Improving Trade and Transport for Landlocked Developing Countries

A Ten-Year Review

World Bank-United Nations report in preparation for the 2nd United Nations Conference on Landlocked Developing Countries (LLDCs)

UN-OHRLLS

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November, 2014

Acknowledgements

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Abbreviations

APoA	Almaty Programme of Action
AEO	Authorized Economic Operator
ASYCUDA	Automated System for Customs Data
ATP	Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for Such Carriage
CAREC	Central Asia Regional Economic Cooperation
CCTTFA	Central Corridor Trade and Transport Facilitation Agency
CIF	Cost, Insurance & Freight
CIM-SMGS	CIM – Uniform Rules Concerning the Contract of Consignment, International Carriage of Goods by Rail; SMGS – Agreement Concerning International Freight Traffic by Rail (OSJD)
CMR	Convention on the Contract for the International Carriage of Goods by Road
CPMM	Corridor Performance Measuring and Monitoring
CU	Customs Union
DPL	Development Policy Lending
DPO	Development Policy Operation
ECOWAS	Economic Community of West African States
EDI	Electronic Data Interchange
EU	European Union
EAC	East African Community
ECOWAS	Economic Community of West African States
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GVC	Global Value Chain
LLDCs	Landlocked Developing Countries
LPI	Logistics Performance Index
MDTF	Multi-Donor Trust Fund
NCTS	New Computerized Transit System
NTMs	Non-Tariff Measures

IRU	International Road Transport Union
ICT	Information Communications Technology
OSBP	One-stop border post
PPP	Purchasing Parity Power
PPP	Public-Private Partnership
RECs	Regional Economic Communities
SACU	Southern African Customs Union
SADC	Southern African Development Community
SCO	Shanghai Cooperation Organization
SSATP	Sub-Saharan Africa Transport Policy Program
TEU	Twenty-foot equivalent unit (= standard international container)
TF	Trade Facilitation
TIR	*Transports Internationaux Routiers* – International Road Transport
TRACECA	Transport Corridor Europe-Caucasus-Asia
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UN-OHRLLS	United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
VAT	Value Added Tax
WAEMU	West African Economic and Monetary Union
WEF	World Economic Forum
WTO	World Trade Organization

Fo e o d

Historically, geography can influence economic development in many ways. While some countries, including a few landlocked countries have benefited from their central location, the majority of landlocked developing countries (LLDCs), however, still faces the constraints imposed by geography and remains on the periphery of major markets. The 32 LLDCs are often characterized by lower per capita incomes when compared to their transit neighbors and 17 of them are classified as least developed. Additionally, LLDCs are usually dependent on their transit neighbors' markets, infrastructures and institutions.

The special needs of LLDCs, especially those related to the need to improve their accessibility and connectivity, have been recognized for a long time by policy makers and developmental institutions. Some needs are very specific and focused, for instance, on the development of efficient transit corridors in order to connect to other countries. Other needs are more challenging and harder to tackle such as the higher trade and transport costs, which dramatically constrain the transformation of LLDC economies, preventing them from diversifying from what often times represents a very small basket of export commodities.

The Almaty Programme of Action for LLDCs, transit countries and their development partners, adopted in 2003, was a major step in putting forward a consistent set of policies addressing these needs. It is expected to be followed by a new Programme of Action to be adopted at the 2

detailed economic or policy analysis of all the potential components of reforms.

The current status and lessons emerging are encouraging but they also point to the importance of persistence in reform implementation. In the decade of the implementation of the Almaty Programme of Ac-

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Introduction

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the road and rail transport, ports, inland waterways, pipelines, air transport and communications needed for achieving the effective integration of the LLDCs into the international trading system and the world economy. Some of the actions involved considerable investment to develop and upgrade the transport infrastructure and complete missing links, establishment of public-private sector partnerships, capacity building, and establishment of new policies and institutional reform. At the regional level actions included adopting comprehensive approaches to develop and maintain transit corridors and development and effective implementation of regional agreements on the regional transport and communications infrastructure.

The World Bank, among other international agencies, has been actively involved in providing policy advice and financial support to LLDCs, as part of its broader program to improve the trade competitiveness of all developing countries. The Bank's contribution to the APoA comprises of a number of knowledge products and technical assistance, including, among others, the mid-term review of the APoA in 2008, and a 2013 report presenting a ten-year comprehensive review of the APoA.

While the review of the APoA in the areas of trade and transport has raised the awareness of the challenges faced by LLDCs globally, LLDCs still remain far from being fully integrated into international trading system.

With a need for a new comprehensive Plan of Action for the next decade, United Nations office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) has been designated as the United Nations system-wide focal point for the preparatory review process for the Second UN Conference on LLDCs. While a new Programme of Action for LLDCs for the next decade (2014–2024) will be adopted at the Conference, UN-OHRLLS has approached the World Bank to prepare an in-depth publication outlining the trends for LLDCs and the implementation of ses of s of srferenc 636forms promoted in the APoA in the areas of trade and transport.

This publication provideren comprehensive ten-year review in order to assess the progress made in improving access of LLDCs to global markets, identify the remaining challenges faced by LLDCs, and present improved and innovative ways to overcome them. The team chose to organize the document around several themes, rather than regions, as a way to provide more specific policy insight to better connect the LLDCs regionally and globally. Thus, the publication is organized as follows:

Chapter1: Economics of Landlockedness

Chapter 2: Connectivity Constraints

Chapter 3: Hinterland Connections

Chapter 4: Transit and Trade Facilitation, Regional Integration

Chapter 5: Physical Connectivity, Corridors.

This document is based primarily on the experience of project implementation by the World Bank, and on analytical work on trade corridors and LLDCs, including reports and presentations on progress in implementing the Almaty Programme of Action. These previous publications have been widely shared during activitfereorganized by the UN-OHRLLS as contribution to the preparation to the new Programme of Action (PoA) for the next decade of 2014–2024.

1 Economics of Landlockedness

This chapter provides evidence of the trade performance of landlocked developing countries compared with others, especially their transit coastal neighbors, and highlighting the impact of landlockedness.

Export composition in LLDCs has not changed significantly since the turn of the century; much of the LLDC export growth can be attributed to the rise of commodity prices. Indeed, over the period 2000 and 2012, resource-rich LLDCs have been growing at an annual rate more than double of resource-scarce countries income in terms of real per capita income and more than six times in terms of exports per capita. Its reliance on commodities makes them vulnerable to potential negative shocks in commodity prices.

Although resource-rich LLDCs still have an average per capita income below that of costal transit countries, its annual growth over the same period has been higher. Conversely, resource-scarce LLDCs growth has been slower than resource-scarce coastal transit countries both in terms of income and exports per capita.

As landlocked developing countries rely on their neighboring countries to transit most of their imports and exports, coordinating effort with neighboring countries to improve the infrastructure (hard and soft) may serve as a useful way to improve the development prospects of LLDCs.

Landlocked countries are entirely or almost entirely enclosed by land, entailing that they have no shoreline on open seas, in contrast to closed seas or freshwater bodies. They have inherent disadvantages compared to countries with coastlines and deep-sea ports. Trade is more difficult and costly because a landlocked country must access most foreign markets through international transport corridors connecting them to ports in neighboring countries, here called "transit neighbors."

There are 44 landlocked countries in the world. Of these, the United Nations lists 32 countries, home to nearly 440 million, as landlocked developing countries (LLDCs). Based on the World Bank country classification, the LLDCs fall into the low, lower-middle and upper-middle income categories.[2] According to Collier (2007), the majority of these countries are in the "bottom billion," with an average real GDP per capita of US$808 (constant 2005 US$) compared to US$2,785 of transit countries in 2012 (see Table 1). Except for landlocked countries in the upper-middle income group,[3] real GDP per capita (weighted average) in low-income and lower-middle income countries in the last decade has been below than GDP per capita of non-landlocked countries in the same income groups.

The two large concentrations of landlocked developing countries are located in Sub-Saharan Africa and Central Asia. The 16 countries in Sub-Saharan Africa have a population of more than 200 million, nearly 30 percent of the region's total. The nine landlocked countries in Central Asia and Eastern Europe have a population approaching 80 million people, or about 17 percent of the region's total.

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Being landlocked does not necessarily lead to poverty or slow growth. Western European landlocked countries have historically taken advantage of their centralized locations. However, in the development context, being landlocked translates into a reduced connectivity and a higher cost of access to global markets. Therefore, it presents specific challenges to economic operators in all LLDCs. Traditionally, landlockedness is seen as a major impediment to trade. UN-OHRLLS[4] has estimated that, on average, the volume of international trade of a landlocked developing country is only 60% of the trade volume of comparable coastal countryr-4Atade vsarolume ment contexeffectsTw T[(T)8ly 60% of f(kedness)424( )]TJlikehe .20e

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Among landlocked developing countries, (see Table 1), resource-rich LLDC countries[5] have been growing at more than twice the growth rate of resource-scarce countries (5.27% vs. 2.2%) since 2000, resulting in their GDP per capita income to become more than a double of that of resource-scarce countries in 2012 (US$ 1,189 vs. US$ 438). Resource-scarce

[5] Due to volatility in commodity prices, there has been a difficulty in determining an exact threshold (as percent of GDP, fiscal revenue, or exports) to consider a country to be resource-rich. The RR (resource-rich) landlocked countries group includes a sample of 17 landlocked developing countries in the low-income, lower-middle and upper-middle income groups. The group was based on two criteria: (i) being either a low-income, lower-middle and upper-middle income country as classified by the World Bank using 2014 GNI per capita; and (ii) depending on natural resources for at least 20 percent of export or fiscal revenue using average data for 2006–10 (see IMF, 2012). For the full list of landlocked resource-rich countries, see Annex 1. This approach has some limitations, e.g. Afghanistan has significant amounts of undiscovered non-fuel mineral resources.

TABLE 3 Exports per Capita, 2000–2012

	Exports per capita, US$			Compound annual growth rate (percer		
Income group	2000	2008	2012	2000–08	2010–12	2000–12
LLDCs	958	3,000	2,930	10.1%	6.6%	6.3%
Resource-rich LLDCs	1,194	4,757	4,466	15.7%	16.3%	11.0%
Upper middle	2,924	12,550	11,041	15.7%	11.7%	11.71%
Lower middle	557	1,414	1,414	18.1%	11.5%	11.45%
Low	101	306	306	15.0%	9.9%	9.85%
Resource-scarce LLDCs	723	1,243	1,393	4.5%	–3.0%	1.7%
Upper middle	645	1,282	1,897	9.0%	–0.1%	–0.05%
Lower middle	1,194	2,173	1,908	–5.6%	4.0%	3.98%
Low	329	273	374	–12.5%	1.1%	1.08%
Coastal transit:	34,511	84,533	77,309	4.6%	11.0%	10.98%
Resource-rich	615	2,103	2,701	8.3%	14.1%	14.10%
Resource-scarce	68,407	166,963	151,917	0.9%	7.9%	7.86%

Source: WITS and WDI, World Bank.

LLDCs have also been behind the resource-scarce transit coastal countries in terms of GDP growth.

LLDCs' share of exports represents a mere 1.1 percent of world exports even if this share has been growing on average at 18.3% annually between 2000 and 2012, whereas exports from transit coastal countries represent 24 percent of world exports, as shown in Table 2. Unsurprisingly, the share of merchandise trade between 2000 and 2012 has increased more in resource-rich LLDCs than resource-poor ones. The share of exports from LLDCs in Europe and Central Asia is the highest and has been growing at an annual rate of 24.5%, and changed from 0.27% in 2000 to 0.78% in 2012, led by a surge in gas and oil exports in countries like Kazakhstan, Azerbaijan and Turkmenistan.

Similar to growth in terms of GDP per capita, Figure 3 shows that exports per capita in LLDCs have been growing, on average, slower than exports per capita of transit coastal countries. Yet, in the period before the global recession (2000–2008) annual growth of exports per capita of LLDCs has been almost double of that of transit countries, 10.1% vs. 4.6%. Indeed, exports in 2012 have not yet reached the 2008 level.

Exports per capita of resource-rich LLDCs have been growing faster than that of resource-scarce LLDCs and almost as fast as exports per capita of resource-rich coastal transit countries. Resource-scarce LLDCs have also been lagging behind all other countries.

Figure 1 confronts the average trade-to-GDP ratios from 2000 to 2002 and from 2010 to 2012 against the log of the average GDP per capita (PPP; 2011 international dollars) during the corresponding period. The dashed vertical line indicates the world's median income. The fitted curve is obtained from regressing the trade-to-GDP ratio on the log of GDP per capita and its squared value. It reflects that countries tend to trade more (relative to their nominal GDP) as per capita incomes rises, but they do so at a decreasing rate.

Country-level evidence shows that the inter-country differences among LLDCs to a certain extent can be explained by good governance and openness to foreign trade (e.g., Paudel, 2014). The trade-to-gross domestic product (GDP) ratio provides an indication of the combined importance of exports and imports of goods and services in an economy. It is one of the most basic indicators measuring a degree of a country's openness to foreign trade and economic

integration. Figure 1 shows that, although trade openness in mostly resource-poor LLDCS like Burundi or Malawi has remained stagnant in between 2000–02 and 2010–12, trade openness in most resource-rich countries like Azerbaijan, Botswana, and Kazakhstan has increased as a result of high commodity prices.[6]

[6] For instance, price of oil went from $15/barrel in 1999 to $130 in mid-2008, and has been hovering around $100 in the post-financial crisis period.

FIGURE 4 LLDCs: Export Composition, 2000 and 2012, in US$ mln

Connectivity Constraints

This section provides evidence on connectivity constraints of landlocked developing countries. It also provides the evidence on factors explaining differences in logistics performance and trade costs between landlocked developing countries (LLDCs) and their transit and coastal neighbors. Despite positive changes with regard to logistics performance and increased involvement of transit countries, LLDCs still experience considerably higher cost of trade when compared to the transit coastal countries: a mark-up of about 70 percent in ad-valorem equivalent. Distance alone cannot explain it; it is rather a lack of overall connectivity of international trade supply chain, related to logistics performance.

Supply chain connectivity depends on the quality of physical infrastructure and the quality and sophistication of services, including customs and border control, trade or transportation policies that affect logistics performance.

Supply chain bottlenecks are the primary cause of frictions in trade; logistics (trade) costs increase with decreasing logistics performance. Reducing logistics (trade) costs by half would raise trade by 15% and production by 5% globally (see Figure 5).

LLDC : Logi ic Pe fo mance

Most of the increase in logistics costs arises due to lower reliability of supply chain. Launched in 2007, a

FIGURE 6 Six LPI Dimensions along the Supply Chain Framework

2014. In Central Asia, a low ability to track international shipments and predict their arrival is one of the main reasons for the low reliability of regional supply chains. As a result, many companies are forced to maintain higher inventory, which adds to their costs.

These findings seem to be in line with recent 2014 LPI findings for the low income country group, where progress in logistics performance has been driven primarily by improvement in infrastructure and basic border management.

Another effective way to quantitatively describe the trade connectivity patterns of LLDCs countries is to look at the bilateral trade costs with major trading countries.

LLDC S ill Face High T ade Co

The intensity of trade between countries is reduced by many factors that capture the degree of separation between them. These factors fall into two main categories. The first category consists of exogenous factors that separate the exporter from the importer such as geographical distance, transportation costs, common features (language, border, history, participation in the same economy community). The second category has to do with endogenous trade costs, which are factor specific to the origin or destination and are dependent on particular policy choices. Examples include

FIGURE 7

logistics performance (cost, delay and reliability) and bottlenecks on international supply chains, international connectivity (existence of regulator maritime services), tariffs and non-tariff measures.[9]

The trade cost is the price equivalent of the reduction of international trade as compared with the potential implied by domestic production and consumption in the origin and destination markets. Higher bilateral trade costs result in smaller bilateral trade flows. The recently published World Bank-UNESCAP dataset proposes comprehensive measures of trade costs for 178

FIGURE 9 GDP per capita and Aggregate Trade Costs, 2013

exceeded the US exports and reached US$70 bln in 2013; between 2005–2010 Chinese FDI constituted about 14% of China's investment abroad.[11]

When using aggregate trade costs instead of bilateral trade costs, landlocked developing countries in general are characterized by higher trade costs and lower per capita income (see Figure 9). Yet, their trade costs seem to be lower than those of Small Island Developing States.

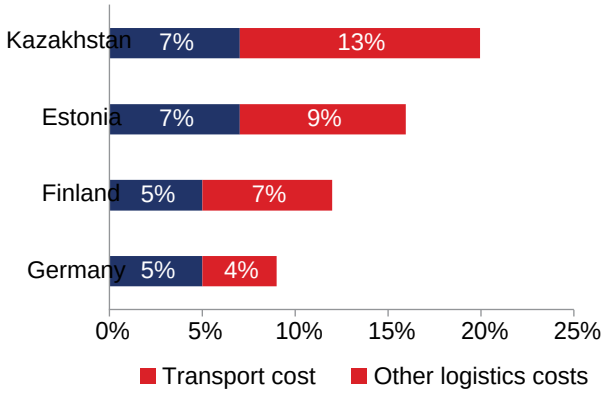
Resource-rich landlocked developing countries seem to have experienced a larger decrease in aggregate trade costs between 2000 and 2010, when compared to their resource-scare peers, except for Armenia (see Figure 10). Among LLDCs, Kazakhstan appears to have the aggregate trade costs below the average of that of transit coastal countries. Although Kyrgyz Republic, Armenia, Zambia, Zimbabwe, and Uganda have experienced a drop in aggregate trade costs since 2000, the level of these costs in 2010 still remains high. On the other hand, Niger and Burkina Faso that are also characterized by very high aggregate trade costs had experienced increases between 2000 and 2010.

In Central Asia, there have been a number of initiatives to raise awareness and help reduce bottlenecks along certain road and rail corridors. Launched in 2009, the Central Asia Regional Economic Cooperation (CAREC) Program has developed corridor performance metrics in terms of travel time and cost (Corridor Performance Measurement and Monitoring, or CPMM) along the six transport corridors using actual commercial shipments (see Table 7). Field surveys point to high costs and border and transit delays, which results in low reliability of regional supply chains.

of sales. In Kazakhstan, for example, such logistics costs are about 13% of total sales compared to 4–7% in high income countries in Europe (see Figure 11). Due to unpredictability of supplies from abroad, manufacturing and retail companies are forced to maintain high levels of inventory in order to operate smoothly. Addressing supply-side constraints and inefficiencies by establishing a secure and reliable transit transport system would allow LLDCs to reduce transport and logistics costs.

It has to be noted, however, that as LLDCs countries strive to further reduce trade costs, the structure of a retail system in many of these countries is such that mark-ups on certain categories of imported products may still be quite high and significantly outweigh all the benefits of lower trade costs.

FIGURE 11 Firm-level logistics expenditures as percentage of sales, 2011–2012



Source: Authors, for Germany: TU Berlin, for Brazil: ILOS, for Finland: Turku School of Economics, for Kazakhstan: World Bank project.

Hinterland Connections: Efficiency of Transport and Logistics Services

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Historically, carriage by road or sea has been performed by private operators. Furthermore, the private

Ports as Gateways to the Hinterland: The Case of West Africa

storage area while waiting to be loaded. In the case of ports in Africa, the amount of dwell time cargo spends in the port terminal averages about 20 days—compared with 3 to 4 days in most other international ports—despite the fact that additional berths have been added and most ports are already run by private

and arterial highways provide good access, and freight does not interfere with urban traffic or traffic at a rail head. Rail freight terminals are found along most trade routes in all regions of the world. When these terminal facilities are located near the final destination or an economic center, they serve as cargo consolidation and distributions centers. The role, location, and attributes of inland facilities and terminals, need to be assessed based on current traffic demand and forecasts and included in a respective transport master plan, irrespective of the financing source.

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Box 3: Belarus Logistics System

Belarus is a landlocked country and an upper-middle-inco economy. It is located in Eastern Europe, with a geograph position that allows it to be (together with Ukraine) a via alternative land-linking EU, Russia, Asian and Central A countries. Belarus optimized the good location and tra formed the landlockedness into an opportunity, by adopt policies favorable to transit by foreign operators, which cre ed business for nationals.

Belarus is crossed by two Pan-European Transport Co dors (PETrC): II and IXb. Corridor II ensures the conne between East and West on the alignment Berlin – Pozna – Warsaw – Brest – Minsk – Smolensk – Moscow – Nizhny Novgorod. Corridor IX ensures the connection between North (Helsinki) and South (Alexandroupolis) and its branch IXb provides access from Eastern Ukraine and central Russia to the specialized ports of Klaipeda, Ventspils and Kaliningrad.

Given the projected annual growth rate of 4–10 per cent, it is expected that by 2020 the transit of goods through the territory of Belarus will be 16–22 million tons, and there will be 1.8–2.4 million trucks passing through the Belarusian-Lithuanian and Belarusian-Polish borders. The program "Roads of Belarus" for 2006–2015, approved by the Government, provides for the implementation of measures aimed at further development of transit potential of the country's road network and increasing its attractiveness to foreign users. Taking into consideration the growth of transit, the Republic of Belarus directed the investments in rehabilitating the two PETrC so as to provide competitive roads allowing for traf c of vehicles with 11.5 tons/axle. The same program foresees for the development of roadside services including gas stations, car washes, parking facilities, retail outlets, eating establishments, service stations and roadside hotels.

Following the same strategic thinking, the Government approved in 2008 a Program for the development of the national logistics system up to 2015. The document provides for the establishment of logistics centers in Minsk, Brest, Vitebsk, Gomel, Grodno, Mogilev, Baranovichi, Bobruisk, Borisov, Zhlobin, Mozyr, Orsha, and Pinsk, with priority given to the ones located on the main transit corridors.

For the purpose of effective development of the logistics system, various Decrees of the President of Belarus and Government Resolutions grant bene ts and privileges to local authorities which would facilitate the establishment of such centers in their areas, as well as to investors who plan to invest in existing logistic centers, and in the construction of new transport and logistics centers.

Source: United Nations Economic Commission for Europe, Review of the Transport and Logistics System of the Republic of Belarus, 2013.

TABLE 12 Typical Land Distances for Landlocked Developing Countries

Region	Typical corridor	Distance
West Africa	Abidjan – Ouagadougou	1,120km
East Africa	Mombasa – Kampala	1,250km
Southern Africa	Durban – Lusaka	1,628km
Central Asia	Hamburg-Almaty	4,900km
South Asia	Kolkata-Kathmandu	886lm
East Asia	Tianjin-Ulaanbaatar	1,690km
Latin America	Arica-La Paz	470km

example, 100,000 TEUs) to accommodate high frequency of scheduled container train services should be considered. Such a development may be facilitated with the arrival of major terminal operating companies to the country (e.g. Dubai Port World-Kazakhstan TemirZholy agreement).

Road Transport and Logistic Service

Challenges in the Trucking Industry

Road transport has become the dominant transport mode for freight, even though the distance between the sea and the main economic centers of most landlocked countries worldwide is typically within the range where rail is competitive over road transport.

Trucking prices for an articulated vehicle are over $2 per km for the most competitive markets (such as in East and Southern Africa), and well over $3 per km for the least functional ones (as in West and Central Africa). Accordingly, road transport is the largest component of the total transport cost between the overseas markets and the economic centers of the landlocked countries. Fostering a competitive and efficient trucking industry is therefore critical.

At first sight, trucking is a highly competitive industry that meets the basic requirements for perfect competition: many suppliers, with none of them in an ostensibly dominant position, similar nature of services (at least for the dry freight segment of the market), open information on prices, almost no barrier to entry and exit for operators. While these characteristics would suggest that the industry is indeed competitive, prices should equal marginal costs. However

Teravaninthorn & Raballand (2009) find that the transport of freight between Sub-Sahara Africa landlocked developing countries and ports, and thus the world market, is at prices that significantly exceed underlying costs, suggesting large profits. They also find that these high profits can be attributed to rent-seeking road-transport cartels benefiting from oligopolies that exist as a result of existing governance and institutional structures. They argue that, unless governments take steps to remove the structural distortions in the trucking market, there is little point in investing in infrastructure improvements, to reduce road-transport costs, as the cartels will capture the benefits from lowered costs: prices will remain the same and cartel members will benefit from higher profits.

Part of that apparent disconnect between prices

reduce damage to trucks. This is true when the truck fleet is recent and in good conditions, as it is for instance in the case in East and Southern Africa, but where the trucks are dilapidated and overage, such as in West and Central Africa, the savings on maintenance expenses are largely overestimated. Infrastructure remains, however, critical to ensure connectivity between the main corridor network and the rest of the country.

Soft measures

Such as trade and transport facilitation, tend to reduce the costs of trade through various channels. Arvis et. al. (2010) show that the main channel to reduce trade costs is through reducing the value of time the good spends in transit and increasing the reliability of the supply chain. Shippers or consignees incur the higher costs in the form of extra inventory or the cost of missed shipments as a result of lengthy and, above all, unreliable transit supply chains. The World Bank has found that commercial distributors often have to maintain, on average, several months of inventories. Poor quality of the supply chain translates into higher losses due to physical damage to and theft of, goods (which, for instance, represent several percent of good value, as found in Central Asia, see Rastotgi and Arvis, 2014).

Trade facilitation along the corridors has a positive impact on fixed costs through the reduction of truck idle time, and potentially a better use of the trucks with higher mileage per year. The gains usually come from: i) optimizing the interface between terminals and trucks (planning port delivery/pick-up, streamlining documentation, etc.), ii) ‘en route’
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wages, bankruptcies (WTO 2010), and absorption of independent small operators by big companies.

In the LLDCs and, to a lesser extent, in transit countries, the regulator or by the truck professional associations are very limited in their capacity to implement the strict rules on access to the trucking profession, even when proper regulatory framework has been adopted. The situation varies significantly, depending on the region, and, more so than on policies, as it is essentially the result of historical trends that have shaped the current market organization.

Examples of different business models include small informal operators that transport for their own account; cargo handling companies delivering goods within the metropolitan area of the maritime gateway; relatively efficient trucking companies with direct contracts with Clearing and Forwarding agents, and individual trucking companies that depend on several intermediaries. All those can be grouped broadly into three main categories comprising several sub-groups: (i) commercial trucking—divided itself in several classes of operators from large companies connected to shippers or C&F agents with secured access to freight to small scale operators, (ii) own account transport—with traders / industries operating trucks carrying their own goods, (iii) intermediaries, or brokers, with varying degrees of predatory practices, as commonly found in West and Central Africa).

In Eastern and Southern Africa, the trucking market is rather efficient and is characterized by healthy competition between organized and professional firms. Much of supply is located in the coastal countries, but homegrown competitive industries could also emerge in such LLDCs as Uganda, Malawi, Zambia or Zimbabwe.

On the other hand, countries in Western and Central Africa are characterized by significantly less efficient trucking markets. Essentially, the lack of transparency and strict criteria for access to the profession has led to the emergence of a few dominant intermediaries. These intermediaries allocate freight volumes to truckers while pocketing a large commission and leaving the operators physically moving the cargo at barely break-even rates. This market structure has triggered the emergence of widely different business models, depending on how they benefit from, or cope with, imperfect system incentives in order to provide quality services and improve market transparency between shippers and truckers.

Central Asian countries have developed a dual system, wherein international operators under the TIR system essentially operate under the European standards in relatively large companies. However, the rest of the industry does not have proper regulation of entry, and there is no clear distinction between one's own account activities. Some countries still maintain monopolies for freight allocation (Rastogi et Arvis, 2014). As a result, regional freight transportation is mixture of independent, small truck operations, and larger scale oligopolistic activities.

Improving Availability and Quality of Road Transport Services

Improving the competitiveness and efficiency of the trucking industry implies shifting away from current opaque practices for access to the transport market towards a situation in which transport operators are recognized based on their ability to provide quality transport services in a professional manner, in view of their compliance with a number of access criteria. If combined with measures to enhance the transparency of the allocation of cargo to transporters, a more competitive market structure will emerge that would lower costs and bring prices more in line with costs. Hence, the improvement of the road transport sector requires coordinated action on at least three areas:

Access to the profession of transport operator, for which regional regulations have been developed which cover most aspects, but with no, or limited, actual adoption by member states. As a result of the revision of access criteria, some of the informal operators, with limited capacity of compliance, will no longer be allowed to operate, creating space for professional operators to operate at greater efficiency and profitability;

Liberalization of access to the transport market, both domestic and international, so as to introduce competition as an incentive for efficiency. This will imply formalizing the contractual relationship between the trucking company and the shipper (or its C&F agents), eliminating unnecessary intermediaries;

Trade Facilitation, in order to improve the operating environment and establish the conditions for profitable trucking companies.

Box 4: Exports of Cut Flowers from Kenya and Freshwater Fish from Tanzania

One of the prime examples of a strong perishables export industry are Kenya's cut ower exports to the European Union. Over the pas
years Kenya has risen to the largest cut ower producer and exporter to the European market, maintaining a solid market share of 31 pe
Since inception, air transportation has been the basis for the global distribution of Kenya's perishable goods. However, Kenya's natio
carrier does not have any dedicated freighter aircraft. Nevertheless, the airline transports about 90 percent of the country's air cargo ex

Under a system of quality licensing, trucking licenses are provided to enterprises that meet specified minimum professional standards. Unlike the quantity-based freight allocation quota system, still in place in some LLDCs, the quality-based system does not set limits on the number of operators. Instead, by imposing higher standards on truck drivers, operated vehicles, or the financial, legal, and ethical status of the companies, it raises the professionalism of the industry.

Ai T an o a ion

Air transportation plays an important role in connecting LLDCs. Scheduled flights play an important role in moving goods in belly cargo, thus opening the way for non-traditional exports such as fresh agricultural produce (exotic fruits, vegetables), freshwater fish, cut flowers (recent example is Ethiopia),[15] meat from livestock, as well as time-sensitive high value goods such as electronic components for the computer industry (see Box 4). Another industry, for which air transportation has become indispensable, is tourism. It is probably the largest sector overall, if all related services and activities are included.

Air Connectivity

Combined, LLDCs represent about 1.5% of global air transportation, providing few air freight transportation services. The connectivity of LLDCs to the rest of the world depends on their connectivity to regional hubs. Air connectivity is determined by the number and frequency of connections to other countries and, in particular, to regional or extra-regional hubs. To measure air connectivity of a country, the World Bank has piloted an Air Connectivity Index, using the complex network theory.

The metric shown below is based on Arvis (2011) and shows a percentage of the air connectivity of a country as a share of the Highly Connected Country

(in this case is the USA). Unlike LLDCs in Africa, which are dependent on smaller regional air hubs, LLDCs in Europe, Central Asia and East Asia seem to have as high air connectivity as transit coastal countries. The reason for this is that main airports in these 2 regions are located relatively close to major global air hubs.

Connectivity and the development of air transport services in developing countries are dependent on several key policy areas to improve their connections to the regional hubs. These policy areas include: (i) air transport infrastructure and charges, (ii) air transport liberalization, and (iii) safety and security.

Air Transport Infrastructure and Charges

The air transport industry depends on adequate and efficient airport infrastructure, which complies with international standards. However, it is often not available in developing countries. Structurally, landlocked countries have poor connectivity because of dependence on regional hubs and distance. Being faced with a low traffic volume, their relatively simple service offering requires only very basic facilities, including land (e.g., passenger services, food and beverage concessions, duty free, car parking) and airside (airfield, gates, air bridges, runways, aprons and taxiways) infrastructure. According to the World Economic Forum (WEF) survey, air transport infrastructure in Africa, Asia and Latin America, and even in Eastern Europe, are still considered of poor quality (WEF, 2012).

The level of airport charges plays a major role in the development of affordable air services in developing countries. As cheaper secondary airports are less available, new air carriers are forced to establish their operations at a country's primary airports. These airports experience not only higher levels of congestion, but also often demand higher airport charges

Box 5: Open Skies for Armenia

In early 2013, Armenia decided to implement an "Open Skies" policy, breaking apart from a long legacy of tight regulations in its comme aviation market. The particularity of the Armenian case relies in its historical limited connectivity with international markets, partly determ by geography, and partly determined by geopolitical considerations. Besides being landlocked, the country has open land borders with two of its four neighboring countries. Moreover, the size of its Diaspora is several times larger than the number of inhabitants currently r ing in Armenia. All these factors contribute to create frictions for the free movement of travelers, workers, knowledge and ultimately cu the growth of the Armenian hospitality sector, which accounts for about 20 percent of all goods and services exports.

For over 20 years—since the country became independent–attempts at setting up a national airline proved unsustainable. After the disb ment of the Soviet Union, Aero ot's Armenian Directorate continued to operate under the name of "Armenian Airlines"—a company wh owned by the Armenian State—until the year 2002, when it ceased operations due to insolvency issues. The following year, a joint ven between Russian and Armenian private capitals established "Armavia Airline Company", under an investment agreement signed betwe parties and the Armenian government. The agreement granted Armavia exclusivity rights for a period of 10 years, to operate on desig international routes, and " rst refusal" rights on any new routes negotiated in bilateral air service agreements by the Armenian Governm During the duration of the contract, Armenia maintained a single designation policy—whereas only one airline per country is allowe operate on every route—except for the case of the Russian Federation. Moreover, traf c rights were set up to match Armavia's operati possibilities, as a way of ensuring a "balanced" share of traf c for the Armenian carrier.

As a consequence of the restrictive aviation policies applied by the country, the number of ights that foreign airlines could offer was signi c constrained, and competition between carriers limited. Different studies carried out by international donors between 2010–2012 estimated as a result of these policies, inbound and outbound fares per kilometer into and out of Armenia (exclusive of taxes, fees and charges) evid a premium of 33 to 50 percent, as compared to neighboring Georgia –a country with a fully liberal aviation regime (e.g. Open Skies). Durin period 2005–2011, passenger traf c growth rates in Georgia doubled those of Armenia after liberalizing its aviation policy.

After facing a prolonged period of nancial distress, Armavia ceased operations in March 2013. The demise of the Armenian carrier bro an agitated debate in Armenian policy fora over its aviation policy. The disappearance Armavia seemingly acted as a catalyst for the G ment of Armenia to consider the liberalization of its commercial aviation market. In effect, through a series of Government decrees, Arm adopted an Open Skies policy in late 2013. The result is such that any airline wishing to serve the Armenian market can do so (not incl 5th freedoms) without any restriction in the number of frequencies or aircraft size, provided they comply with safety regulations. The Ru Federation and UAE were the rst to amend the old air service agreements with Armenia. After almost a year, recent passenger traf c gr gures indicate that the Armenian market has expanded in 2014 by 25 percent (Jan-June) as compared to 2013, and the number of carr serving Yerevan increased from 27 to 31. New services will also include not only a combination of international legacy carriers and reg airlines from the CIS countries, but also low cost carriers; the arrival of the latter will also bring a wider range of services offering, espe for the more price-sensitive segment of the market. In addition to this, Armenian sources indicate that fares have dropped up to 25 per in certain routes, further stimulating demand growth.

Source: World Bank project.

countries is best illustrated by Air Transport Liberalization in Africa by the Yamoussoukro Decision, which entered into force in the year 2000. The Declaration committed all representative governments to making all necessary efforts to integrate their airlines within eight years; it represents a radical move away from regulating air services between states on the basis of restrictive bilateral agreements. However, implementation of the decision has encountered two quite opposite realities. Implementation in terms of carrying out public policy has seen little progress at the pan-African level. Many of the key policy elements are still missing or exist only on paper. At the same time, in terms of operational implementation, many examples can be seen of countries opening up by applying the Yamoussoukro Decision at the bilateral level. Given the current structure of the air transport sector in many African countries, one can assume that about two-thirds are willing to apply the Decision because they see little value in protecting their own markets from outside competition (Schlumberger, 2010).

Another example of maintaining an open sky policy, at least with regional partners, is Armenia (see Box 5). It shows that cross-country policy coordination is beneficial to the LLDCs because it increases the potential for human mobility to and from coastal countries and main partners. For business people, it improves access to regional economic centers.

to fill out customs and transit declarations, and eventually to perform other trade-related procedures, on behalf of a client. In practice, the two activities are quite intertwined with each other. In most countries forwarding companies also perform customs brokerage. Companies that once started as pure customs representatives may eventually start providing freight forwarding services. Customs brokers are regulated in the customs code, spelling the professional requirement of individual brokers and the financial guarantees (deposits or bonds) that companies offering brokerage should offer.

In LLDC the two main issues are: i) the development and international connectivity of freight forwarders and 3PLs, and ii) the integrity of the brokerage activities. The situation is quite different depending on the regions.

For instance, in Africa, forwarding is dominated by international companies, and often tied to terminal operations or shipping lines. There are relatively few players; the share of regional firms is small, higher in southern Africa, where integration links with the strong regional trucking industry plays a role. In the former Soviet Union, the forwarding industries is largely home-grown, quite fragmented and largely comes from the externalization of commercial activities of the railways (when the railroads emerged as national entities at the breakup of the Soviet Union in the 1990s). In contrast to Africa, international companies in Central Asia have a small presence. The (small) development of higher value logistics activities (3PLs) is essentially tied to the presence of multinational companies, which brings externalization of logistics activities to 3 PLS, as part of their operations in LLDCs. International distributors (supermarket chains like Shoprites in Southern Africa, or Metro in Central Asia) or companies involved in the production and distribution of consumer goods (Unilever, P&G) would operate this way.

Proper regulation of customs brokerage by customs agencies is important to prevent non-professional services (part-time brokers), monopolistic behavior,

or collusion among brokers and customs officials. In recent years, customs reforms, including in low-income countries, have paid attention to these aspects. Requirements have been adjusted, including the introduction of a higher level of guarantees in order to reduce the number of registered brokers to that of any regular profession. Trade Facilitation measures taken to address transparency, including incentive to submit-declaration online, (next chapter) also increase the quality of provided services.

Transit and Trade Facilitation, Regional Integration

Regional integration and facilitation of trade and transit are at the heart of efforts to reduce

1. Hard and soft infrastructure of the transit system:
    a. Political commitment to allow transit trade, formalized in treaties that can be bilateral, regional, or multilateral;
    b. Physical infrastructure, including border checkpoint facilities;
    c. Market for services available in the region, including the trucking industry, customs brokers, and freight forwarders.
2. Institutions that enable the transit system to move goods and vehicles on the corridor:
    a. Transit regime, implemented mostly by customs agencies, comprising the operating procedures that govern the movement of goods;
    b. Transport policies and protocols that govern the movement of vehicles. They are implemented in countries and across borders to regulate logistics services, recover infrastructure costs, and to improve competition within and between modes of transportation.
    c. Initiatives to facilitate cooperation and to build trust between transit and landlocked countries and between public and private participants, including the setup of joint corridor management institutions or the survey of corridor performance indicators common solutions.

Recent research (Arvis et al., 20114) shows that transportation costs alone do not account for trade costs on corridors, and it is important to take into account other important outcomes in corridor performance, such as delays, reliability, or service quality. The trade and transport costs borne by LLDCs now depend more on operations than on infrastructure capacity. The main factor is the fragmentation of the

supply-chain performance. This framework is not corridor-specific: it rather offers a complementarity with corridor approach taken in the past. Such approach is important but in practice it is rather about implementation.

In Central Asia especially, the corridor concept so far has not solved fundamental issues concerning institutional capacity and private sector competence. Most of the binding constraints are not route specific; they are structural issues found to various degrees in all countries but are largely national. They have to be addressed at the national level, eventually within a regional integration framework with a strong customs

Guarantees (financial securities, bond by a bank, deposits)

A functional transit regime ensures that the physical movements of goods, information flows and financial flows are effectively synchronous.

The agent for a transit operation is the carrier or the freight forwarder, not an owner of the goods. The agent furnishes the guarantee and files the transit declaration with customs. Unlike for regular clearance, for transit traffic, the due diligence by customs authorities is limited to affixing or checking the seals and verifying the guarantee instrument. Customs do not need to

some of the most widespread misconceptions. First, transit does not require a heavy border or ICT infrastructure; in fact, transit facilitation reduces the needs for border investment. Since the process at the border should be limited to fairly simple diligence—check the manifest and the seals, no inspection—there is no

operations. The TIR implements these principles very effectively:

TIR is universal instrument managed by the International Road Union (IRU), under supervision by the UNECE (TIR convention)

Operations happens under a TIR carnets, which is a transit declaration distributed by the IRU, with a transit guarantee attached to it.

Operators must meet minimal international standards, validated by the national association member of the IRU.

The IRU through its management of the carnet does offer a system of tracing and validation of transit operations. IRU is also responsible for the interoperability of transit guarantees across border, a critical feature difficult to implement.

TIR trucks offering a better level of security, customs may differentiate depending on the quality of the operators and their vehicles, the sensitivity

single guarantee instrument, the latter two are provided by a single international body the IRU.

Beyond the EU, trade within the SACU is within a customs Union, but less complete than the EU. There

Sim li ca ion of P oced e : T ade and T an o Facili a ion

Trade facilitation is one of the areas, where the most progress has been made during the period of the Almaty Program of Actions. However, this trend is not specific to the LLDCs but can rather be attributed to global awareness on the importance of practical trade facilitation measures to reduce the trade costs at the borders. This global convergence shows in reduction

The key measures covered under the new agreement include commitments on the publication and availability of information for traders, the adoption of modern approaches to customs and border management. The principles include:

1. Operational standards by customs agencies in terms of risk management for clearance post clearance audit,
2. Transparency measures such as: transparence on new legislation, appeals against administrative decisions, advance rulings,
3. Improved cooperation between government agencies including the implementation of national single window systems
4. Guidelines for streamlining international transit procedures.

In effect, the new agreement brings under the formal auspices of the WTO many of the standards and best practices enshrined in other international instru-

WTO Trade Facilitation Agreement (Bali Agreement)

After more than nine years of intense negotiations, WTO members finally reached consensus on a Trade Facilitation Agreement at the Ministerial Conference held in Bali, Indonesia, in December 7th 2013. The final agreement builds on the now 50 year old trade rules covered by Articles V, VIII & X of the General Agreement on Tariffs and Trade (GATT) and contains provisions for faster and more efficient customs and border management procedures.

border charges—infrastructure consumption, axle load controls, insurance (if cross border operations are allowed), etc. Article 11(3) makes it clear that national regulations, bilateral or multilateral arrangements related to regulating transport will continue to play an essential role. Also Clause 5 underscores the importance of proper planning of border facilities, to spate traffic flows into separate lanes. This would also include catering for vehicles carrying fresh produce as provided for in Article 7 (9). Last but not least en-route checkpoints and repeated weighing at weighbridges can be included under “unnecessary delay” mentioned in Article 11(7). These principles endorse many of the practices already implemented on the ground especially with border crossing. However the agreement, because it is focused on unilateral facilitation measures, did not address the main issues with regional transit systems

NB: This list is inspired by the list of conventions deemed essential by the United Nations Economic Commission for Asia Pacific (UNESCAP) in its resolution 48/11 of 1992.

At the other end of the legal infrastructure, bilateral agreements should fulfill a different role, mostly as protocols to define practical details on the functioning of corridors such as layout and schedule of operations at the borders, and organizations of truck flows. General architecture of transit should belong to international or regional instrument. The reality on the ground is that bilateral agreements play a more extensive role in regulating corridors.

Road transport remains a dominant mode of transportation in landlocked developing countries. Bilateral agreements continue to prevail as the main instrument to govern and regulate international road transport services. Few of them have been brought in conformity with liberal principles that are adequate to today's globalization. In addition, there appears to be little consistency in the content of bilateral agreements. For example it is not unusual for a country to have agreements that are very different with each of its neighbors. Also, it is quite common for traffic rights exercised over more than two countries to involve a chain of bilateral agreements, substantially adding to the regulatory burden.

Having a multitude of bilateral agreements puts a burden on both operators and implementing agencies, as they must keep track of all the agreements' provisions; it may create some confusion and operational constraints which may affect the level of integration among road transport markets. In fact, the lack of a bilateral agreement results in a major obstacle to trade by creating a successive unloading and loading operations at each border crossing—this constraint is increasingly rare but still in place in several borders is South Asia and East Asia.

The problem is that bilateral agreements are often quite old and has not been designed as facilitating instrument. Bilateral agreements are guided by principles of reciprocity and territoriality, where the former refers to how parties mirror each other's rights and obligations and the latter to how operators have to abide by the rules and conditions in the other contracting party. In reality unequal treatment of operators, based on their nationality or country of vehicle registration, still exists. As evidenced in (Kunaka 2013), trucking bilateral agreements are primarily freight sharing agreements. The trends is to evolve towards more liberal design and implementation of bilateral treaties.[22] However excessive implementation of freight sharing principle such as in Central Africa is the source of major inefficiencies, where freight is allocated by a public body resulting in additional procedures and delays.

Land Bo de C o ing Poin

Land borders are customarily difficult to cross, and often represent major obstacles to trade, especially for landlocked developing countries. Long queues of trucks clogging borders are a common image throughout the developing world, and whenever drivers and traders are interviewed, crossing times are measured in days, even sometimes in weeks. This time has a cost, and traders are affected both directly and indirectly: directly through excess inventory costs tying up scarce resources and through hedging costs to protect from the consequences of uncertain transport time (the cost of excess stock to avoid disruptions risks caused by fluctuating delivery time, or the cost of lost business opportunities), and indirectly through more expensive logistics services, as idle trucks are not making money (less trips mean less income, and higher fixed costs to cover on each paying trip).

Facilitating land-border crossings has therefore become a priority for governments and Regional Economic Communities (RECs) in their efforts at boosting intra-regional and international transit trade. On the assumption that border delays were caused by border agencies, one of the solutions rapidly gaining momentum in several regions of the world is the one-stop border post (OSBP) approach, in which, border agencies interventions from both countries are combined. This approach has two main variants, the joint model, with common facilities for border agencies procedures at the border or at close proximity in any of the two countries, or, for the second model,

[22] Where bilateral agreements are based on a quota system, the common practice is to fix the number of permits at the same level for both parties. However, if one party has bigger trade volumes or more efficient operators, then it may exhaust its quota faster than the other party. Unless the quota is increased, the party with higher volume must pay for additional permits and access to infrastructure.

(telecommunications infrastructure and IT services), the majority of respondents in 7 landlocked developing countries (Bolivia, Kyrgyz Republic, Zimbabwe, Uganda, Zambia, Ethiopia, and Mongolia) rated it as quite low. On the other hand, Burundi, Lao PDR, Tajikistan, Uzbekistan and Nepal rated the quality of the ICT infrastructure as average or slightly above average.

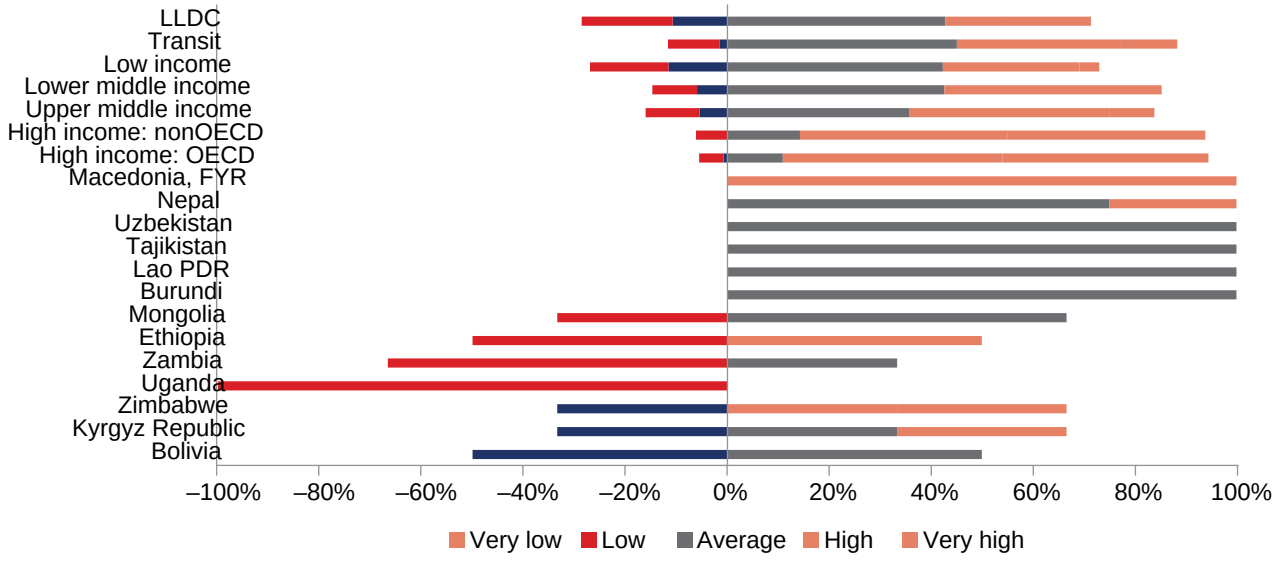
The penetration of ICT in general in LLDCS does help. When compared to the coastal transit countries, LLDCs seem to have a lower access to ICT infrastructure, measured as a number of subscriptions per 100 people for broadband internet, landline and mobile telephones.

Among the LLDCs, Azerbaijan, Kazakhstan, Macedonia, FYR, Turkmenistan, Moldova, and Armenia are characterized by a significantly higher number of subscriptions for wired broadband, landline and mobile telephones per 100 people than the LLDCs or upper-middle income countries on average.

In terms of affordability of ICT, Central African Republic ($1,330 a month), Tajikistan ($363), Rwanda ($112), Lao PDR ($97), Lesotho ($85), and Zambia ($82) demonstrate the highest price for fixed (wired) broadband connection. Sub-Saharan countries such as Lesotho, Malawi, Swaziland and Zimbabwe stand out in terms of higher price for mobile telephones. Such higher prices in these countries may be due to a somewhat monopolistic nature of the market structure for these services.

However there are quite a few issues in actually fully reaping the benefits of IT for trade. As indicated in the LPI 2014 survey, on a question to evaluate the quality of trade and transport related infrastructure (telecommunications infrastructure and IT services), the majority of respondents in 7 landlocked countries (Bolivia, Kyrgyz Republic, Zimbabwe, Uganda, Zambia, Ethiopia, and Mongolia) rated it as quite low (see Figure 20). One of the issues is that in most countries electronic declarations still have to be accompanied by a paper version of it. The second is that most progress in many LLDCs is limited to processing customs declarations, while traders are also required to obtain and process the import license, health, SPS, or veterinary permits, at other border control agencies. These other control agencies can

FIGURE 21 LPI Survey: Quality of ICT Infrastructure



Source: LPI 2014, World Bank. Survey Question: Please evaluate the quality of trade and transport related infrastructure (telecommunications infrastructure a services) in your country.

[a] Note: one has to be cautious in interpreting the results as the number of respondents in landlocked developing countries is relatively small when compared with higher income.

potentially hamper the progress achieved with the processing of customs declarations. Eventually, processing of all these documents in a trade single window should solve this problem. For instance, among LLDCs, Lao PDR has followed this approach. The introduction of "single windows for trade" required an alignment of several government control agencies and a very detailed and accurate data for policy making and information sharing. Box 9 demonstrates an example of implementation of a national single window and a trade information website in Cambodia.

Box 10: Improving Border Management in Cambodia

In recent years Cambodia has made real progress in reforming and modernizing its import, export, and transit operations, including by streamlining and harmonizing customs procedures to international standards. These reforms have contributed to Cambodia improving its LPI ranking from 129th in 2010 to 101st in 2012 and to 83rd in 2014. With the introduction of automated customs procedures and much of the hard infrastructure now in place at the Port of Sihanoukville and at border posts around the country, clearance times with physical inspection of cargo have fallen from 5.9 days in 2010 to 1.4 days in 2014. Likewise, the share of consignments selected for physical inspection has fallen from 29 percent in 2010 to 17 percent in 2014, suggesting that customs' risk management capabilities are improving.

Further gains in trade facilitation will require extending the reform program of the General Directorate of Customs and Excise to other border management agencies, because advances made by customs are not being made elsewhere: 2014 LPI data rate the performance of quality/standards inspections and health/SPS agencies lower than customs. More than 120 laws, royal decrees, sub-decrees, and regulations containing formal nontariff measures have been identi ed in a World Bank project, including various import- or export-related permits, licenses, and approvals needed to trade. Thus with World Bank support, the government is automating application and issuance of certi cates of origin, as well as improving transparency through a trade information website where all rules, regulations, fees, and procedures will be available. Other areas of collaboration include developing a blueprint to guide implementation of a national single window through which traders can conduct all their regulatory requirements. This will mean that data are submitted only once, and that processing, risk assessment, and inspection are well coordinated.

Source: Connecting to Compete. Trade Logistics in the Global Economy. The Logistics Performance Index and Its Indicators. Word Bank, 2014.

The main issues that need to be addressed are:

harmonization of road design standards,
standardization of axle load limits, vehicle weights and dimensions
modalities for infrastructure cost recovery (coupons, carnet, fuel levies, tolls) and
improving availability and quality of road transport services.

The ultimate test of the impact of improvements

best practices covering the technical requirements for the vehicle, the driver, and the cargo, and simplify technical documentation requirements.[23]

Modalities for Infrastructure Cost Recovery (coupons, carnet, fuel levies, and tolls)

Clearly, a reform agenda for the road trucking sector needs to be multifaceted, covering a number of regulatory and economic issues. In addition to describing the types of vehicles that can be operated, the ways they can be licensed and financed, driver qualifications, institutional arrangements for oversight of the sector, safety and environmental protection, it should also account for consumption of infrastructure and cost recovery measures. Infrastructure institutions governing road funding and maintenance, such as road fund agencies, focus primarily on cost recovery for the corridor infrastructure to ensure maintenance and continuity of service.

Unless roads are tolled, it is a common practice to require foreign trucks to pay infrastructure usage fees on crossing the border. For example, the Common Market for Eastern and Southern Africa (COMESA) adopted a standard and simple fee of $10 per 100 kilometers for all member countries. Such standardization is particularly important if the tariffs are very high (increasing transport cost) or benefit domestic operators over foreign registered fleets (reducing competition). In the SADC, the types of charges payable by vehicle operators when entering a country and using its roads vary considerably. There are two types of charges: (1) compulsory access fees, which are all charges payable at border posts upon entering a country and (2) other fees, including charges payable on toll roads, fuel levies, and fuel taxes.[24]

Another alternative is to levy a charge on traffic passing through a corridor. Such traffic is expected to benefit from improved performance. Therefore, the argument can be made that users should collectively contribute to the funding of management functions. A traffic linked usage levy ensures sustainability of the corridor management arrangement while at the same time maintaining pressure on the corridor group to continue delivering benefits. Contributions should ideally reflect the proportion by which users benefit from handling the corridor tonnage. A levy based on the tonnage and distance that the traffic will move along the corridor can be introduced based on a rate per ton-kilometer. Such a levy can be collected at a major gateway, such as a port of entry or some other intermediate point. The main advantage of the usage levy system is that it is directly linked to traffic volumes along the corridor. The more traffic there is and the more efficiently it is moved, the lower the levy. The weakness is that the levy can become complex and add to the cross-border charges that some stakeholders are seeking to eliminate or at least minimize.

In addition, it is not unusual for there to be a time lag between making an investment in capacity and realizing the benefits. Still, if it is linked to demonstrated benefits accruing to the stakeholder group in general and economies at large, a usage levy is a sustainable way of generating funding for corridor management groups. It is the preferred mode of funding for corridor groups, as it achieves the twin objectives of ensuring sustainability of the trade facilitation interventions and providing funding for the corridor management institution.

While a conventional toll is easier to implement and enforce, a vignette toll system is arguably a better instrument for cost recovery because adheres to two main principles of payment collection: non-cash payment system and non-discrimination. The vignette toll system allows collecting payments in advance avoiding payments in cash en route and is enforced on everyone using the road system, including foreign vehicles. National net benefits in the case of the vignette toll system are high regardless of whether the taxes and fees are paid into the Central treasury or earmarked to a road fund.

Re i ing Rail a S em

There is growing interest in railways as they have great potential which is presently not fully exploited for LLDCs. Rail transport can have an advantage over

[23] Quantitative Analysis of Road Transport Agreements. A World Bank Study. Kunaka, C., Tanase, V., Latrille, P., Krausz, P. 2013.

road transport on long-distance or high-volume corridors. For LLDCs which export mainly high-volume, low-value bulk goods (such as minerals, cotton, and timber in Africa and soy in Bolivia and Paraguay), and freight along corridors can be served by well-run railways at lower cost than road transport. Railways also offer other potential benefits: lower carbon emissions, congestion, accidents, reduced cost of road infrastructure. However, landlocked developing countries are highly dependent on infrastructure investments in neighboring transit countries.

Also, railways face significant challenges:

International interconnectivity including gauge interoperability
Small volumes of traffic—lack economies of scale
Stiff competition from road transport
Management and operation of railways, especially international border crossings
Availability of backhaul loads
Ownership of containers
Investments to connect missing links.

International Interconnectivity Including Gauge Interoperability

The interconnectivity of railway tracks across boundaries is fundamental to the seamless movement of trains across international borders. The same gauge must be used along the corridor or technical solutions provided to effect efficient interchanges. In Central Asia, rail transport has long dominated passenger and freight transport, where long distances between centers and the movement of predominantly bulk commodities make railway a competitive and preferred mode. Given their large railway stock, countries in the lutions aitional bord088developir ard Tw T[(long)0(14

Ownership of containers

concessioning is warranted where business fundamentals are sound. At the same time, better solutions must be found to ensure that host governments continue to benefit from substantial economic rates of return from these concessions and private operators' financial returns are high enough to entice broader and more competitive investor participation.

International Border Crossings

Railways usually have shorter border delays than trucks, for four reasons. First, railway border stations are usually located at major railway stations/ junctions and marshalling yards, not necessarily on the border. They therefore facilitate processing without the space constraints often found at border-crossing points. Second, rail traffic at border stations is usually cleared or inspected during scheduled stopping times, when other needed technical operations (such as locomotive

launch of this container block train operation, lead time was reduced from 18 to 15 days, due to continuous optimization of border crossing procedures and

988km of railways). In the long run, the construction of this railway link may allow increasing freight transportation from China and Kazakhstan (coal and metal products) to the Caucasus region.

To conclude, revival of railways is possible:

6 Conclusion

The Almaty Programme of Actions recognized the special needs of landlocked developing countries in reducing their trade costs and promoting growth. The Programme and its implementation, including with the support of international agencies like the World Bank, have been very much focused on connecting LLDCs to markets and the promotion of infrastructure complemented by investment in "soft" measures facilitating trade, transportation, and transit.

Since 2003, there has been incremental progress in structural transformation of LLDCs. With little diversification in exports composition, LLDC countries are more vulnerable than their coastal transit neighbors. In the period after 2000, resource-rich LLDCs outperformed their resource-scarce peers in terms of real income and exports per capita. However, most of that growth was based on a surge in commodity prices in the last decade. Trade costs experienced by landlocked countries remain still very much above those of transit countries. These costs seriously constrain the transformation of the economies of the LLDCs.

However, there have been many positive developments during the implementation of the Programme. First, there has been a priority given to investment in access infrastructure during the period. For instance, the World Bank has more than doubled its share of projects contributing to the Almaty PoA objectives. Furthermore, raising awareness of trade facilitation issues resulted in significant reduction in lead time to import and export on most corridors. Dwell time in ports or at the borders has been reduced significantly, as shown by the example of East Africa for instance. Facilitation and logistics indicators such as the LPI or the Doing Business show that, although LLDCs remain at a deficit of performance, they (slowly) converge to their transit neighbors. LLDCs have also made important progress in related dimensions of connectivity such as the development of ICT.

However, progress has been slower in other areas. Such is the case, for instance, for implementation of regional cooperation schemes to facilitate transit of goods, or reform of the services sector such as trucking. LLDCs are involved in many bilateral, regional, or even multi-lateral agreements. However, quite often, many transit agreements are written very loosely and do not always specify the ways governments can implement and administer them. Some agreements such as bilateral treaties tend to be protectionist, and not conducive to the development of quality services.

For the next decade policy makers and development practitioners need to maintain focus in several areas to reduce trade costs and promote growth.

In terms of infrastructure cost recovery and maintenance of roads, LLDCs are recommended to adopt a "vignette" toll system. For the railway system – one of the potential solutions is to connect railway infrastructure efforts with the extractive industry and require mining companies to raise capital for infrastructure buildings and maintenance. This would help LLDCs to achieve greater economies of scale. Also, scheduled maintenance is highly desirable to prevent higher costs of deferring repairs. It is important to explore innovative means to mobilize additional funds to build and maintain existing transport infrastructure, e.g. concessions, or cross-border investment packages. Overall, LLDCs are recommended to make investments only when traffic is expected to achieve economies of scale to cover the operating costs.

Despite significant progress in trade facilitation, many challenges remain, especially to better integrate border management and facilitation of procedure beyond customs (interventions of other control agencies). The Bali Trade Facilitation Agreement offers help to LLDCs that rely on transit through third countries to access ports. However, it offers a partial solution because its main focus is on customs administration, use of an IT system and access to information. The Bali TF Agreement describes some aspects of the governance mechanism including establishment of a new Trade Facilitation Committee and possible subsidiary institutions, but much of it still needs to be finalized. The actual benefits of this FTA package will depend on the swift ratification of the agreement.

Finally, a push is overdue in two related areas, which are by nature regional and cross-border: reform of the trucking sector and the implementation of transit regime. In most LLDCs, trucking remains a main mode of freight transportation so a TIR-like system would benefit many LLDCs. There have been some reforms on improving transit regime, including initiatives to govern the cross-border movement of transport vehicles, albeit with a partial success. The new efforts should focus on improving transit regime,

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Annexes

Anne 1: Li of LLDC and T an i Co n ie

Country name	Code	Region	Income group	T

Anne 2: LLDC : Economic and Social Con e

	Population (Millions)		Urban population		GNI per capita, Atlas method ($)		GDP growth (avg. annual %)		Adult literacy rate, (%, ages 1 and older)	
	2000–01	2012–13	2000–01	2012–13	2000–01	2012–13	2000–2008	2009–2013	2000–01	2012–13
Afghanistan	21	30	21	24						

Anne 2: LLDC : Economic and Social Con e

Country	2000	2006	2012

Annex 4: LLDC: Share of Top Five Export and Import Partners

	Share of top 5 exporters		Share of top 5 importers		HH Market Concentration Index**			
Country	2000	2012	2000	2012	2000	2012	Top 5 export partners, 2012	Top 5 import partners, 2012
Afghanistan	87.1	99.2	57.3*	93.4	0.14	0.30	Pakistan (46.9%), Unspecified (28.7%), India (16.3%), Iran (6.2%), China (1.1%)	Unspecified (50%), Pakistan (14.2%), China (11.5%), Japan (9.7%), Iran (8%)
Armenia	69.1	54.8	53.2	49.3	0.13	0.12	Russian Federation (19.5%), Germany (10.7%), Bulgaria (9.1%), Belgium (8.9%), Iran (6.6%)	Russian Federation (24.7%), China (9.3%), Iran (5.1%), Ukraine (5.1%), Turkey (4.9%)
Azerbaijan	74.8	53.1	53.1	52.1	0.14	0.13	Italy (23.3%), India (7.9%), France (7.5%), Indonesia (7.4%), Israel (6.9%)	Turkey (15.8%), Russian Federation (14.3%), Germany (8.1%), United States (7.4%), China (6.6%)
Bhutan*	85.4	94.7	95.1	82.6	0.72	0.76	India (84.8%), Nigeria (6.4%), Italy (1.7%), Japan (1.1%), Germany (0.7%)	India (55.5%), Greece (14.5%), China (5.1%), Thailand (4.9%), Austria (2.6%)
Bolivia	71.4	72.8	64.5	62.5	0.11	0.18	Brazil (31.1%), Argentina (17.8%), United States (14.8%), Peru (5.3%), Japan (3.8%)	Brazil (18.4%), China (13.1%), Argentina (13.1%), United States (10.9%), Peru (6.7%)
Botswana	97.1	89.1	88.9	89.9	0.65	0.50	United Kingdom (60.7%), South Africa (13.1%), Israel (5.4%), Norway (4.9%), Belgium (4.4%)	South Africa (62.8%), United Kingdom (16.7%), Namibia (5.6%), China (2.8%), United States (1.9%)
Burkina Faso	74.1	88.7	63.3	41.3	0.08	0.11	Switzerland (69.2%), South Africa (10.3%), Singapore (4.7%), France (2.4%), Belgium (2.2%)	France (12.1%), Cote d'Ivoire (10.7%), China (9.8%), United Kingdom (4.4%), United States (4.3%)
Burundi	75.3	95.8	56.3	49.3	0.08	0.10	Unspecified (76.9%), UAE (16.3%), France (1.1%), Tanzania (0.9%), Japan (0.6%)	Italy (17.6%), Saudi Arabia (8.2%), Belgium (7.9%), China (7.8%), India (7.8%)
Central African Republic*	47.3	54.4	81.2	66.3	0.53	0.16	Belgium (23.7%), China (20.9%), Indonesia (3.9%), France (3.5%), Saudi Arabia (2.3%)	Netherlands (31.5%), France (16.5%), Korea, Rep (13.4%), Cameroon (10.1%), China (5.4%)
Chad*	37.3	96.1	71.8	64.2	n.a.	n.a.	United States (81.8%), China (6.7%), Canada (3.5%), Other Asia, nes (2.9%), Japan (1.1%)	China (23.1%), France (21.5%), Cameroon (10.5%), United States

	Share of top 5 exporters		Share of top 5 importers		HH Market Concentration Index**			
Country	2000	2012	2000	2012	2000	2012	Top 5 export partners, 2012	Top 5 import partners, 20
Lao PDR*	53.6	77.3	89.5	92	n.a.	n.a.	Thailand (34.3%), China (22.5%), Vietnam (12.9%), India (4.1%), Japan (3.5%)	Thailand (62.5%), China (16.2%), Vietnam (7.5%), Korea, Rep. (2.9%), Germany (2.9%)
Lesotho*	86.9	67.1	95.6	84.2	0.66	0.50	United States (34.3%), Belgium (29.9%), Botswana (1.3%), Canada (0.9%), China (0.6%)	China (36.1%), Other Asia, nes (28.8%), India (6.9%), United States (6.3%), Vietnam (6.1%)
Macedonia, FYR	70.6	65.4	49.8	44.8	0.09	0.11	Germany (29.4%), Serbia (17.2%), Bulgaria (7.3%), Italy (6.9%), Greece (4.7%)	Greece (12.3%), Germany (9.7%), United Kingdom (8.6%), Serbia (7.8%), Bulgaria (6.3%)
Malawi*	38.1	29.9	68.7	71.8	0.06	0.04	Canada (7.8%), Germany (7.3%), Russia (5.3%), United States (4.9%), South Africa (4.8%)	South Africa (28.5%), China (16.1%), Zambia (12.1%), India (8.4%), Tanzania (6.7%)
Mali	94.7	80.5	60.9	59.8	0.05	0.34	South Africa (56.8%), Switzerland (11.8%), Senegal (4.5%), Burkina Faso (4.2%), China (3.6%)	Senegal (21.4%), China (10.7%), France (10.3%), Cote d'Ivoire (8.1%), Benin (7.6%)
Moldova	75.3	65.7	61.9	54.4	0.18	0.10	Russian Federation (30.3%), Romania (16.5%), Italy (9.4%), Ukraine (5.7%), United Kingdom (3.9%)	Russian Federation (15.7%), Romania (11.9%), Ukraine (11.4%), China (7.9%), Turkey (7.5%)
Mongolia*	83.4	91.9	77.2	83.8	0.30	0.54	China (84.8%), Canada (3.6%), Russian Federation (1.4%), Korea, Rep. (1.2%), Italy (0.9%)	China (37.8%), Russian Federation (26.4%), United States (8.5%), Korea, Rep. (6.2%), Japan (4.9%)
Nepal*	70.6	66.3	71.9	93.3	0.24	0.40	India (41.8%), United States (12.7%), Germany (5.4%), China (4.0%), United Kingdom (2.9%)	India (50.6%), China (38.5%),

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Annex 4: LLDC: Share of Top Five Export and Import Partners (continued)

	Share of top 5 exporters		Share of top 5 importers		HH Market Concentration Index**			
Country	2000	2012	2000	2012	2000	2012	Top 5 export partners, 2012	Top 5 import partners, 20
Turkmenistan*	80.8	82.3	57.4	68.7	0.29	n.a.	China (72.3%), Italy (4.5%), Turkey (2.5%), Russia (1.5%), Kazakhstan (1.49%)	China (21.8%), Turkey (18.9%), Russian Federation (15.5%), Ukraine (6.8%), United Kingdom (5.7%)
Uganda	65.9	55.3	58.5	54.9	0.05	0.06	Sudan (17.3%), Kenya (10.8%), Congo, Dem. Rep. (10.2%), Rwanda (9.6%), UAE (7.5%)	India (20.9%), China (11.3%), Kenya (9.8%), UAE (7.5%), Japan (5.4%)
Uzbekistan*	45.2	80.8	55.1	73.2	n.a.	n.a.	Russian Federation (26.4%), China (20.8%), Kazakhstan (15.4%), Turkey (15.3%), France (2.9%)	Russian Federation (22.1%), China (16.9%), Korea, Rep. (16.7%), Kazakhstan (12.7%), Germany (4.8%)
Zambia (2011)	85.1	85.2	79.4	72.2	0.07	0.16	Switzerland (48.9%), China (16.7%), South Africa (9.3%), Congo, Dem. Rep. (6.5%), United Kingdom (3.7%)	South Africa (35.7%), Congo, Dem. Rep. (18.5%), China (9.8%), Kuwait (4.7%), India (3.5%)
Zimbabwe (2001)	52.2	93.3	72.9	78.5	0.04	0.13	South Africa (68.9%), UAE (12.4%), Mozambique (7.3%), Zambia (2.5%), China (2.2%)	South Africa (42.2%), United Kingdom (17.2%), United States (7.6%), Zambia (6.7%), China (4.8%)

Source: WITS, World Bank.
Note: * = mirror data, ** = 2012 or latest year.

Anne 5: Logi ic Pe fo mance of Landlocked De elo ing Co n ie (1 = lo o 5 = high)

Anne 5: Logi ic Pe fo mance of Landlocked De elo ing Co n ie (1 = lo o 5 = high) (continued)

	2007		2010		2012		2014	
Country Name	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Upper middle income	2.64		2.74		2.78		2.82	
Lower middle income	2.39		2.58		2.57		2.59	
Low income	2.22		2.37		2.37		2.41	
World	2.74		2.87		2.87		2.89	
By Region:								
East Asia & Paci c	2.58		2.73		2.77		2.85	
Europe & Central Asia	2.45		2.68		2.73		2.76	
Latin America & Caribbean	2.53		2.72		2.67		2.74	
Middle east & North Africa	2.36		2.60		2.58		2.50	
South Asia	2.30		2.49		2.58		2.61	
Sub-Saharan Africa	2.35		2.43		2.46		2.46	

Source: World Bank.

Anne 7: The T ade Enabling Inde

Annex 8: LLDC : Access to ICT Infrastructure

	Access: subscriptions (per 100 people)						Affordability: sub-basket ($ a month)		
	Fixed telephone		Mobile-cellular telephone		Fixed (wired)—broadband		Fixed telephone	Mobile-cellular telephone	Fixed (wired)—broadband
Country	2000–01	2012–13	2000–01	2012–13	2000–01	2012–13	2012	2012	2012
Afghanistan	0	0	0	68	0	0	2	10	54
Armenia	17	20	1	112	0	7	3	9	12
Azerbaijan	10	19	7	109	0	15	3	10	13
Bhutan	3	4	0	74	0	3	2	4	11
Bolivia	6	8	8	94	0	1	24	12	25
Botswana	8	8	16	158	0	1	18	13	57
Burkina Faso	1	1	0	64	0	0	15	12	47
Burundi	0	0	0	24	0	0			
Central African Republic	0	0	0	27	0	0	10	13	1330
Chad	0	0	0	36	0	0	17	15	12
Ethiopia	0	1	0	25	0	0	1	4	24
Kazakhstan	13	27	3	184	0	11	3	11	13
Kyrgyz Republic	8	9	0	123		1	1	6	13
Lao PDR	1	8	0	65	0	0	5	6	97
Lesotho	1	3	2	81	0	0	14	20	85
Macedonia, FYR	25	19	8	106		15	9	13	14
Malawi	0	1	1	31	0	0	22	21	48
Mali	0	1	0	114	0	0	8	16	50
Moldova	15	35	5	104	0	13	1	13	13
Mongolia	5	6	7	123	0	4	1	6	10
Nepal	1	3	0	66	0	1	3	4	8
Niger	0	1	0	35	0	0	12	17	60
Paraguay	5	6	18	103	0	1	9	9	22
Rwanda	0	0	1	53	0	0	9	15	112
South Sudan		0		23		0			
Swaziland	3	4	4	68	0	0	7	23	76
Tajikistan	4	5	0	87	0	0	1	9	363
Turkmenistan	8	11	0	116		0			
Uganda	0	1	1	45	0	0	9	9	14
Uzbekistan	7	7	0	73	0	1	1	2	12
Zambia	1	1	1	73	0	0	7	17	82

(continued on next page)

Annex 8: LLDCs: Access to ICT Infrastructure (continued)

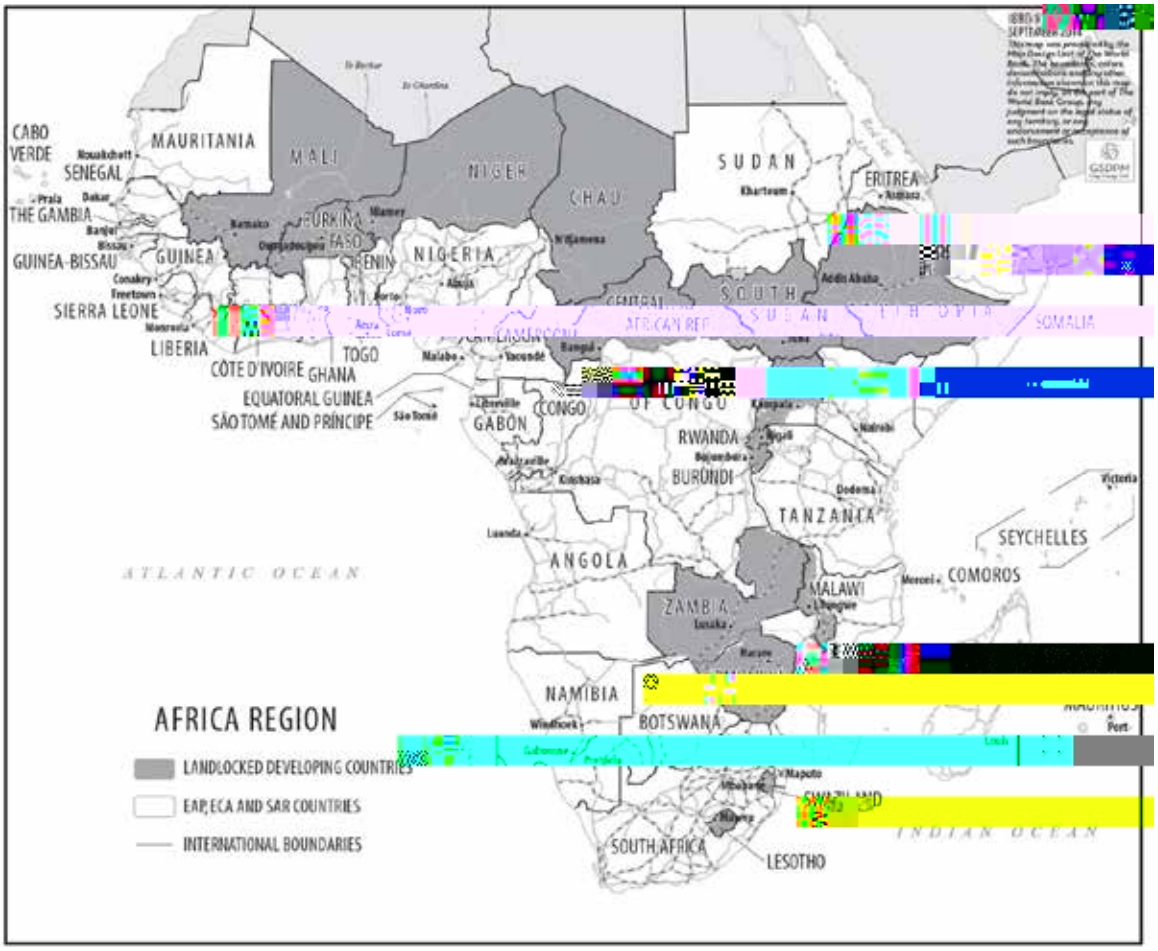
	Access: subscriptions (per 100 people)						Affordability: sub-basket ($ a month)		
	Fixed telephone		Mobile-cellular telephone		Fixed (wired)—broadband		Fixed telephone	Mobile-cellular telephone	Fixed (wired)—broadband
Country	2000–01	2012–13	2000–01	2012–13	2000–01	2012–13	2012	2012	2012
Zimbabwe	2	2	2	94	0	1	10	21	30
LLDC	5	7	3	80	0	2	8	12	93
Transit	11	13	8	99	0	6			
High income: OECD	53	42	63	122	2	29	25.2	20.6	29.2
High income: non-OECD	42	38	30	135	1	19			
Upper middle income	16	18	10	110	0	8	9	15	18
Lower middle income	5	8	4	85	0	2	5	11	21
Low income	1	1	1	51	0	0	9	12	47

Source: The Little Data Book on Information and Communications Technology, 2014. World Bank.

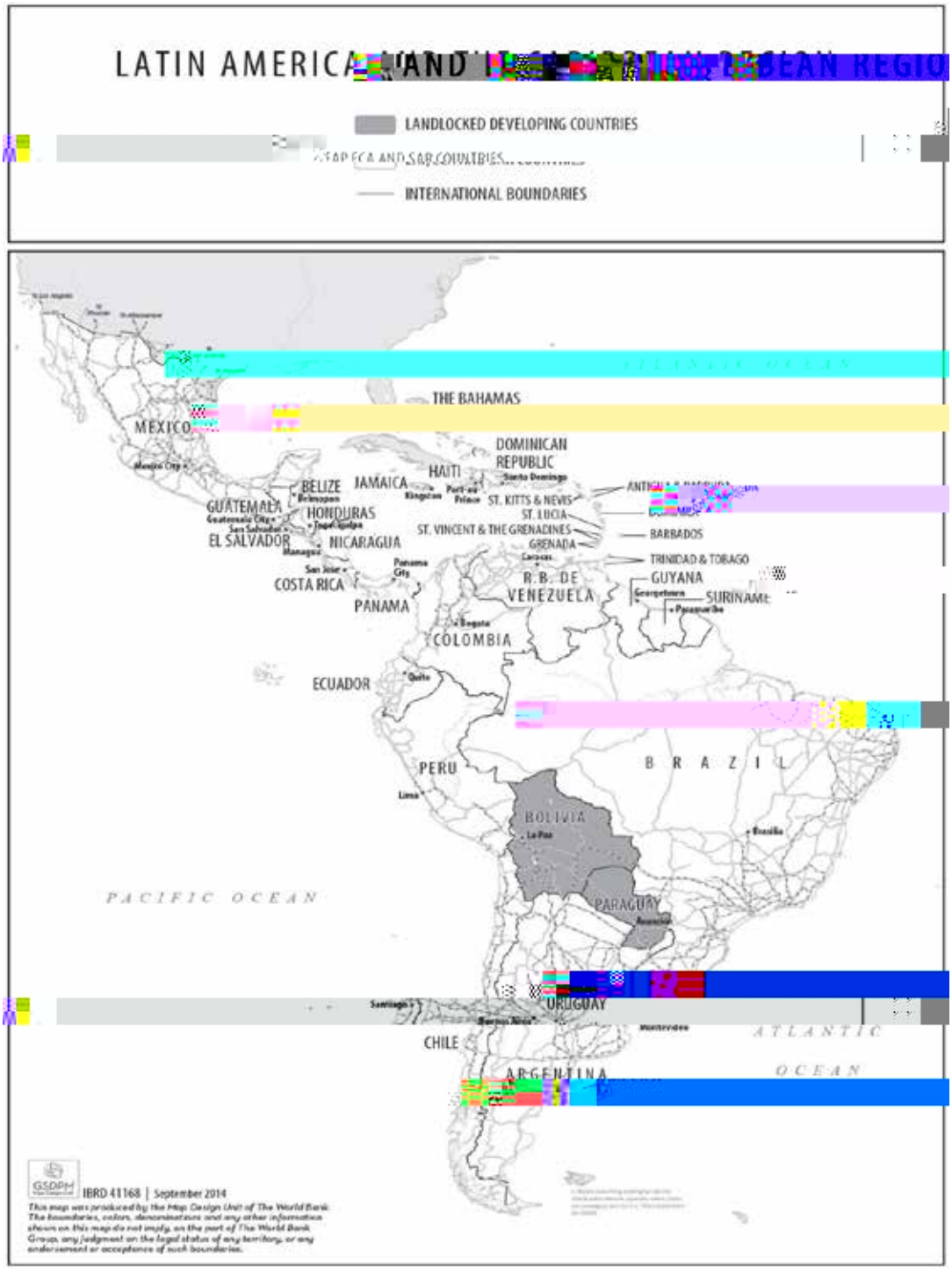
Anne 9: Ma of Landlocked De elo ing Co n ie

MAP A9.1 Europe and Asia Regions

MAP A9.2 Africa Region



MAP A9.3 Latin American Region



Mbit/s per month by 2010, which should translate into end-user broadband access at under US$150/month and rapidly decline further. This in turn should lead to lower prices for telephone services and better access to the Internet that will significantly improve foreign and local private investment opportunities in the region, decrease the cost of doing business and increase the prospects for job creation and wealth generation while enabling countries to reap the benefits of ICT as a platform to deliver services to their citizens.

West Africa

Infrastructure has been critical to the West Africa region's growth. It is estimated that between 1995 and 2005, infrastructure improvements boosted West Africa's growth by about one percentage point per capita per year. The positive growth was almost entirely attributed to the Information and Communication Technology (ICT) revolution while deficient power infrastructure held back economic growth by about 0.1 percentage point per capita per year. It is estimated that if infrastructure could be upgraded to the level of the best performing country in Africa (Mauritius), the impact on per capita economic growth would be in the order of 5 percent.

The World Bank's response and support to the region's efforts is underpinned by a comprehensive Regional Integration Assistance Strategy, 2008 (RIAS) for the continent and Implementation Action Plan for West Africa (2011–2015). The purpose of the West Africa Regional Communications Infrastructure Project is to increase the geographical reach of broadband networks and reducing the cost of communications services in West Africa. Landlocked countries such as Burkina Faso, Mali and Niger have always depended on their neighbors for international access, often at high risk and uncompetitive prices. These countries, however, can benefit from advantageous geographic positions in the center of West Africa, and could play a key route for a number of the large telecom groups in the region. Burkina Faso for example has six neighboring countries (Mali, Niger, Benin, Ghana, Togo, and Cote d'Ivoire) and could provide opportunity for such regional players to complete their international connections and regional rings. There is, therefore, a significant potential international demand provided Burkina and the other landlocked counties can offer robust national and international network capacity. The team is reviewing the most viable options for reducing the cost of international bandwidth to landlocked countries and possibly providing financing for the backhaul transmission infrastructure. One of the options is to develop backhaul transmission infrastructure from landlocked countries to landing points in coastal countries using either buried or aerial cable; another option would be to establish virtual landing points which would be managed jointly by all the operators.

There is more urgency for Burkina Faso, which is not associated with ACE (Africa Coast to Europe). For Mali and Niger, although they are landlocked, they are expected to gain access to the ACE cable through their Orange subsidiaries who are members of the ACE cable consortium. Subsequent phases of the program will assess more effective connectivity solutions for these countries.

Taking a Multi-Pronged Approach to Project Design: The Example of the Nepal-India Regional Trade and Transport Project

Over the past decade, the World Bank added to its already significant portfolio of trade and transport facilitation projects with a focus on landlocked developing countries. Recent projects have become progressively more complex reflecting the multi-sectoral nature of the issues that have to be dealt with, which encompass technical issues concerning infrastructure, policies and regulations governing transport and logistics services provision, and cooperation and collaboration between countries and agencies that handle these aspects. One example of a project that takes a comprehensive approach is the Nepal-India Regional Trade and Transport Project.

Nepal is a landlocked country in South Asia, and is among the landlocked countries with high trade costs. Over the past decade and a half in particular, Nepal has invested in several initiatives to reduce these costs, especially along the main corridor linking it to the Kolkata/Haldia port complex in India. In the late 1990s, with support from the World Bank, among other improvements Nepal constructed three Inland Container Depots at the major border crossing points with India. One of the three ICDs has a rail connection to Kolkata, and has since emerged as the largest trans-loading node for Nepal's international trade.

corridors. While rail transport accounts for more than 75 percent of the combined ton-km of freight carried in Kazakhstan, past trends show a ten percent increase in road freight per annum since 2002.

Roads are a key element of the Kazakhstan transport system, playing an important role in the provision of basic access to rural areas, and providing essential transit corridors for trade. The key issues facing the management of the Republican road network are: a) outdated organizational structure and weak institutional capacity to plan and manage the road network, mainly because the Committee has few trained personnel; b) inefficient allocation of funds; c) poor condition of the network, with over 50 percent of roads requiring major maintenance or full rehabilitation; d) inappropriate maintenance practices that are reactive rather than preventive (i.e., repairs are done once defects appear), resulting in higher costs; e) poor quality of construction; f) very poor road safety record, with indications that this will increase; g) unsatisfactory condition of local road networks, thereby limiting access for rural communities to essential social services and work opportunities; h) lack of services to transporters along the transit corridors; and i) non-physical barriers in the form of unofficial payments and unscheduled inspections for transit traffic. The overall objective of the government's WE-WC Corridor development program is to improve transport efficiency and safety, and promote development along one of Kazakhstan's main strategic road transport corridors. Transport and trade efficiency will be improved through provision of better infrastructure and services along the entire corridor to reduce transport costs, and through gradual reform of the entities responsible for all categories of roads.

Proposed Central Asia Road Links (CARs) Program

Initiated by governments in respective Central Asian countries, the proposed Central Asia Road Links (CARs) Program is currently being considered for financing by the World Bank. Realizing the necessity for collective action, the proposed CARs Program will address some of the development challenges which have come about with the recent 'disruptive' breakup of the Former Soviet Union, the emergence of new markets, and the growing disparities between capital cities and peripheral regions. At the core of these challenges is the need to re-build a framework across national borders, including a regionally and locally integrated trans-border road transport network capable of connecting people and businesses to local and global services and markets across borders. The objective of the proposed Program is to increase cross-border connectivity and enhance regional economic development, which can be achieved by rehabilitating priority road links and improving transport operations and maintenance practices. Financing activities proposed under this Program are expected to have substantial positive regional spill-over effects and promote positive change in the region. In line with the overall objective of the Program, sequential entry of countries is proposed, initially starting with the Kyrgyz Republic and Tajikistan. The financing requirements for this transformational Program are estimated to be at least US$ 400 million.

Regional Trade Facilitation and Competitiveness Development (Burkina

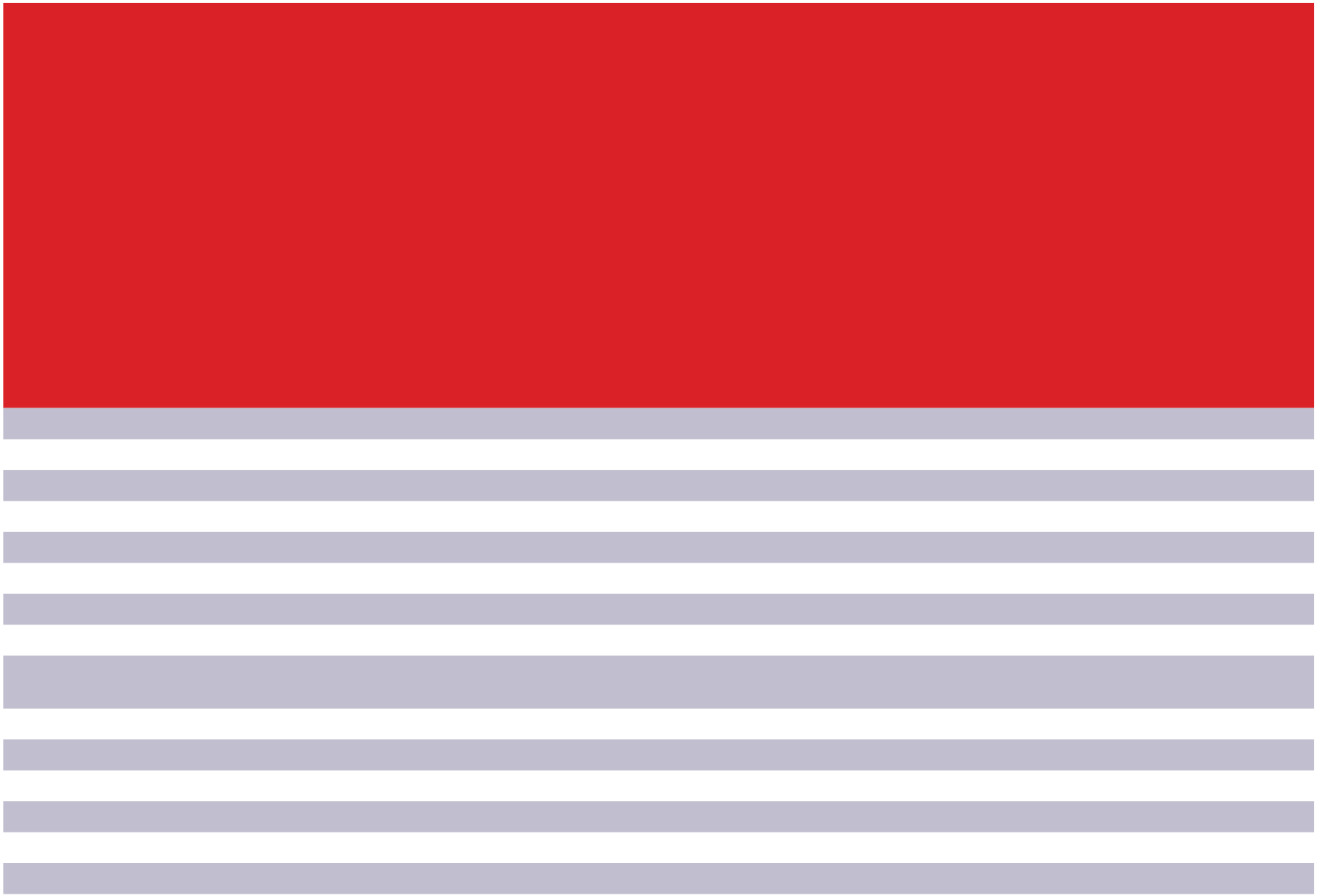
Nepal and Turkmenistan we have provided guidance and assessed the economic rationale for joining the WTO, the likely impact on tariffs as a result of WTO accession, and the regulatory reforms needed for trade in both goods and services. Following an agreement with ASEAN, we are undertaking NTM surveys in Lao PDR, Cambodia and Myanmar, which has led to several positive avenues for streamlining NTMs.

In **Southern Africa**, the T&C GP is supporting an Accelerated Program of Economic Integration (APEI) which is providing technical inputs to the prepa-

Single Window. Positive results include a drop in customs clearance time from 5.9 days (2010) to 1.4 days (2014) and a reduction in physical inspections from 29% (2010) to 17% (2014).

A US$101 million Trade and Transport Facilitation project in **Nepal** covers both the hardware of trade (roads and storage facilities) and the software components of trade (customs and border management reform and ICT). Immediate results achieved include the establishment of a National Trade and Transport Facilitation Committee and the preparation of a blueprint for the National Trade Portal and Single Window system.

Anne 11: LLDC ' Pa ici ɹa ion b In men



TIR Convention (Convention on International Transport of
LLDC country