    - New industrial / warehousing development not rail-connected
  - Change in commodity mix
    - Lower density / higher value products
  - New patterns of consumption
    - Stronger just-in-time pressures
    - Poorer utilisation of vehicle capacity
    - Decline in rail freight
    - By less green mode
    - In less full vehicles

- Economic Development & Freight Transport
  - Much more freight being moved
  - Greater environmental & social degradation
  - Higher externalities per unit of freight moved
  - Economic Development & Freight Transport Externalities

Source: Alan McKinnon

Freight Transport Externalities

- Vehicle Ownership
- Vehicle Kilometer Travel
- Accidents
- Energy consumption
- Congestion Costs
- PM2.5
- PM10
- Nox
- Black Carbon
- CO2
- N2O
- CH4

Share in Transport Sector
What is Sustainable Freight Transport?

**ECONOMIC**
- Trade competitiveness, transport costs, energy efficiency, quality and reliability
- Infrastructure investment and fiscal burden
- Freight productivity, sustainable consumption, resilience and operational continuity
- Connectivity and market access

**ENVIRONMENTAL**
- Air pollution, GHG emissions, water pollution, resource depletion, land use and habitat fragmentation, waste, biodiversity and ecosystems, soil quality & climate resilience

**SOCIAL**
- Safety, security, employment, labour conditions, affordability, aesthetic impacts, cultural preservation, health and noise and vibration

Sustainable Freight?
Sustainable Freight for Sustainable Development

Sustainable Freight Links to Other International Processes

Making freight transport more sustainable promotes achievement of multiple international development agendas:

- New Urban Agenda
- Paris Agreement
- Addis Ababa Action Agenda
- Sendai Framework for Disaster Risk Reduction
- Vienna Programme of Action for LLDCs
- SIDS Accelerated Modalities of Action (SAMOA) Pathway
- Decade of Action for Road Safety
- Istanbul Programme of Action for LDCs
Role of Freight in Climate Mitigation?

Freight Transport CO2 emissions from ~3.5 Gt to reduce to 1 Gt by 2050 [8Gt in 2050 BAU]

Current Status?

20 Asian Countries Review
Implementing Sustainable Freight Transport

Technology
Infrastructure
Market
Behaviour
Energy
Regulation

Structure of the supply chain
Modal Shift
Vehicle routeing
Utilisation
Energy Efficiency
Emission content of the energy
Other externalities per vehicle-km and per unit of throughput

Economic
Environmental
Social
Sustainable Freight

Source: Alan Mckinnon

Example - UNCTAD

Who should initiate the measure? – A review of 300 SFT measures

Government, 18%
Partnership, 35%
Private Sector, 46%
Development Agency, 0.3%

Biggest barrier – "Soft infrastructure" i.e. Capacity/Awareness/Lack of Partnerships
2017-10-30

Capacity Building - Sustainable Freight Transport Training Modules

- INTRODUCTION
- FRAMEWORK
- MEASUREMENT
- ENVIRONMENTAL COSTS
- TARGETS

- FREIGHT INTENSITY
- MODAL SPLIT
- VEHICLE UTILISATION
- ENERGY EFFICIENCY
- REDUCING EMISSIONS/UNIT OF ENERGY
- CITY LOGISTICS
- GREENING MARITIME SUPPLY CHAIN

- FINANCING
- SCALING-UP - PARTNERSHIPS & PROGRAMS

UNCTAD Reference Framework for Sustainable Freight Transport

- Data Collection
- Stakeholder Mapping
- Qualitative Evaluation
- Quantitative Evaluation

- Diagnosis
- Visioning
- Goals
- Objective Visioning
- Establish Targets
- Establish KPI's Targets

- Awareness Raising
- Capacity Building
- Consultations
- Experimentation & Technology
- Financing
- Harmonisation
- Institutional
- Legal framework

Enabling Factors

- Partnership
- Recognition Scheme
- Sustainable Freight Program

Partnership & Program

- Implementation
- Prioritisation
- Identify Projects, Strategies and Policies
- Identify Framework

Implementation
UNCTAD Role in SFT?

Data Collection
- Stakeholder Mapping
- Qualitative Evaluation
- Quantitative Evaluation

Diagnosis

Visioning
- Goals
- Objective

Establish Targets
- Establish KPI's

Implementation
- Identify Framework
- Identify Projects, Strategies and Policies
- Prioritisation
- Implementation

Monitoring & Evaluation

Sustainable Freight Program
- Recognition Scheme
- Partnership

UNCTAD as “Enabler”
- [Awareness, Capacity, Experimentation & Technologies Financing (Soft)]
- Harmonisation of standards, Institutional and Legal Framework] - generating a snowball effect

Thank you

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