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FACILITATION OF TRANSPORT AND TRADE IN LATIN AMERICA AND THE CARIBBEAN

Natural resources logistics in landlocked countries in Latin America and the Caribbean

Background

Landlocked developing countries face many challenges on their path to sustainable development. In response, the United Nations System is promoting coordinated actions to support such countries and help them to improve their competitiveness and their inhabitants' quality of life. One such action is the Vienna Programme of Action for Landlocked Developing Countries, which replaces the Almaty Programme of Action (2003-2013) in coordinating a range of actions in support of these countries. Alongside it, the 2030 Agenda and the Sustainable Development Goals provide an overall framework for progress towards sustainable development for all countries, with special reference to the challenges facing landlocked developing countries in such areas as enhancing productive capacity, value addition, diversification and reduction of dependency on commodities.

This issue of the *FAL Bulletin* analyses natural resources logistics in landlocked countries in Latin America and the Caribbean. It is divided into four sections. Section one describes the general framework of United Nations System global and regional intervention on the issue of landlocked developing countries, highlighting targets in the Sustainable Development Goals and Vienna Programme of Action that relate to specific measures for landlocked countries. Section two characterizes the export matrix of Paraguay and the Plurinational State of Bolivia, underlining the special importance of natural resources for the countries' development and the current context marked by the end of the commodities boom. Section three analyses the natural resources logistics of Paraguay and the Plurinational State of Bolivia, the challenges currently facing them and the efforts of both countries to improve their logistics policy. The conclusions in section four present the main ECLAC policy recommendations to convert both natural resources and logistics into levers for the region's development.

This issue of the *FAL Bulletin* analyses natural resources logistics chains in Paraguay and the Plurinational State of Bolivia in the light of the Vienna Programme of Action for Landlocked Developing Countries and the United Nations Sustainable Development Goals.

This Bulletin is one of the activities of the project "Logistics integration for a more sustainable exploitation of natural resources in Latin America and the Caribbean", implemented by ECLAC with funding from the United Nations Development Account.

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UNITED NATIONS

ECLAC

I. Global and regional framework of United Nations actions in support of landlocked developing countries

The 2030 Agenda for Sustainable Development[1] seeks to raise awareness of the need for sustainable development that achieves an appropriate balance of economic, social and environmental progress. To achieve this, 17 Sustainable Development Goals were set, along with 169 targets for monitoring progress in each of the development areas (see diagram 1).

Although the 2030 Agenda is intended to improve the performance of all countries, a number of targets make special mention of landlocked developing countries. Goal 7 (Ensure access to affordable, reliable, sustainable and modern energy for all) includes target 7b: *By 2030, expand infrastructure and upgrade technology forsupplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support.*

Goal 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation) includes Target 9a: *Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.*

Goal 10 (Reduce inequality within and among countries) explicitly refers to landlocked developing countries in target 10.b: *Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes.*

Diagram 1
SUSTAINABLE DEVELOPMENT GOALS

Source: United Nations (2016).

[1] "Transforming our world: the 2030 Agenda for Sustainable Development", adopted by United Nations General Assembly Resolution A/RES/70/1, available at: http://undocs.org/ A/RES/70/1.

In addition to the overall framework provided by the 2030 Agenda, the latest United Nations action aimed specifically at landlocked developing countries is the Vienna Programme of Action.[2] It was adopted in November 2014 to provide specific guidelines for addressing the problems encountered by landlocked developing countries on their path to sustainable development, as a follow-up to the Almaty Programme of Action, which ended in 2013. These programmes reaffirm the United Nations' commitment to tackle the special difficulties facing landlocked developing countries in the areas of infrastructure, transit and trade facilitation. More specifically, the Vienna Programme of Action makes a thorough and critical analysis of the previous programme of action, identifying international best practices and domestic policies that have proven useful, in order to foster a new, more coordinated and effective framework for action. To this end, it promotes coordinated actions to be implemented by landlocked developing countries, transit countries and development partners, grouped into the following six priority areas.

1. Fundamental transit policy issues.
2. Infrastructure development and maintenance (transport infrastructure; energy and information and communications technology infrastructure).
3. International trade and trade facilitation (international trade; trade facilitation).
4. Regional integration and cooperation.
5. Structural economic transformation.
6. Means of implementation.

The Vienna Programme of Action also emphasizes the role of the United Nations Regional Commissions —including ECLAC, which is responsible for Latin America and the Caribbean— in monitoring and reviewing implementation of the Vienna Programme of Action, through existing intergovernmental processes at regional and subregional levels. For instance, at the regional level, resolution 711(XXXVI) adopted by ECLAC at its thirty-sixth session confers a mandate upon the Commission in this case through its Natural Resources and Infrastructure Division to play an active part in implementing United Nations programmes to support landlocked countries. The last substantive report on the subject was released in 2014 at the second conference of the United Nations on landlocked countries, in Vienna, where ECLAC described the status of cases in South America, highlighting progress in implementing the Almaty Programme of Action (2003-2013) and making policy recommendations to guide new activities in the follow-up to the Almaty Programme of Action.[3] The Natural Resources and Infrastructure Division is currently deploying a regional work plan for implementing the Vienna Programme of Action in South America, which provides for specific activities under a project funded by the United Nations Development Account entitled "Logistics integration for a more sustainable exploitation of natural resources in Latin America and the Caribbean". Two of the project's beneficiary countries are Paraguay and the Plurinational State of Bolivia, where it seeks to: establish forums for national dialogue on the importance of logistics for natural resources; build their institutional capacity for designing and implementing logistics infrastructure and national policies for diversified and sustainable use of their natural resources; and promote regional integration with their transit countries.

II. Natural resource use in Paraguay and the Plurinational State of Bolivia and end of the commodities boom

Like most other Latin American countries, Paraguay and the Plurinational State of Bolivia are highly dependent on natural resource-intensive activities where exports are concentrated in low value-added products with no involvement in value chains. In these two particular countries, exports of natural resources accounted for more than 80% of the volume and total value of exports in 2015.

Within the export matrix of the Plurinational State of Bolivia, hydrocarbons, especially natural gas, account for 74.2% of export volume and 42% of total export value, for which the main destination countries are in the region: Argentina, Brazil, Paraguay and Peru. Other major export commodities are: zinc ores, tin, gold, and soybean cake and oil (see table 1).

In Paraguay's economy, the agriculture, hunting, forestry and fisheries sectors accounted for almost 20% of GDP in 2015 (Central Bank of Paraguay, 2016). Agricultural commodities, such as soybean, maize, wheat and rice, form a large part of the country's export matrix in terms of export volume. Energy is another big export item and, strictly speaking, it is Paraguay's leading export commodity in value terms. Only 20% of the total energy output from hydroelectric plants (Itaipú,[4] Yacyretá and Acaray de Paraguay) is for the domestic market and the rest is exported to Brazil and

[2] Programme of Action for Landlocked Developing Countries for the Decade 2014–2024, adopted by United Nations General Assembly Resolution A/RES/69/137, available at: http://undocs.org/ A/RES/69/137.

[3] Status of Implementation of the Almaty Programme of Action in South America, ECLAC Natural Resources and Infrastructure Division, ECLAC Series 167, available at: http://www.cepal.org/en/publications/37090-status-implementation-almaty-programme-action-south-america.

[4] The Itaipú hydroelectric power plant was built jointly by Brazilian consortiums (UNICON and ITAMON) and Paraguayan consortiums (CONEMPA and CIE) (Itaipú, 2016).

Argentina, to the point where Paraguay is the world's largest per capita hydropower producer (Sauer and others, 2015) (see table 2).

As the tables show, Paraguay and the Plurinational State of Bolivia, like many other countries in the region, have based their development strategy on the extraction and marketing of natural resources. Between 2000 and 2012, there was a steep rise in international commodity prices, as figure 1 shows.

Table 1
PLURINATIONAL STATE OF BOLIVIA: EXPORT COMMODITY GROUPS, 2015

Standard International Trade Classification code	Volume (tons)	Percentages	Value (millions of dollars)	Percentages
(343) Natural gas	13 234 937	74.2	3 771 166	42.3
(081) Feeding stuff for animals[a]	1 585 513	8.9	522 984	5.9
(287) Ores and concentrates of base metals, n.e.s.	798 458	4.5	1 043 291	11.7
(333) Petroleum oils and oils obtained from bituminous minerals, crude	557 486	3.1	202 713	2.3
(421) Fixed vegetable fats and oils, crude, refined or fractionated but not 'soft'	425 238	2.4	294 636	3.3
(057) Fruit and nuts (not including oil nuts), fresh or dried	152 345	0.9	52 773	0.6
Other	890 435	5.0	1 217 704	31.3
Total	17 844 806	100.0	8 908 659	100.0

Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the United Nations COMTRADE database (2016).

[a] The main commodity in this category is soybean in its various forms.

Table 2
PARAGUAY: EXPORT COMMODITY GROUPS, 2015

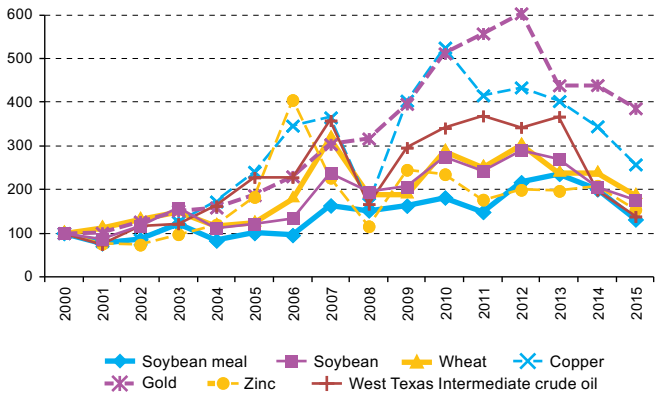
Standard International Trade Classification code	Volume (tons)	Percentages	Value (millions of dollars)	Percentages
(351) Electric current[a]	38 274 469		2 069 161	24.7
(222) Oil-seeds and oleaginous fruits of a kind used for the extraction of "soft" fixed vegetable oils (excluding flours and meals)	4 640 298	32.8	1 652 320	19.8
(044) Maize (not including sweet corn) unmilled	3 287 300	23.2	441 231	5.3
(081) Feeding stuff for animals	2 667 144	18.8	939 560	11.2
(041) Wheat (including spelt) and meslin, unmilled	872 307	6.2	152 890	1.8
(421) Fixed vegetable fats and oils, crude, refined or fractionated but not 'soft'	711 063	5.0	456 961	5.5
(042) Rice	398 244	3.1	129 825	1.6
(011) Meat of bovine animals, fresh, chilled or frozen	271 736	1.9	1 121 856	13.4
Other	1 306 783	9.2	1 217 704	31.3
Total	14 154 873	100.0	8 908 659	100.0

Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the United Nations COMTRADE database (2016).

[a] Electric current is represented in thousands of kilowatt-hours.

These higher revenues and policies for increasing tax revenue from the extractive industry led to a decline in poverty and extreme poverty in the region, in both absolute and relative terms, to varying degrees depending on the country and the fiscal instruments used. For instance, the structural reforms implemented by the Plurinational State of Bolivia during the commodity price boom (change of tax regime, creation of a direct tax on hydrocarbons and collection of royalties), coupled with an expansion in private mining, increased average tax revenues from around 3% of GDP in the 2000-2003 period to around 10% of GDP in 2008-2012 and more than 11.6% of GDP in 2010-2014 (Altomonte and Sánchez, 2016).

Figure 1
PERFORMANCE OF THE MAIN COMMODITY PRICES IN THE REGION
(INDEX: 2000=100)



Source: Prepared by the authors on the basis of price information from Bloomberg (2016).

Despite progress, the export matrix continued to concentrate heavily on low value-added products with no involvement in value chains that would foster innovation or the development of new products or services. When international prices began to decline in 2012-2013 due to a slowdown in global growth, the result was rising inflationary pressure and reduced capacity to create new jobs and formalize existing informal ones, stalling the poverty-reduction process across the region (ECLAC, 2016). A number of factors contributed to this global downturn in the price of major commodities, including (ECLAC, 2015):

- The supply of raw materials on the world market grew as a result of increased investment in the natural resources sector during the price boom.
- Global demand for raw materials slackened on the back of an expected slowdown in growth in emerging countries.
- China shifted its strategy to boosting its own domestic market, which is expected to decrease demand for raw materials, especially industrial ones such as metals and energy commodities.

The end of the commodities boom poses a huge challenge for the region, especially for natural resource exporters such as Paraguay and the Plurinational State of Bolivia, as many of their successful social actions were undertaken using windfall revenues from international price rises. With today's low prices and a poorly diversified matrix that is more vulnerable to global shocks, fiscal scope for maintaining economic investment and social spending may be severely curtailed unless a new way is found to boost development.

From the standpoint of State funding and the sustainable development of landlocked countries itself, the fiscal dependency of the non-renewable resources sector increases fiscal risk, given that such revenues are volatile and subject to an intrinsic process of depletion. This calls for proper investment planning to replace such resources with alternative sources of tax revenue to ensure that, as the relative importance of natural resources wanes, other sources of wealth are tapped into (Altomonte and Sánchez, 2016).

III. Natural resources logistics in landlocked countries in Latin America

Section two demonstrates the importance of natural resources for landlocked countries in the region. Despite this, neither landlocked nor coastal countries in the region are seen to pay special attention to designing specialized infrastructure or promoting value-added logistics services specifically for natural resources. Moreover, much of the public infrastructure used to transport natural resources is poor and has high negative externalities for the population and the environment. Private infrastructure frequently acts as a barrier to the entry of other production actors and does not help to improve territorial connectivity, hindering the creation of the sort of economies of scale, networks and clusters that could be achieved using natural resources logistics.

Given that logistics costs in Latin America can be up to four times higher than in member countries of the Organisation for Economic Co-operation and Development (OECD) and that a very high proportion of exports are logistics-intensive or time-sensitive (OECD, 2014), it is especially important for the region's sustainable development, and particularly for its landlocked countries, to promote appropriate natural resources logistics.

However, lack of sovereign access to the sea is not the only reason for high logistics costs. Recent field studies by ECLAC in both landlocked and coastal countries have revealed that a large part of the region's logistics costs can be attributed not only to traditional factors of foreign trade, including logistics performance, competition, economies of scale, process facilitation, productivity and port efficiency, but also to failures in infrastructure provision and regulation of services, associated with a wide range of factors such as inadequate provision of highways and secondary and tertiary roads, poor distribution and storage logistics, long waiting times for loading and unloading, and uncompetitive and insecure domestic transport and logistics services.

With particular regard to landlocked countries, a recent analysis by ECLAC found that logistics inefficiencies in Bolivian exports of soybean cake accounted for as much as 20.9% of cost overruns. The main causes of cost overruns in inland water transport logistics chains were lack of dredging, navigational beacons in rivers and underutilization of barge capacity, while the main causes of inefficiencies in land transport logistics chains for soybean cake were poor road conditions and delays in unloading cargo at port (ECLAC, 2014).

An important point regarding land transport in the Plurinational State of Bolivia is that, according to official data for 2014 from Bolivia's National Statistical Institute (INE), 53% of the country's road network comprises dirt roads, 33% gravel roads and 13% paved roads (INE, 2016). This lack of domestic infrastructure incurs higher road freight costs because of the slower operating speeds imposed by poor road conditions, which also prevent the use of high-performance equipment that would be more efficient in terms of units of freight transported (tons-kilometre). For transport to be more competitive, it is therefore essential to maintain and upgrade the existing road network.

Table 3 shows the transport modal split for export shipments from the Plurinational State of Bolivia between 2005 and 2015. Growth in the pipeline segment stems from hydrocarbon exports to neighbouring countries, which represented 84% of the country's export volume and 45% of its total export value in 2015. The table also shows that, while the number of tons shipped by rail has increased slightly in recent years, it accounts for a relatively low share (around 3%) of the total volume of export shipments, with road transport the mode that showed the highest increase in tons shipped over the reporting period.

Table 3
PLURINATIONAL STATE OF BOLIVIA: EXPORTS BY MODE OF TRANSPORT, 2005 AND 2015
(Tons)

Mode of transport	2005		2015	
	Volume	Percentages	Volume	Percentages
Pipeline	14 417 593	83.7	23 623 201	84.3
Road	1 459 440	8.5	2 538 244	9.1
Inland waterway	880 083	5.1	968 363	3.5
Rail	437 538	2.5	851 670	3.0
Air	24 167	0.1	42 368	0.2
Total	17 218 821	100.0	28 023 845	100.0

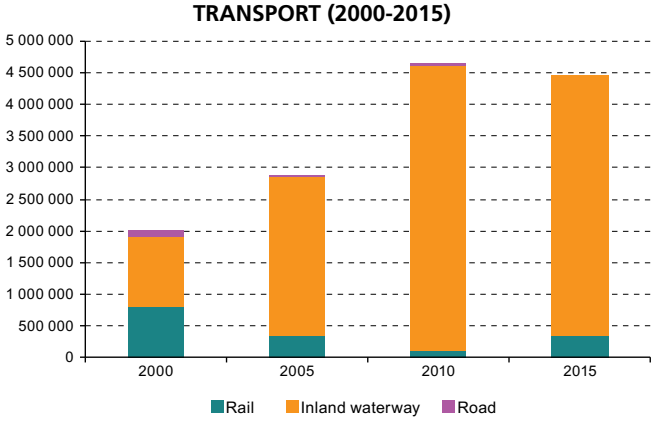
Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), based on information from the Bolivian Foreign Trade Institute (IBCE), 2016.

Table 4 shows the main exit routes for exports. In 2015, the main route for Bolivian exports was Puerto Suarez-Corumbá, owing to the importance of the pipeline for exports of Bolivian gas, soybean cake and other commodities (INE, 2016). With regard to road transport, the main export route was Desaguadero, from which the chief exports are soybean cake and soybeans. With regard to export commodities, the table also shows an increase in the share of road transport compared with other modes of transport, especially for exports of soybean cake via the Desaguadero and Arica-Charaña-Tambo routes and for exports of zinc and lead ores via the Antofagasta-Ollagüe-Uyuni route. This growth in the volume of road shipments may result in a significant increase in border crossing times, as investment in customs (both physical and technological) has not kept in step.

Paraguay also has low coverage of paved roads and a high proportion of dirt roads (nearly 75% of the country's entire road network).[5] As in Bolivia, this leads not only to logistics cost overruns, as a result of longer journey times and failure to take advantage of economies of scale, but also to loss of agricultural produce. That is why future investment should focus on these areas.

Inland waterways are the chief mode of transport for Paraguay's export commodities, accounting for more than 90% of the country's total volume of soybean exports, as figure 2 shows. According to the annual newsletter of the National Directorate of Customs (DNA, 2016), soybeans, rice, maize and sorghum account for the largest volume of Paraguayan exports to be shipped by inland waterways.

Figure 2
PARAGUAY: VOLUME OF SOYBEAN EXPORTS BY MODE OF TRANSPORT (2000-2015)



Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean. (ECLAC), based on data from the Paraguayan Association of Grain and Oilseed Exporters (CAPECO), 2016.

[5] Information for 2013. The data are available on the website of Paraguay's Ministry of Public Works and Communications (MOPC).

Table 4

PLURINATIONAL STATE OF BOLIVIA: EXPORTS BY MODE OF TRANSPORT, EXIT ROUTE AND GROSS WEIGHT (TONS) IN 2005 AND 2015

Commodity	Mode of transport	Exit route	Gross weight (2005) (tons)	Percentages	Gross weight (2015) (kilograms)	Percentages
Soybean cake[a]	Inland waterway	Corumbá-Puerto Suarez	729 667	64	763 097	48
	Road	Arica-Charaña-Tambo Quemado	201 254	18	351 000	22
		Desaguadero	167 230	15	446 401	28
		Corumbá-Puerto Suarez	-	0	11 968	1
		Pocitos-Yacuiba	4 028	0	11 630	1
		Moho-Puerto Acosta	70	0	-	0
		Boyuibe-Fortin Villazón			2 650	0
	Rail	Antofagasta-Ollagüe-Uyuni	2 423	0	-	0
		Corumbá-Puerto Suarez	19 585	2	-	0
		Charaña-Arica	20 721	2	-	0
	Total		**1 144 978**	**100**	**1 586 747**	**100**
Zinc and lead ores and concentrates[b]	Rail	Antofagasta-Ollagüe-Uyuni	215 308	55	813 047	73
		Charaña-Arica	62 774	16	-	0
		Corumbá-Puerto Suarez	2 858	1	-	0
	Road	Arica-Charaña-Tambo Quemado	74 815	19	261 281	23
		La Quiaca-Villazón	19 211	5	6 782	1
		Desaguadero	12 264	3	26 227	2
		Antofagasta-Ollagüe-Uyuni	2 798	1	5 445	0
		Pocitos-Yacuiba	3	0	-	0
	Air	Air	0,51	0	1 289	0
	Total		**390 385**	**100**	**1 115 738**	**100**

Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), based on information from Bolivia's National Statistical Institute (INE), 2016.

[a] Soybean cake is included in the group "Feeding stuff for animals" (081- SITC Rev. 3). This group also includes bran, sharps and other residues of maize and other cereals.
[b] Zinc and lead ores are the main products in the group "Ores and concentrates of base metals" (287-SITC Rev. 3).

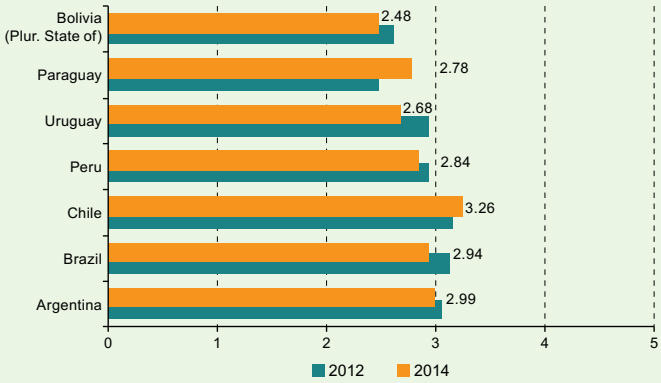
In recent years, rising exports of soybeans and other agricultural products have led port facilities to increase from 4 bulk ports for shipping soybeans in 2003, to 26 in 2009, and 35 at present. However, most of the installed port capacity is located only 72 kilometres from Asunción, leading to long queues to unload soybeans at inland waterway ports (Gauthier, Carruthers and Millán Placci, 2016).

This is consistent with an ECLAC analysis that found logistics inefficiencies to equal 17.1% of the value of exports by inland waterway, owing to operational failures, loading and unloading delays, and lack of dredging and navigational beacons in rivers, which delay operations by a further 24 hours. In the case of logistics chains using road transport, inefficiencies were found to equal 27.5%, with the most significant factors in such cost overruns being delays at the Paraguay-Brazil border crossing and product losses associated primarily with poor rural road infrastructure (ECLAC, 2014). Similarly, the World Bank found that it costs 1.6 times more to transport soybeans by truck over a distance of 330 kilometres from Caazapá to Asunción than it does to transport them by barge over a distance of 1,240 kilometres from Asunción to Rosario (Gauthier, Carruthers and Millán Placci, 2016).

In conclusion, cost overruns in logistics chains in Paraguay and the Plurinational State of Bolivia can be said to stem mainly from poor infrastructure in these two countries and in transit countries, coupled with lack of process facilitation at border crossings (see figure 3). These findings are consistent with the latest Logistics Performance Index scores,[6] showing that these countries perform least well in the areas of customs and infrastructure (Pérez-Salas, Sánchez and Wilmsmeier, 2014).

[6] The Logistics Performance Index is measured on a scale of 1 to 5.

Figure 3
LOGISTICS PERFORMANCE INDEX FOR LANDLOCKED DEVELOPING COUNTRIES (PARAGUAY AND PLURINATIONAL STATE OF BOLIVIA) AND FOR TRANSIT COUNTRIES (ARGENTINA, BRAZIL, CHILE, PERU AND URUGUAY)



Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), based on information from the World Bank (2016).

Their performance is much the same according to other international indices, such as the World Economic Forum's global competitiveness index, which ranks the competitive landscape of different countries on a scale of 1 to 7: 1 being the least efficient and 7 the most efficient (see table 5).

Table 5
GLOBAL COMPETITIVENESS INDEX FOR SELECTED COUNTRIES

	Bolivia (Plurinational State of)	Paraguay	Argentina	Chile	Brazil	Peru	Uruguay
Global competitiveness index	3.8	3.6	3.8	4.6	4.3	4.2	4
Infrastructure	3	2.7	3.5	4.6	4	3.5	4.5

Source: Infrastructure Services Unit, Economic Commission for Latin America and the Caribbean (ECLAC), based on information from the World Economic Forum (2016).

In response, landlocked countries have embarked on major actions and policies in the area of logistics to improve their infrastructure and make services competitive. For example, in early 2016, the Bolivian Government launched the National Trade Logistics Forum, with the participation of the Ministry of Public Works, Port Services Administration and Ministry of Productive Development, to work with different stakeholders to identify and prioritize the key logistics challenges facing the country. The forum's main aim is to define lines of intervention for Bolivia's Trade Logistics Strategy 2016-2025.

Similarly, Paraguay, through its Ministry of Industry and Commerce, has launched its National Logistics Plan 2013-2030, which aims to improve the country's logistics performance by promoting the development of value-added logistics services and supporting higher-performance supply chains. The plan seeks to establish coordinated actions in three key areas: (a) transport flows for the movement of goods and facilitation of connectivity; (b) service infrastructure, with distribution centres and facilities to support connectivity; (c) promotion of good logistics practices.

These efforts are in line with ECLAC recommendations on integrated logistics and mobility policies, which advocate a paradigm shift in the way in which policies are designed and implemented, establishing a general framework that identifies and links a number of key concepts, such as development, production, infrastructure, transport and, more particularly, logistics and mobility services. To achieve this, ECLAC proposes the development of national logistics and mobility policies, with common guidelines for Latin American and Caribbean countries. Such a paradigm shift would enhance development and production integration by: creating value chains to deepen domestic and regional markets; improving integration into the global economy; generating efficient connectivity between links in the chain; and coordinating regional projects in science, technology and innovation to consolidate structural change with equality (Jaimurzina, Pérez Salas and Sánchez, 2015).

IV. Conclusions

Landlocked countries in Latin America are still heavily dependent on the extraction of natural resources. It is therefore crucial to create an efficient logistics infrastructure for natural resource extraction and distribution, not only to remain competitive but also to reduce the cost of imported consumer products. Along with more and better national infrastructure, it is essential to continue working to strengthen public logistics policy and, in particular, to narrow the institutional gaps affecting facilitation and transit with neighbouring countries. All the elements analysed lead to logistics inefficiencies, higher product prices and increased externalities on the population and the environment.

The Natural Resources and Infrastructure Division is not only monitoring the Vienna Programme of Action and its link with the Sustainable Development Goals, it is also deploying a

regional work plan for implementing the Vienna Programme of Action in South America, combining updated analytical studies with enhanced national and regional dialogue on the subject. Actions are already being implemented under the project on logistics integration for a more sustainable exploitation of natural resources in Latin America and the Caribbean to strengthen the role of logistics in achieving a more sustainable use of natural resources in landlocked countries and to promote the facilitation and integration of logistics infrastructure with neighbouring countries.

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