Designing Policy to Promote Transport Connectivity for the Achievement of the SDGs

Key Elements

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UN-OHRLLS Training on Strengthening Capacity to Design and Implement Policies and Identify Solutions that Promote Transport Connectivity for the Achievement of the SDGs

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Relevant Development Frameworks

- **Global level**
  - 2030 Agenda for Sustainable Development
  - Vienna Programme of Action for Landlocked Developing Countries
  - Paris Agreement on Climate Change
  - Sendai Framework for Disaster Risk Reduction 2015-2030
- **Regional level:** Agenda 2063
- **Sub-regional level:** SADC, ECOWAS, COMESA
- **National level:** National Development Strategies/Plans

SDGs as an international reference for sustainable development

- Countries need to commit to make every effort to fully implement the Agenda by 2030
- An ambition needs to be set, along with clear formulation of long-term vision defining what needs to be achieved with the 2030 Agenda
- Governments need to translate the global SDG into national targets and policies for 2030:
  - Defining new policy targets for the SDG themes that are insufficiently addressed by existing national targets
  - Updating relevant existing national targets to the 2030 horizon
  - Cover the most important elements
  - Be relevant in the national context

SDGs as an international reference for sustainable development (cont'd)

- Policy responsibilities must be clearly defined to ensure successful implementation
  - Who would be responsible for the implementation of specific SDG targets?
  - Who would oversee and ensure policy coherence and interlinkages between the targets?
  - Diverse SDG targets require involvement of various authorities at all levels
  - No silo approach.
- Periodic monitoring
  - Trends in indicators relevant to specific SDG targets
  - Ex-ante policy evaluation → assess the extent to which the targets are expected to be achieved

Towards SDGs Implementation

*Example from Botswana**

Botswana's SDGs implementation process:

- Phase 1: Creating ownership at all levels
  - Awareness campaigns for the Government, local authorities, civil society, academia, parliament and development partners
  - The SDGs translated into the local language
- Phase 2: Alignment of SDGs with the National Vision and National Development Plans
- Prior to the SDGs adoption in 2015, Botswana developed a draft *National Framework for Sustainable Development*
- A lengthy consultation process in the development of Vision 2036, National Development Plan 11 (2017-2023), and the associated District and Urban Development Plans
- Vision 2036 and NDP 11 were formulated at the same time that the SDGs were being finalized

*) *Botswana Voluntary National Review 2017*

Towards SDGs Implementation (cont'd)

*Example from Botswana**

Botswana's SDGs implementation process:

- Phase 3: Institutional Mechanism for SDG Coordination
  - National Steering Committee (NSC) is established (government, private sector, development partners, …)
  - Multi-sectoral Technical Task Force to assist NSC
  - 4 Thematic Working Groups: 1) Economy and Employment; 2) Social Upliftment; 3) Sustainable Environment; 4) Governance, Safety and Security
  - Statistics Botswana for data and monitoring progress
- Phase 4: National SDG Roadmap

  A 5-year plan of action broken down into annual workplans

*) *Botswana Voluntary National Review 2017*

Transport connectivity under Vienna Programme of Action (VPoA)

Priority Area 1: Fundamental transit policy issues

a) To reduce travel time along corridors, with the aim of allowing transit cargo to move a distance of 300 to 400 km every 24 hours

b) To significantly reduce the time spent at land borders

c) To significantly improve intermodal connectivity

Priority Area 2: Infrastructure development and maintenance

Develop and implement comprehensive national policies for infrastructure development and maintenance

Priority Area 3: International trade and trade facilitation

To significantly increase the integration of LLDCs into world trade and global value chain by reducing non-physical barriers that cause high transport costs

Mainstreaming the VPoA into national development plans and sectoral strategies

Most of the LLDCs' National Development Plans make reference to all six of the VPoA priority areas → several LLDCs followed systematic participatory process

Zambia National Transport Policy 2019

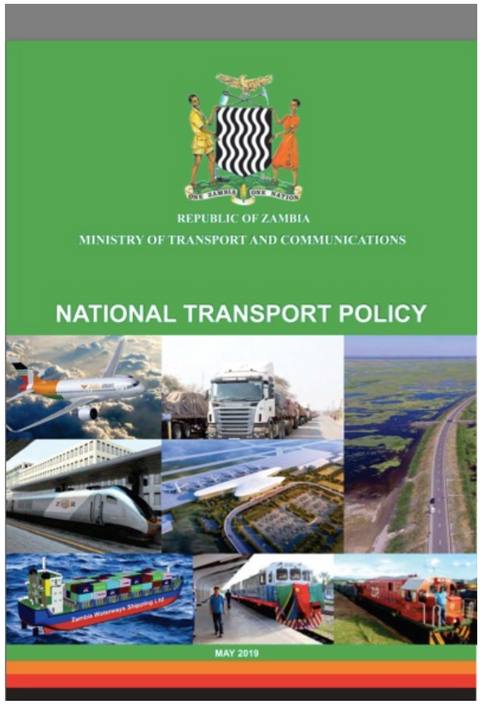
- Rationale:
  - *Ensure optimal maintenance and rehabilitation of existing transport infrastructure*
  - *Transform Zambia into a land-linked country by establishing efficient, safe and competitive regional transport development corridors*
- Transport Corridor Development

  Ambition to take a lead in the development of corridors as a hub of inter-regional trade as emphasized by the SADC Regional Infrastructure Development Master Plan 2012-2020

  → Develop economical and integrated transport infrastructure and systems

  → Promote port competitiveness through alternative transport corridor development…

  → Develop a National Logistics Strategy



Integration of regional transport policies into national development strategies

Transport corridor infrastructure development

- Integrating and harmonizing regional policies into national plans of LLDCs and transit countries → start with transport corridor planning and cascade to other parts of the connected transport network

- National transport planning needs to incorporate likely impacts of pandemic and other emergency situations to ensure continuation of cross border activities

- Policies should concentrate on improving transport infrastructure capacity and efficiency of transport corridors within the country, rather than only on national transport networks

Integration of regional transport policies into national development strategies (cont'd)

Ex: Malawi National Transport Policy

- Most of the key infrastructure forms part of one or more of the international corridors
- Acknowledges that efficient operations of international transport corridors are critical for Malawi's participation in international trade.
- International Transport Corridors as **one of the 6 priority areas** → Policy objectives:
  - Promote the establishment of inland dry ports and one stop border posts
  - Ensure that infrastructure along the major corridors is maintained and rehabilitated to improve access to ports
  - Develop a database of statistics on corridor operations

Conclusions

- In promoting transport connectivity and building resilient transport infrastructure to achieve the SDGs, it is essential to ensure that contemporary transport policy is in place
- Policies should be generic, robust and provide the framework for most specific policies for subsectors.
- The process of selecting strategies usually follows combination of methods:
  - Political, Economic, Social, Technological, Legal, and Environmental (PESTLE) analysis
  - Strengths - Weaknesses – Opportunities - Threats (SWOT) analysis
  - Multiple-criteria decision-making (MCDM)
  - …
- It is essential to ensure that capacity exists to develop and implement the policy, including to collect data to develop, monitor and evaluate the policy implementation

Collecting Data for Designing and Monitoring Policies that Promote Transport Connectivity for the Achievement of the VPoA and SDGs

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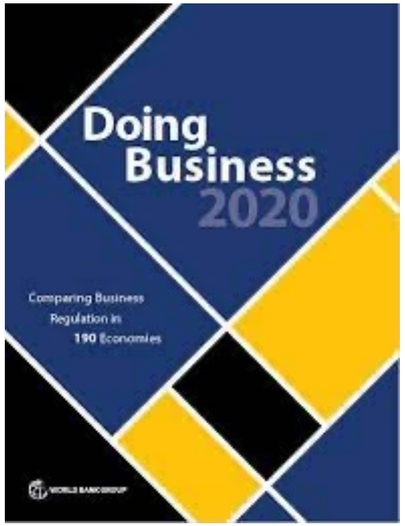
Why is data essential?

- A comprehensive database supports transport policy making process of national and local governments to ensure a sustainable and healthy development of transport systems
- A sustainable data collection system also allows an effective performance measurement and policy monitoring system → in terms of transport connectivity, this is useful for assessing the effectiveness of transport operations and for identifying bottlenecks preventing the smooth movement of transit goods
- Regular data collection and analysis are needed to monitor LLDCs' progress in achieving the objectives of VPoA and SDGs → stressed at the *High-level Midterm Review on the Implementation of the VPoA for LLDCs for the Decade 2014-2024* and the 2030 Agenda for Sustainable Development

Databases and indicators by development partners

- Logistics Performance Index (LPI) by the World Bank
- Doing Business/Trading Across Borders by the World Bank
- World Development Indicators
- Global Competitiveness Index by World Economic Forum
- Trade Cost Database by ESCAP-World Bank
- Corridor Performance Measurement and Monitoring by CAREC
- United Nations Regional Commissions Trade Facilitation and Paperless Trade Implementation Survey database
- Productive Capacities Index (PCI) by UNCTAD
- Air Connectivity Index (ACI) by the World Bank
- Liner Shipping Connectivity Index (LSCI) by UNCTAD



Databases and indicators by development partners (cont'd)

- Mainly developed to measure countries' performance on trade facilitation and to monitor transport corridors' efficiency
- Countries need to establish their own transport infrastructure database

  → Employ endless possibilities of Big Data

  → Data-driven policies handle complex policy issues efficiently and effectively

  → Data needs to be collected in a standard format that can be used by different government institutions and agencies.
- Very few LLDCs perform transport surveys with private respondents, shippers, freight forwarders or truck drivers

Proposed indicators for monitoring both VPoA and SDGs

Vienna Programme of Action

- 13 **core** indicators (relate to strategic indicators which are necessary for policy-decision making)
- 16 **additional** indicators (disaggregated indicators to be utilized by countries to measure and monitor the performance of their transport infrastructure)

Sustainable Development Goals

- 8 indicators

The indicators are mainly:

- Quantifiable and able to measure change (time series potentiality)
- Comparable with international benchmarking
- Expressed as value, rate and percentage

VPoA Priority 1: Fundamental transit policy issues

Indicator	Data source
Core indicators	
Average road corridor speed for export and import (km/h)	
Access to all-weather road (% access within {x} km distance to road) (SDG)	Ministry of Transport
Commercial speed* of international railway lines (km/h)	
Number of ratifications, accessions, signatories to transport agreements	Database of development partners
Additional indicators	
Road corridor speed with delays for export and import (km/h)	Ministry of Transport, Infrastructure Managers
Road corridor speed without delays for export and import (km/h)	

*) *distance divided by journey time*

VPoA Priority 2: Infrastructure development and maintenance

Indicator		Data source
Core indicators		
• Length of total roads network (km) • Length of paved roads (% of total roads length) • Length of total rail network (km)	• Air transport: registered carrier departures • Length of navigable inland waterways (km)	Ministry of Transport, Infrastructure Managers
• Recurrent spending on infrastructure (% of GDP)		Ministry of Finance
Additional indicators		
• Length of international road network per class (km) • Length of international road with design speed of at least 100 km/h (km) • International Roughness Index (IRI) rating for the total length of the international roads. • Length of inland waterway (IWW) with international importance (km)	• Length of main international railway lines (km) • Length of supplementary international railway lines (km) • Length of international railway lines with at least two tracks (km) • Rail track gauge and loading gauge • Cargo handling capacity of inland navigation ports (tons)	Ministry of Transport, Infrastructure Managers
• Passenger airport terminal capacity: number of gates, number of passengers embarked and disembarked per year	• Cargo airport terminal capacity: freight and mail loaded and unloaded per year (tons)	Airport

VPoA Priority 2: Infrastructure development and maintenance

Example from Paraguay

Classification and surface type of Paraguay road network in 2020

Type of network	TYPE OF SURFACE								Total by network type (km)
	PAVED (KM)						NON-PAVED (km)		
	PCA*	SURFACE TREATMENT **	HCP***	Cobblestone (Portland cement concrete)	Stone	Stone-Gravel	Gravel	Earth	
National (km)	4.702,27	321,16	15,00	34,65	83,34	66,17	0,00	3.553,32	**8.775,91**
Departamental (km)	2.056,24	84,90	0,00	0,00	474,44	384,53	0,00	4.825,81	**7.825,93**
Neighbourhood roads (km)	1.320,66	33,08	0,00	5,34	688,54	646,26		59.515,27	**62.209,14**
Total by surface type (km)	**8.079,17**	**439,13**	**15,00**	**39,98**	**1.246,36**	**1.096,96**	**0,00**	**67.894,41**	
Percentage	**13,85%**						**86,15%**		**78.811**

*PCA: asphalt layer
**Surface treatment: Layer with surface treatment
***HCP: concrete pavement with portland cement

Source: UNECE

VPoA Priority 3: International trade and trade facilitation

Indicator	Data source
Core indicators	
Freight performed with road transport modes involved in international (transit) journeys (ton-kms) **(SDG)**	Ministry of Transport, surveys of shippers, freight forwarders and inland port operators
Freight performed with rail transport modes involved in international (transit) journeys (ton-kms) **(SDG)**	
Freight performed with inland water transport (ton-kms) **(SDG)**	
Additional indicators	
Gross weight of international (transit) cargo transported by either multi-modal, inter-modal or combined transport (tones)	Surveys of shippers, freight forwarders and truck drivers
Gross weight of containerized cargo and non-bulk cargo by each transport mode (tones)	
On-flight origin and destination (aggregate number of passengers, freight and mail tons carried between all international city-pairs on scheduled services).	Airlines

Key transport data to monitor and report on SDGs

SDG Indicator	Key data	Source
Goal 3: Ensure healthy lives and promote well-being for all at all ages		
3.6.1: Death rate due to road traffic injuries	• Number of vehicles with (operational) tachograph • Number of road traffic accidents per year	Police
3.9.1: Mortality rate attributed to household and ambient air pollution	• Number of alternative fuel passenger cars, buses and trucks • Average age of passenger cars, buses and trucks • Number of alternative fuel filling stations along international roads and inland stations	Ministry of Transport
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
9.1.1: Proportion of the rural population who live within 2 km of an all-season road	• Paved road length per 1000 km^2 territory • Access to all-weather road (% access within {x} km distance to road)	Ministry of Transport, Infrastructure Managers
9.1.2: Passenger and freight volumes by mode of transport	• Number of passenger-kms and freight ton-kms performed with road and rail transport modes involved in international (transit) journeys	Surveys of shippers, freight forwarders and truck drivers

Key transport data to monitor and report on SDGs

Example from Botswana

SDG Indicator	Key data	Source
Goal 3: Ensure healthy lives and promote well-being for all at all ages		
3.6.1: Death rate due to road traffic injuries	450 deaths (2016): 324 males, 126 females	Transport statistics; Statistics Botswana; Causes of Mortality Stats brief; Ministry of Transport and Communication
3.9.1: Mortality rate attributed to household and ambient air pollution	No data	Environment Statistics Report; Statistics Botswana; Vital Statistics; Ministry of Health and Wellness; Ministry of Environment, Natural Resources, Conservation and Tourism
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
9.1.1: Proportion of the rural population who live within 2 km of an all-season road	Not included	Not included
9.1.2: Passenger and freight volumes by mode of transport	Passengers: 755,721 Freight: 1,844,808 tonnes (2014)	Civil Aviation Authority Reports

Source: Botswana Domesticated SDGs Indicators – Stats Brief 2018

Conclusions

- Reliable data on the transport sector would allow for a better assessment and monitoring of transport infrastructure and related policies.
- Challenges of LLDCs in transport data collection:
  - Data are collected in different formats by different agencies and are often not publicly available
  - Transport data are usually aggregated and are not collected regularly
  - Low resources to collect transport data that requires extensive surveys. Therefore, data essential for building national transport model are not available
- LLDCs are encouraged to seek support from development partners to enhance their capacity in developing integrated transport database system (development partners have been collecting transport data at the regional and sub-regional levels)

Thank you for listening ...