

# Financing infrastructure in the Transport Sector in Landlocked Developing Countries - Trends, Challenges and Opportunities

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UN-OHRLLS, OCTOBER 4<sup>TH</sup>-5<sup>TH</sup>, 2016

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# Trends, Challenges and Opportunities

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This presentation summarizes the analyses and recommendations of a report, near completion, commissioned by UN-OHRLLS at the end of July, 2017, to provide a comprehensive analytical report on financing infrastructure in the transport sector in LLDCs and regional transit transport systems that connect the LLDCs to seaports, identifying trends, challenges and opportunities for mobilizing greater financing.

The report is in four parts, one each on Trends, Challenges and Opportunities and a final section of Conclusions and Recommendations. This presentation follows the same format

# Trends

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CHANGES IN FOCUS SINCE BEFORE ALMATY TO NOW

RESULTS MILDLY POSITIVE FOR INFRASTRUCTURE BUT STILL  
LARGE GAPS

# Pre Almaty and Almaty Agenda(2003)

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The Almaty Conference represented a new global awareness of the additional constraints that geography places on Land Locked Developing Countries (LLDCs). Until that time they had been considered no differently to other developing countries of similar size, population and GDP per capita.

Almaty brought attention to the until then overlooked constraints of land-lockedness, including

- Transit policy and regulatory frameworks.
- Infrastructure development.
- Trade and transport facilitation.
- Development assistance..
- Implementation and review.

# Post Almaty to Santa Cruz

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Two different periods

- *Up to about 2010*, there was a focus on investment, which was quicker and easier to implement than the other methods, and its potential benefits were thought to be more obvious;  
  
By 2010 a period of disillusion with the infrastructure dominated approach emerged, since few of the perceived benefits were realized and the costs turned out to be greater than anticipated.
- A new emphasis to logistics and supply chains was hoped to be more cost effective. This however has proven difficult to apply in practice and found to be still dependent on more and better infrastructure to realize any significant benefits

It was argued that logistics had become increasingly complex and critical for firms' competitiveness, and that addressing logistics weakness would be the most cost-effective way to overcome the transport and trade disadvantages of landlocked countries

# Santa Cruz Ministerial Declaration

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More recently there has been a coming together of these two perspectives of the importance of transport infrastructure for land-locked countries. It is the concept of reliability and confidence in the certainty of transport times and costs that is common to the two approaches and that brings them together

The Santa Cruz Ministerial Declaration was a reflection of this new paradigm and included concepts not emphasized before:

- Mobility, Connectivity, Resilience, Sustainable, Facilitation, Intramodality

These are the concepts that are essential to the new paradigm of addressing the constraints of LLDCs; They all involve a combination of infrastructure, transport and logistics services and trade facilitation

Implementing them will need a different approach to dealing with landlocked-ness than was applied previously

# LLDCs have about the same trade share of GDP as other countries.....but

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Region	Import % of GDP	Export % of GDP	Trade % of GDP
Eastern Asia	23%	34%	56%
Eastern Europe and Central Asia	36%	19%	56%
Latin America	29%	25%	55%
South Asia	45%	12%	58%
Sub-Saharan Africa East	35%	22%	57%
Sub-Saharan Africa West	24%	15%	39%
All LLDC	33%	20%	53%
Global	29%	29%	57%

Other than for Sub- Sahara Africa West, total trade as a % of GDP does not vary much between regions.

But the shares of imports and exports are very different. Other than LLDCs in East Asia, all have a negative trade balance

With the exception of those in Eastern Europe and Central Asia, LLDCs have low transport densities for paved roads and rail

	Road density	Rail density	Land transport density
Region	Kms per 1,000 km <sup>2</sup>		
Eastern Asia	5.7	1.2	6.9
Eastern Europe and Central Asia	181.1	11.8	192.9
Latin America	10.6	2.8	13.4
South Asia	80.2	-	80.2
Sub-Saharan Africa East	34.7	5.7	40.4
Sub-Saharan Africa West	3.5	2.3	5.8
All LLDC	19.1	3.6	22.7
All LLDC with railway	36.4	3.6	40.0

On average, LLDCs have only 12.5% the global density of paved roads, but for the LLDCs that have them, the rail density is 50% of the global average (but driven by the for Eastern Europe and Central Asia)

*ECA is an exception with above global benchmarks for both road and rail*

There is a very high correlation (more than 95%) between paved road and rail density for LLDCs. So those with no rail network do not compensate with a higher density road network.

LLDCs in three regions in particular have very low transport densities, those in East Asia and Sub-Saharan Africa West, and to a lesser extent, those in Latin America.

LLDCs in the third of these regions have good inland waterway networks that partially compensate, at least for international transport and trade

# Challenges

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INFRASTRUCTURE IS EXPENSIVE AND NOT ALL LLDCS HAVE THE SAME CAPACITY TO ACCESS FINANCE

# Not all LLDCs have the same priority issues

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Some:

- are closer to a deep-water port
- do not have a railway
- have inland waterway access to a deep-water port
- have a low GDP per capita and low GDP
- Do not have benefit of a regional corridor agency

# LLDCs have large differences in distance from a deep-water port

Region	Average distance kms	Standard Deviation kms
Eastern Asia	1,157	537
Eastern Europe and Central Asia	2,630	2,147
Latin America	718	248
South Asia	1,298	427
Sub-Saharan Africa East	1,012	567
Sub-Saharan Africa West	1,345	200
All LLDC	1,587	1,534

The average distance to a deep-water port is just almost 1,600km (1,587kms) but with a large standard deviation almost the same as the average (1,534kms).

LLDCs in ECA have the longest average of 2.630km (166% of the mean) and Latin America with 'only' 718km.

While far from a dependable index, these distances as a very approximate indication of the relative 'landlockness' penalty of the LLDC countries

# Only just over half LLDCs have a railway

Region	% of LLDCs with a railway
Eastern Asia	50%
Eastern Europe and Central Asia	100%
Latin America	50%
South Asia	0%
Sub-Saharan Africa East	55%
Sub-Saharan Africa West	20%
All LLDC	56%

What should the strategy be for those without any railway? For most the cost will be prohibitive, but they are all proposing to build one, some more seriously than others

The costs are very high - U\$3m to U\$8m per km for a standard gauge railway, depending on the terrain and what is included in the cost

If they have prospects of high tonnage, repayment of the financing loans might be feasible, but for most of those proposed the feasible revenue might cover the operating costs, but no more.

# Inland waterway access can be valuable transport asset

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Only four LLDCs have feasible, or potentially feasible) inland waterway access to a port or large neighbor

- Bolivia
- Lao
- Paraguay
- CAR

*Some others (such as Niger and South Sudan) have long term prospects of waterway access*

Bolivia and Praguay have access to a major waterway on which large barge trains (12,000 tons or more) can be operated without any additional infrastructure investment. Operations are financially viable

Lao and CAR do not have access to waterways with such large economies of scale and significant investment is needed to make anything other than local transport of building materials viable. The potential benefits and necessary investment costs need to be assessed to see what level of investment could be justified

# Regional corridor management

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## Regional agency

- CAREC
- Greater Mekong Sub region

Broad focus, strategic, lending agencies as partners. Limited input from users

## Specific corridor agencies

### East Africa

- Northern
- Central
- Nacala
- Corridor focus, operational, lending agencies as supporters. Users have significant role

# Average investment (including maintenance) to reach global standards will be almost 2% of GDP

Region	Investment share of GDP
Eastern Asia	5.1%
Eastern Europe and Central Asia	1.5%
Latin America	1.2%
South Asia	2.7%
Sub-Saharan Africa East	0.7%
Sub-Saharan Africa West	6.6%
All LLDC	1.7%

This is just for paved road and rail networks. It does not include unpaved roads, airports or urban transport. It does not include replacing narrow gauge with standard gauge railways. It does make allowances for additional infrastructure needed to provide resilience to disaster in transport networks

There are large differences between LLDCs in different regions, with East Asia and Sub-Saharan Africa needing to spend the largest share of GDP, for the latter as it has such a low GDP per capita (less than U\$600).

Rarely have LLDC governments exceeded road and rail investment of more than 0.5% of GDP.

# Opportunities

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MORE FUNDING AND FINANCING SOURCES NOW  
AVAILABLE

# Domestic revenue generation

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National budgets of LLDCs can rarely provide more than 1% of GDP

Few opportunities to raise more:

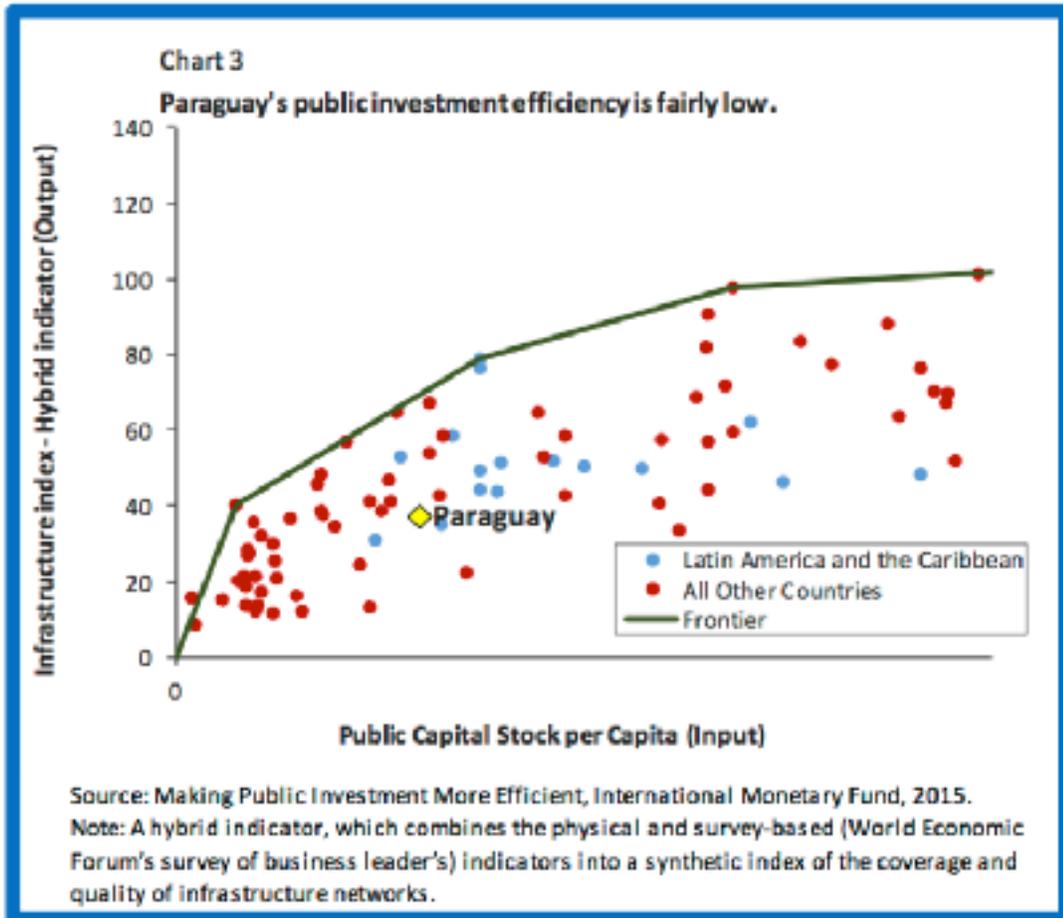
- User fees, including road maintenance charges
- Concessioned railways can rarely charge tariffs high enough to cover infrastructure maintenance and investment, so 'cycle of degradation' of SOE railways continues. Change model from vertically integrated to separation of infrastructure and operations.
- Pension funds and diaspora funds

# Make better use of public investment

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- **Implement more rigorous and transparent arrangements for investment project appraisal, selection, and management**
  - *Use Infrastructure Prioritization Framework (IPF)*
- **Strengthen institutions related to investment implementation**
- **Implement transparent procurement procedures**
- **Strengthen the management of PPPs**
- **Integrate institutions for strategic investment planning with subsequent stages in the PIM**
- *Use Making Public Investment More Efficient*

# Large potential benefits to LLDCs



LLDCs tend to be at the lower end of the infrastructure investment efficiency ratings

If they could reach the threshold efficiency levels, about 30% more infrastructure could be built without any increase in funding

# Make investment climate attractive to private investors in PPPs

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- Apart from project feasibility and country confidence issues, implementation of PPPs is most impacted by the readiness of the institutional structure of the government to deal with PPPs.
- To assist with this the PPIAF has designed a PPP Readiness Assessment diagnosis. Although aimed at the staff of the MDBs, and specifically the World Bank, with little change it can be used to governments to assess their own readiness, and based on its outcomes, determine the best path to becoming ready.
- Another perhaps more useful tool for self-diagnosis of readiness to implement PPPs is provided by UNESCAP.

# Opportunities

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MDBS HAVE MANY SPECIFIC FUNDS THAT LLDCS CAN USE,  
PRIVATE INVESTORS MORE INTERESTED IN LLDCS, NEW  
BILATERAL SOURCES LARGEST PROVIDERS OF FINANCE

# MDBs continue to invest in transport

	2013	2014	2015
<b>Loan amount</b>	U\$b	U\$b	U\$b
LLDBs	2.58	3.85	4.78
All countries	20	21	23
LLDB share	<b>13%</b>	<b>18%</b>	<b>21%</b>
<b>No. of borrowing countries</b>			
LLDBs	17	23	20
All countries	81	83	85
LLDC share	<b>21%</b>	<b>28%</b>	<b>24%</b>
<b>No. of loans</b>			
LLDBs	35	48	51
All countries	187	193	229
LLDC share	<b>19%</b>	<b>25%</b>	<b>22%</b>
<b>Average loan size</b>	U\$m	U\$m	U\$m
LLDB	74	80	94
All	107	109	100

- MDB lending to LLDCs is growing faster than to other countries,
- but it tends to be focused on fewer countries
- and fewer loans.
- But LLDC loans are smaller than to other countries
- *The Regional Integration Funds of LLDCs have not achieved their expected success*

# Corridor concept can help attract investment funds

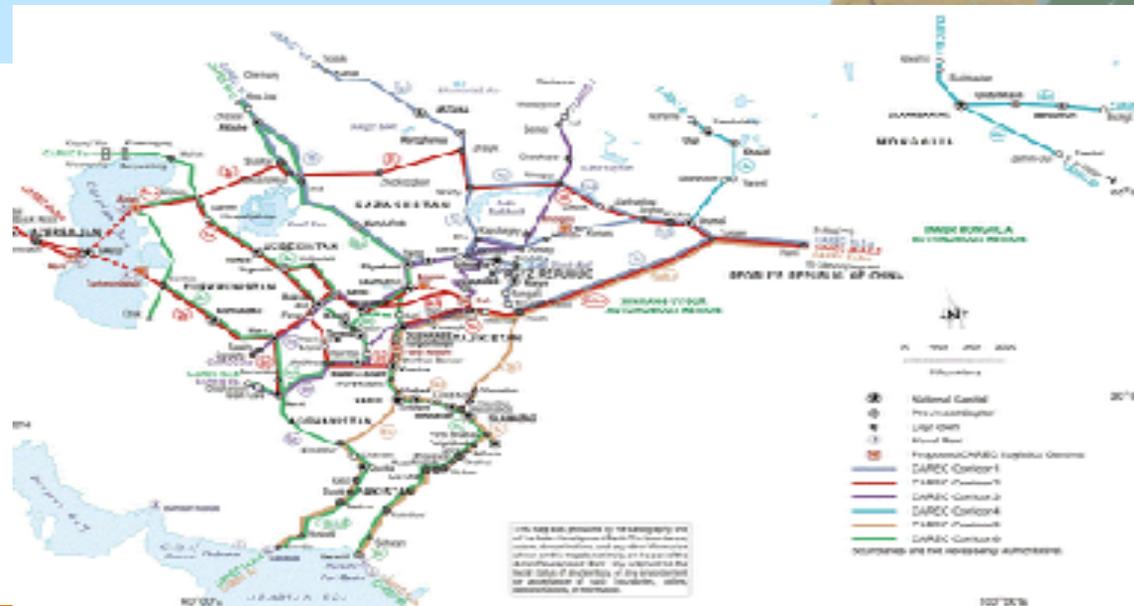
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- Two approaches:
  - **Regional planning of several corridors: Focus on planning and investment**
    - (e.g. CAREC and Mekong)
  - **Individual corridor management: Focus on operation and management**
    - (East Africa Northern and Central Corridors, Nacala Corridor)

Use of resources from World Bank and CAREC/UNESCAP can help identify where are the infrastructure and other gaps in LLDCs trade and transport corridors, and provide guidance on how to address them:

- Trade and Transport Corridor Management Toolkit (World Bank)
- Corridor Performance Measurement and Monitoring (CPMM) method (CAREC)

# Three regions, three solutions, three outcomes



# PPP finance finds LLDCs more attractive than before

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- Public sector funds about 40% of PPP costs in LLDCs, higher than in other sectors such as energy and water as project revenue generation is lower and less secure
- East Asia attracts more private sector funding to its transport PPPs (83%), Latin America and Caribbean the least (19%)
- Institutional private investors such as pension funds still only contribute about 1% of transport equity (most for ports and airports)

Theme	Key question
PPP experience	Does the government have any experience implementing PPPs
Stakeholder support and ownership	Does the government support PPPs?
	Does the general public and other key stakeholders support PPPs?
	Is the legal and regulatory environment sufficiently conducive to PPPs?
	Do legislation and regulations provide clarity on the management of unsolicited proposals?
	Do other legislation and regulations support the implementation of PPPs?
	Are legislation and regulations functioning well in practice?
Institutional framework	Are there institutions in place to support the preparation, procurement, and implementation of PPPs?
	Are there processes in place to guide the preparation, procurement, and implementation of PPPs?
	Are there standardized PPP documents and templates?
	Is there a government communication strategy and stakeholder engagement strategy on PPPs?
	Do the government and the industry have (access to) the skills and expertise to implement PPPs successfully?
Funding and managing fiscal risk	Does the budgetary system support PPPs?
	Is there funding available for robust PPP project preparation, procurement, and implementation?
	Is there a framework for government financial support to PPPs?
	Is there a framework for assessing and managing fiscal commitments and contingent liabilities?
	Is there a framework for project-level financial and economic assessments?
Access to finance	Are the necessary PPP project finance structures and sources available?
Transparency and disclosure	Are there oversight , audit, and disclosure procedures and institutions in place?

# Importance of 'Cascade' Process

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- Since 2015, the major MDBs have been implementing a new approach to their lending that will have a large impact on LLDCs;

*“In most simple terms this approach prescribes that we first consider private investment for projects; then public private partnerships; and if the first two are not available then, only then, consider public finance.”*

Managing Director and World Bank Group Chief Financial Officer, June 2017

- Could involve a complete rethink of how LLDCs approach MDBs for project financing

# New bilateral and multilateral funds

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Financing from the sources is now greater for the transport sector than that from the ‘big seven’

New bilateral sources are mostly from China, and include

- the China Development Bank and the China Exim Bank, already with more assets (\$1.8 trillion) than the MDBs
- China Africa Development Fund
- China State Construction Engineering Corporation, and others
- The Silk Road Fund and the China - Central and Eastern Fund
- Other funds that invest in transport infrastructure in South America
- Africa Growing Together Fund (jointly funded with AfDB)
- South South Climate Cooperation Fund
- Asia Infrastructure Investment Fund (China at least 50% of total equity, currently more than US\$100 billion equivalent to  $\frac{2}{3}$  that of the capital of the Asian Development Bank and about half that of the World Bank.

# Recommendations

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MENU OF OPTIONS, SOME APPLY TO ALL LLDCS, SOME ONLY TO A FEW

# Summary of recommendations

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## *Make best use of available domestic resources*

- Apply the IMF approach to *Making public investment more efficient*
- Make better use of road funds and transport user
- Consider making infrastructure investment attractive to national pension
- Implement a project prioritization process,

## *Maximize access to international finance*

- Make investment climate for transport infrastructure more attractive to PPP investors. Use PPPIAF or UNESCAP PPP Assessment Tools.
- Where appropriate, implement system of corridor management,
- Review all the potential sources of multilateral and bilateral funding.
- Involve potential new bilateral and multilateral sources (such as the AIIB and Silk Road Fund) as early as possible