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The strategic value of Hub Peru in South America

Abstract

Global geopolitical dynamics are undergoing fundamental changes in the configuration of international relations and geo-economics. Since the *New Silk* Road strategy was presented with its maritime extension to the South American subcontinent to link Asia with South America, Peru will become the most important centre for trade and navigation in South America thanks to the construction of the mega port of Chancay, new infrastructure at Lima International Airport and complementation of the National Road Network, which includes railway construction projects and the IIRSA (Initiative for the Integration of Regional Infrastructure in South America) highways linking Peru with Brazil. This integral node, known as Hub Peru because of its geostrategic location in South America, represents a historic opportunity for the country to definitively take-off towards the longed-for sustainable development.

Keywords

Geopolitics; Silk Road; Mega Port Chancay; Geo-strategic Location of Peru.

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1. Introduction

To understand 21st century geopolitics, we must revisit the classics such as Mackinder, Spykman, Mahan and Sun Tzu[1]. Alfred Thayer Mahan postulated that achieving maritime power was the key to gaining supremacy, while Mackinder argued that control of the heartland meant control of the world. A global geopolitical game seems to be on the horizon, from which Peru could benefit. And that geopolitical game appears to be based on RMB: Resources, Market, Bases, according to Mohan Malik (NATO, 2016).

The geopolitical centre of gravity in Asia has evolved rapidly, especially in the last two decades. Eurasian countries (China, Russia, India, etc.), leaving aside their old maritime rivalries, have undertaken a series of actions aimed at creating extra-continental spheres of influence, such as: the creation of economic hubs, organisations (ASEAN-Association of Southeast Asian Nations, Eurasian Union although without China and India as yet), transport corridors, highways, high-speed trains or gas pipeline networks (NATO, 2016). Now in the present day, all of this has meant a major change in the geopolitics of this world region, with global repercussions. However, a major disruptive element has been introduced, Russia's still unfolding attack on Ukraine, which may deepen this change.

Peru is one of the countries that combine a series of geographical, social, cultural and economic characteristics that set it apart it in the world. With a geographical extension of 1,285,215.9 km2[2] (which, until the late 19th and early 20th centuries, was 30% larger than the current territory) and 200 miles of sea over the Pacific Ocean (Grau Sea), the country is one of the planet's megadiverse territories. Natural resources available in terms of flora, fauna, minerals, hydrocarbons, gas, phosphates, water (8th largest reserve in the world)[3], hydrobiological resources (a unique ecosystem considered the richest sea in the world), make Peru a privileged country. The morphology of the Peruvian territory, with its varied ecological levels and climates determined by the coast, the Andes and the Peruvian Amazon, reinforces this privileged status.

This natural layout of the territory also describes incredible scenic resources, with tourist potential and attractions for national and foreign visitors (Zegarra, 2022).

Geostrategically located, the Peruvian territory occupies the central and western part of South America. The Pacific coastline stretches for 3,080 km. The great Amazon River, with its source on Peruvian soil, shares Lake Titicaca with Bolivia. This geographical characterisation gives Peru a very particular value and strategic stature in the region.

1 Mohan Malik. Geopolitics: Asia out of balance? In NATO Forum Papers No. 25. 2016. ISBN 978-88-96898-13--0.

2 Peru is the 19th largest country in the world in terms of geographical size. Source: INEI Peru. Press Release No. 127. 11 July 2016.

3 FAO (2003), cited by the National Water Authority - ANA. Informe *El agua en cifras.*

Peru also has an ancient culture. Ancient civilisations such as Caral dating back to 2,500 BC (Shady, 2015) and later the Incas, developed centres of power that, as in the case of the Inca culture, came to form a veritable empire from its capital Cusco. There is evidence that the tenth ruler of the Inca Empire, Túpac Yupanqui, El Navegante (1441-1493), explored the Pacific Ocean, bringing the presence and knowledge of Andean man to great distances such as Rapa Nui and Mangareva in Oceania (Del Busto, 2019).

Peru's long tradition of foreign trade dates back to ancient times, as far back as the trade relationship with China and Mexico developed between 1595 and 1800. The Port of Callao is to date one of the most important in the South Pacific, the nerve centre of Peru's trade with the world; it is also relevant to mention that more than 80% of Peruvian foreign trade is carried out by sea. The regional ports of Paita and Salaverry in the north and San Martin, San Juan, Matarani and Ilo in the south contribute to this purpose and by the end of 2024, the mega port of Chancay located 70 km north of Lima will come into operation, thus reconfiguring maritime transport in the region and its connection with the Asia-Pacific countries.

In terms of national road systems, Peru has the Longitudinal Coastal Highway (Pan-American Highway North and South), the Longitudinal Highland Highway and the Longitudinal Jungle Highway, as well as 20 transversal roads and their respective variants, the main one being the Southern Interoceanic Highway that links the Peruvian coast with the Atlantic coast in Brazil.

With the advent of aviation in the last century, Peru also undertook the construction of a series of air terminals throughout the country. Limatambo International Airport was inaugurated in 1935, located in the district of San Isidro, Lima. Terminals were subsequently developed in Cusco, Arequipa, Juliaca, Iquitos and Tacna, among others.

The urban growth of the Peruvian capital and the increased flow of passengers led to the construction of a new air terminal in the Constitutional Province of Callao. Jorge Chávez International Airport was inaugurated in October 1960; five years later it was reopened after modernisation work in December 1965. Since 2001, it has been operated by European consortium Lima Airport Partners (LAP).

Due to its strategic location in the western centre of the South American coast, Jorge Chávez International Airport quickly became an international connection node for the subcontinent, considered a regional air hub, handling up to 10 million passengers per year.

In the early 2010s, the leadership of Lima airport began to give way to the constant increase in air traffic and entry into operation of other terminals such as the new international airport in Santiago de Chile, Bogotá (El Dorado) and Quito (Mariscal Sucre). Finally, Jorge Chávez Airport would lose its status as a regional hub. Faced with this scenario, since 2015, LAP has undertaken the construction of the new terminal, including a second runway and new control tower which, together with complementary construction work, will allow it to regain its status as a regional hub by 2025 and serve up to 37 million passengers per year.

2. The geo-strategic and geo-economic environment

The Peruvian state orients its development strategy in a social market economy regime guaranteeing private initiative, freedom of enterprise, labour and trade[4]. A series of actions have been established under these premises, such as the signing of free trade agreements, which currently total 22 with 55 countries on four continents. In terms of population it equates to international trade relations with more than half of the world's population.

In the geo-economic field it means that goods and services produced in Peru can be placed in very competitive conditions in the markets of America, Europe, Asia and Oceania. The advantages for Peru are obvious, as entering goods and services into the US market tax free is not the same for another country to do the same with taxed operations without a free trade agreement.

In 1974, General Edgardo Mercado Jarrín, a renowned Peruvian geopolitical expert, recommended Peru's adhesion to the APEC (Asia Pacific Economic Cooperation) Economic Forum as soon as the moratorium on adding new members to the 18 existing ones was lifted (Mercado, 1974).

General Mercado's strategic vision is today a state policy. Peru's trade and cooperation partnership with the world thus includes APEC, the European Union, China, the Trans-Pacific Partnership (TPP), the United States of America, Canada, the Pacific Alliance (PA), the Andean Community (CAN), and others.

APEC, an Australian initiative formed in 1989, is the world's most stable and powerful forum for economic cooperation, grouping 21 countries from the Americas, Asia and Oceania, namely: Australia, Brunei Darussalam, Canada, Chile, China,

Map 1. APEC. Source: Chilean Chamber of Commerce.

4 Political Constitution of the Peruvian State of 1993. Articles 58, 59 and 60

Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore; Taipei-China, Thailand, United States and Vietnam.

As can be seen, APEC (map 1) includes the world's most powerful economies, as well as only three Latin American countries (Chile, Peru and Mexico). Chile joined in 1994 and Peru in 1998. A new moratorium has since been agreed for the inclusion of new members.

In socio-economic terms, APEC accounts for 60% of the world's GDP, as well as about 40% of the world's population (2.9 billion), and 48% of world trade is generated in the area. By 2022, Peru will reach almost 65 billion in trade with APEC. Each year, the leaders of member economies meet in one venue; in 2024 the meeting will be held in Lima, Peru.

The potential generated by the PA, made up of Colombia, Chile, Mexico and Peru (recently joined officially by Singapore), is of great importance due to the fact that its mechanisms are highly dynamic, one might even say surprising. In economic terms, the PA would be the 8th largest economy in the world[5].

Despite recent political disagreements, the PA has proven to be a powerful economic and trade integration mechanism that has achieved great goals in its relatively short period of existence (it was created in April 2011 and its trade protocol dates from 2016) towards the objective of guaranteeing the free transit of goods, services, capital and people. The steady development of its aims has attracted worldwide attention. The alliance currently has 14 observer countries[6] from the Americas, 32 from Europe, 13 from Asia, 2 from Africa and 2 from Oceania.

A particularly important milestone (because of its geopolitical implications) occurred in September 2013. During an official visit to the Republic of Kazakhstan, Xi Jinping, President of the People's Republic of China, announced to the world one of the largest and most ambitious infrastructure projects for passenger, freight and hydrocarbon transport, as well as high technology to connect Asia with the world, the New Silk Road or BRI (Belt and Road Initiative) project. Shortly afterwards, in October of the same year, at the APEC Leaders' Summit in Jakarta, Indonesia, President Xi Jinping announced the maritime component of this project, the 21st Century Maritime Silk Road.

Initially conceived to link the port of Tianjin in China with the port of Ilo in Peru, today the transpacific maritime connection of the BRI strategy that will link the South American coast with Asia and Oceania has been redesigned considering the mega port of Chancay as the Hub of South America and is presented as an emerging route to consolidate intercontinental trade, complementary to traditional regular maritime routes.

5 Published on the Colombian Ministry of Foreign Affairs website.

6 Alianzapacifico.net/estados-observadores/países-observadores-4/

Map 2. Belt and Road Initiative. Source: *Belt and road research platform*

The port of Chancay combines the natural characteristics of a bay (depths, tides, waves and current conditions) suitable to develop a port and logistics complex and has access to the Pan-American Highway and other inland communication routes, as well as being located in a central position within the Peruvian territory and the subcontinent. Unique characteristics that fit precisely with the maritime strategy of the BRI initiative.

All the geographical, social, political and economic integrity described in summary forms a geostrategic and geoeconomic node of extraordinary importance for the development of Peru's international economic relations with the world, and to promote its development, what is known as the Economic hub-and-spokes system. (NATO, 2016).

The synergy of the mega port of Chancay (maritime component) together with the new Jorge Chávez International Airport (air component), the national road network that includes the road linking Peru with Brazil (IIRSA South), IIRSA Centre, IIRSA North and the short- to medium-term construction of the railway network (land component), inexorably determine that Peru will become the Hub of the South Pacific.

The question is whether this strategic opportunity can represent a qualitative leap in the country's growth and become a sustainable source of Peruvian development.

As part of this line of action, the State of Peru approved the National Competitiveness and Productivity Policy, whose priority objective is:

> "To provide the country with quality economic and social infrastructure through efforts aimed at efficient planning and prioritisation of infrastructure, ensuring the sustainability and functioning of economic, social and natural infrastructure, with a focus on territorial development and resilience to natural disasters" (Ministry of Economy, 2018).

Subsequently, in 2022, the plan was updated and renamed the National Plan for Sustainable Infrastructure for Competitiveness 2022-2025 (Ministry of Economy and Finance, 2022), a planning instrument that will drive economic growth, close gaps and unlock long-term infrastructure. In good time.

3. The maritime component

3.1. Key considerations

International trade to and from the South American Pacific coast involving Colombia, Ecuador, Chile and Peru is now regularly served by the main shipping routes (north-south and south-south) operating in the region, also referred to as liner shipping[7] . However, South America has no container transhipment ports. These services are located in Mexico, Panama and the United States (Los Angeles).

However, regular maritime routes are not the only ones serving the external trade of the South American west coast. Other routes are used by charter vessels providing direct service using the shortest route. Here are some comparisons (CAF. 2003, page 43):

> "From any Brazilian port or from Buenos Aires in Argentina, you can get to Singapore faster than from any port on the west coast of South America.
>
> Rio de Janeiro is the same distance from Hong Kong as it is from Antofagasta, which is at the same latitude.
>
> To get from Buenos Aires to Los Angeles it is shorter to go through the Strait of Magellan than to use the Panama Canal.
>
> Valparaíso seems to be closer to Singapore than Callao. However, this direct distance passes very close to Antarctica and is probably not feasible for most journeys.
>
> New York is closer to Callao and Valparaíso than Los Angeles. However, the economic distance is greater than the miles indicate because to get to New York, you have to go through the Panama Canal.
>
> Colombia, Ecuador, Peru and even Chile are closer to Europe than to Asia.
>
> Transferring in Los Angeles during a transport service between Asia and the west coast of South America does not practically increase the total distance at all".

7 Maritime transport is divided into two main groups: "tramp shipping" (bulk) and "liner shipping". The latter is a containerised freight transport service, mainly a regular service; it can be compared to the metro passenger service: the lines offer different fixed itineraries in relation to a timetable and stops. (A. Gomez & Sanchez R., 2021)

Jan Hoffmann, in a study published in 2000, details the requirements necessary for a port to be considered as a hub port[8], which is equivalent to a mega port with intermodal connections, warehousing and container distribution centre capabilities. According to the study, these requirements are as follows:

a) Land connections

The port terminal must have connections to a road and rail network in order to be able to receive cargo and concentrate it for distribution in foreign trade and cabotage operations.

The world's major port terminals have also developed adjacent industrial zones and free trade zones, as well as all kinds of international logistics services (cargo handling and storage, maintenance and repairs, etc.) that serve international trade operations as a whole.

b) Maritime connections

Ability to operate as a major transhipment hub (cargo arrives and departs by sea). It is essential to offer quality maritime services that make it possible to move cargo from smaller ports to concentrate at the mega port and connect to international maritime traffic.

This capacity is closely linked to the geostrategic location in the region. Recognition of a port terminal as a transhipment centre by international trade operators has a correlate: substantial growth in land services linked to international trade, the confluence of international maritime routes and an increased presence of shipping lines serving international trade, due to the large volume of cargo concentrated at the terminal.

On the other hand, it is necessary to take into account that the latest generation of container ships used to transport goods, particularly intercontinental transport, have the following characteristics:

- Load capacity: 15,000-18,000 TEUs
- Length: 400 metres
- Draught: 16-20 metres
- Speed: 25 knots
- Deadweight: 200,000 to 250,000 tonnes.

There is currently no port on the South American Pacific coast with capacity to receive ships of these dimensions.

8 *CEPAL Review N° 71*, Article El potencial de puertos pivotes en la costa del Pacífico sudamericano, p. 129. August 2000.

3.2. Economic and geographical distance

Since the turn of the century, the idea of *bioceanic corridors*[9] has dominated the development agenda of countries bordering both the South Pacific and Atlantic sides of the region. Associativity has been presented as an unavoidable strategy to achieve infrastructure integration in South America, as a way to interconnect countries in terms of trade and exchanges of all kinds.

If we stick to the definition of a *bioceanic corridor*, it is essential to clearly establish the relationship between *economic distance* and *geographical distance*.

This is because the usefulness of creating *bioceanic corridors* with a drop-off point at Pacific Ocean ports (Callao, Paita, Ilo, etc.) –in the case of Peru– has been widely, and perhaps exaggeratedly, considered as the solution to export production from countries with views of the Atlantic –Brazil, for example– to the large markets of Asia.

In the case of the Southern Inter-Oceanic Highway (IIRSA South), or Peru-Brazil Bioceanic Corridor, which links the Ports of Santos (Brazil) and Matarani, Ilo, and Marcona (Peru), an analysis of the geographical distance in terms of sea crossing yields the following results:

MARITIME DISTANCE (miles)	Singapore	Hong Kong	Shanghai	Yokohama
Callao	11,700	11,424	10,672	9,643
Santos	9,912	11,205	11,550	11,579

Table I. Comparative distances from Puerto Callao and Puerto Santos to Asia. Prepared by: RVB

As can be seen at first glance, in terms of maritime distance, placing goods in the large port of Singapore or Hong Kong from the port of Santos means a marked difference over Callao; on the other hand, exporting to the ports of Shanghai (China) or Yokohama (Japan) is evidently more favourable from Callao.

In this aspect other variables such as the location of export production centres, logistics costs (including the cost of land transport, rights of way, port fees, services and time), competitiveness, price levels, etc., thus become absolutely relevant in order to really carry out a cost-benefit and economy of scale analysis that unquestionably justifies the use of a bioceanic corridor. These aspects should be subject to supranational analysis and definitions.

3.3. The South American Pacific Coast Ports

Four coastal countries are located on the South American Pacific coast: Colombia, Ecuador, Peru and Chile. Over the last two decades, as the region's world trade has

9 A bioceanic corridor is defined as a route that connects the Atlantic Ocean with the Pacific Ocean, opening up new external markets, while at the same time providing greater and better physical and real connectivity within the countries along its route, in other words "integrating" regions, peoples and countries (Mercado Jarrín, 2000).

grown, a series of port terminals have begun to develop, clearly competing to attract the greatest volume of cargo to their shores. Chile, Ecuador and Colombia planned the construction of so-called *mega ports* with capacity to handle large container ships. Private capital and world-class operators were brought in to this end. Let us look at them.

3.3.1. Colombia: Port of Buenaventura

Colombia modernised infrastructure at the Port of Buenaventura, whose greatest strengths are its proximity to the Panama Canal and its land connection with the Port of Cartagena on the Caribbean Sea, its equidistance between the north and south of the American continent and its proximity to more than 300 maritime transport routes.

However, access to the port is via a natural channel 31.5 km long, 200 metres wide on average and ranging in depth from 13.5 to 12.5 metres. Its annual container throughput is lower than other South Pacific coast terminals and does not qualify for a position in the top 100 largest ports in the world. (see ranking in table II)

In a report dated January 2022, the Superintendeny of Transport of Colombia (Supertransporte) recorded that container movement at the Port of Buenaventura between 2019-2021 reached the figure of 1,051,772 TEUs[10], equivalent to 9,331,783 tonnes mobilised. The terminal is operated by Colombian company Sociedad Portuaria Regional de Buenaventura S.A.

3.3.2. Ecuador: Port of Manta

In early 2006, Ecuador planned the construction of a mega port at Manta by the company Hutchinson Ports Holdings (HPH) one of the largest port operators in the world; a corporation based in Hong Kong which currently operates 8 ports in Latin America (4 in Mexico, 2 in Panama, 1 in Argentina and 1 in the Bahamas).

As a result of insurmountable differences with the Ecuadorian government at the time, in 2009 the operator abandoned the concession initially agreed for the development of a 30-year plan. One of the reasons given by Ecuador for terminating the contract with HPH was failure to meet projected maritime traffic targets.

As it is located in the open sea with a draught of 12 to 13 metres, the port of Manta does not generate or attract more maritime traffic despite efforts by the current operator, Chilean group Agencias Universales (AGUNSA), in charge of the operation since 2017 and whose concession is for 40 years. In 2021, according to the terminal operator, Manta moved 1,168,534 tonnes of cargo. It can handle container ships of 2 to 3 thousand TEUs.

10 TEU, Twenty foot Equivalent Unit = 20 cubic foot container.

However, the port of Guayaquil is still the busiest port in Ecuador and ranks second in the region (after the port of Callao) with 2,163,151 TEUs mobilised.

Figure 1. Port of Manta, Ecuador. Source: Manta Port Terminal (TPM)

3.3.3. Chile: Port of Mejillones

Chile, a country with an extensive coastline, could not escape the trend of building mega ports in the Pacific. Located 65 km north of Antofagasta is the old port of Mejillones, once a minor port dating back to the 19th century when it was under Bolivian jurisdiction. Mejillones was always linked to the nitrate and coal trade.

The project to build a mega port in Mejillones started at the end of the last century. The Mejillones Port Complex (CPM) was finally put into operation in late 2003, with the goal of becoming the main port terminal in the southern cone of South America. Mejillones certainly has a unique strength: it has a connection with the Antofagasta Railway to Bolivia and also sufficient draught to handle large tonnage vessels.

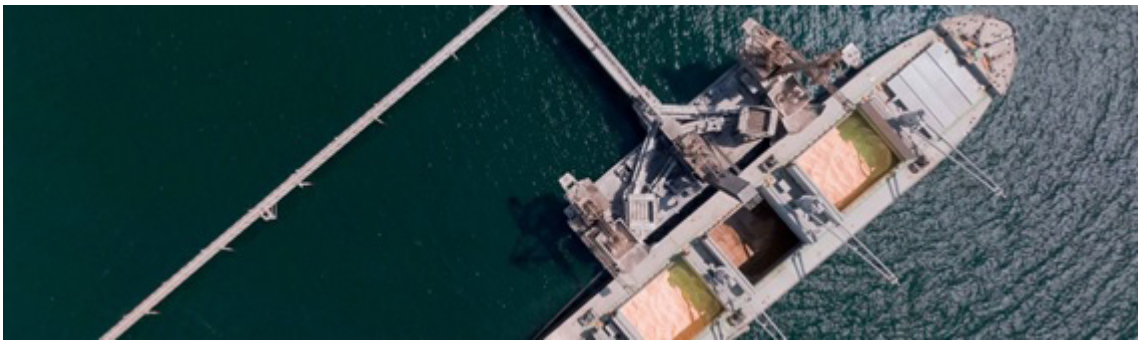


Figure 2. Port of Mejillones. Antofagasta. Chile. Source: Puerto Mejillones website.

Mejillones port is currently operated by Belfi and Neltume Ports Consortium (a subsidiary of Ultramar Ltda.), both companies with Chilean capital, which has specialised in handling solid and liquid bulk cargo. It is the largest sulphuric acid terminal in the region with a storage capacity of up to 220,000 tonnes. It is the exit

point for Chile's global mineral exports. However, very little container traffic can be verified at this terminal.

Thus, the Port of San Antonio, a former minor terminal located south of Valparaiso and specialised in general cargo, went from being a bulk port to a container port and has been the main Chilean port on the Pacific for two decades.

The Chilean state is planning to expand this terminal in what it has called the outer harbour, building two new docks to receive ships of up to 400 metres in length. Work is scheduled for completion within 10 to 12 years.

Chile's maritime trade operations are concentrated in the terminals of San Antonio (third in the region after Callao and Guayaquil) and Valparaiso, as the main ports of that country.

No.	PORT	COUNTRY	REGION	TEU
01	Shanghai	China	Asia	47,030,300
02	Singapore	Singapore	Asia	37,470,000
03	Ningbo-Zhoushan	China	Asia	31,070,000
04	Shenzhen	China	Asia	28,767,600
05	Guangzhou	China	Asia	24,180,000
06	Qingdao	China	Asia	23,710,000
07	Busan	South Korea	Asia	22,710,130
08	Tianjin	China	Asia	20,269,400
09	Hong Kong	China	Asia	17,798,000
10	Rotterdam	Netherlands	Europe	15,300,000
39	Colon	Panama	Central America	4,915,795
41	Santos	Brazil	South America	4,831,972
53	Balboa	Panama	Central America	3.561432
59	Manzanillo	Mexico	North America	3,371,400
61	Cartagena	Colombia	South America	3,343,810
79	**Callao**	**Peru**	**South America (*)**	**2,486,425**
84	**Guayaquil**	**Ecuador**	**South America (*)**	**2,163,151**
93	Kingston	Jamaica	Caribbean	2,004,302
99	**San Antonio**	**Chile**	**South America (*)**	**1,840,158**
100	Jinzhou	China	Asia	1,830,000

Table II. Ranking of the 100 largest ports in the world. (*) Ports on the South Pacific. Source: The Lloyd's List 2022. Prepared by: RVB

3.3.4. Peru: Port of Callao and Port Chancay

Peru's main maritime terminal is the Port of Callao, ranked 79th among the world's largest ports. It is the most important port on the South American Pacific coast, surpassing the port of Guayaquil in Ecuador (84th) and San Antonio in Chile (99th), according to the ranking of the 100 largest ports in the world (Table II). Operation is currently under concession since 2006 to the company Dubai Ports World from the

United Arab Emirates (DP World Callao - DPW) and mobilises around 60% of the containers handled by the south dock terminal. Similarly, the north (multipurpose) dock is operated by APM[11] Terminals, a subsidiary of the world's largest shipping company MAERSK of Denmark. Both DPW and APM are world-class maritime operators.

The Port of Callao is a multipurpose and container terminal. It currently serves Peruvian foreign trade with great efficiency as both APM and DPW are among the most important global operators in the world. In 2023, infrastructure works were initiated to expand operating capacity with the aim of doubling the current installed capacity.

However, it is clear that there is an infrastructure and maritime services gap in the region and in Peru in particular. Port movement on South America's west coast has increased exponentially, opening a window of opportunity to develop emerging routes, primarily for traffic between Asia and South America, and to significantly expand logistics capabilities to handle larger capacity vessels than those currently serving the region.

The imminent start-up of the new infrastructure (November 2024) at the port of Chancay, located 70 km north of Lima, capital of Peru, is part of this context.

As mentioned, the natural characteristics (depths, waves, tides and current conditions) of Chancay Bay, in the province of Huaral, Lima Region, and with access to the Pan-American Highway and inland communication routes in the hinterland, including railway projects in pre-feasibility or technical studies stage, set up the mega port of Chancay as the future port and logistics complex of Peru and the South American region, the maritime hub of South America.

Terminal construction and management is entirely private and will be operated by Cosco Shipping Corporation Limited, a Chinese state-owned company based in Shanghai, and its Peruvian subsidiary Cosco Shipping Chancay Ports Peru, which owns 60% of the shares (the other 40% belongs to Compañía Minera Volcan) and operates 40 terminals and 427 docks in the world, registering a movement of over 129 million TEUs (Cosco, 2023), making it the fourth operator in the world in terms of container transport capacity; its fleet has a total of 466 vessels.

The mega port of Chancay will have a high level of automation and renewable energy sources (Cosco is a world leader in this field), an area for a railway station and capacity to handle ships of up to 18,000 containers, thus becoming a centre of cargo concentration and distribution to Colombia, Ecuador and Chile and, with existing and planned connectivity (National Road Network and railways), to other countries in the region.

11 Meaning of the acronym APM: Arnold Peter Möller-Maersk Gruppen.

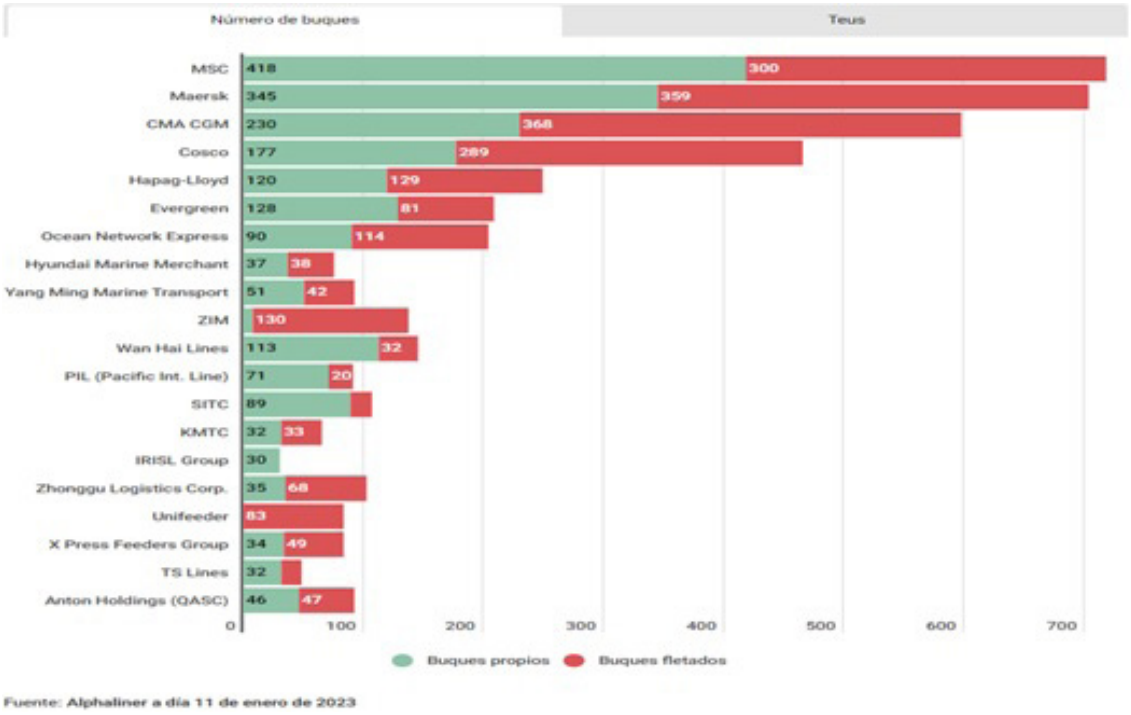
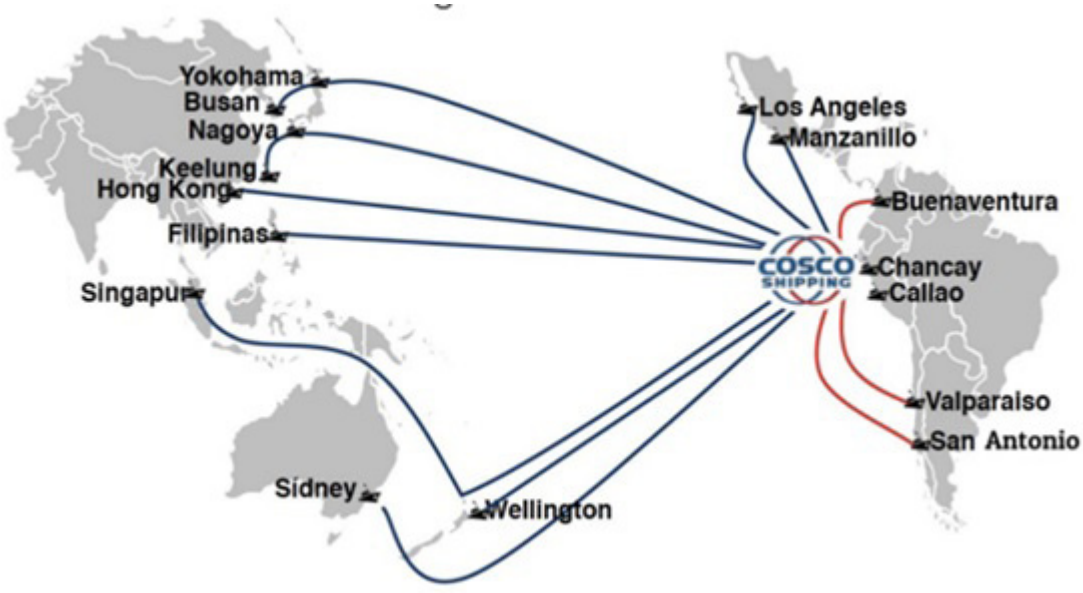


Table III. Shipping lines with the largest container capacity in the world

In addition, in a second phase of the maritime hub development, the infrastructure of the Port of Callao should be linked to that of the Port of Chancay by a highway, which could be an elevated construction for the exclusive use of cargo transport.

Thus, the 21st century maritime silk route, an emerging route on its way to becoming a regular route, would be configured in the Pacific basin as shown in the map (map 3).



Map 3. Sea routes considered by COSCO Shipping Ports. Source: COSCO *Shipping Ports*

4. The Air component

4.1. Key considerations

In a highly dynamic and technology-driven world, air connectivity is of vital importance. While virtuality has to some extent replaced the need for face-to-face contact primarily in the field of education, this is not necessarily the case in other areas of human activity, such as the tourism industry and international economic relations, to name just two.

In the case of Peru, air connectivity with countries in Europe, Asia, Africa and Oceania is limited by a series of factors, including the lack of airport capacity to support large passenger flows and to provide top quality services to air operators. This apparent shortcoming does not allow airlines from South Africa, China, South Korea, Dubai, Qatar, Türkiye or Germany, for example, to schedule direct flights with Lima International Airport.

Direct connections (on routes to Europe and vice versa) are currently only available with Madrid (Spain), Paris (France) and Amsterdam (Netherlands) and a direct Lima-London route will be opened soon. Other destinations involve often complicated and expensive interconnections and transfers. This aspect makes Peru's current leading air terminal less competitive.

4.2. South America's west coast airports

4.2.1 Colombia: El Dorado Airport

Although it changed its name to Luis Carlos Galán Sarmiento in 2012, Colombia's main airport has maintained its traditional name of El Dorado since 1959.

It is the most important in the South American region in terms of passenger movement. In February 2007, it was handed over in concession to the OPAIN consortium (a subsidiary of ODINSA -Organización de Ingeniería Internacional S.A. of Grupo Argos- Colombia), which began a modernisation and expansion plan for the air terminal that culminated in December 2017.

El Dorado Airport is equipped with a modern and functional infrastructure that has earned it several international awards. There are now plans for further expansion and renovation of the terminal and it has gained further international recognition as the best airport in the region.

Located 12 kilometres from the centre of Bogotá, from 16 million passengers in 2007, by the end of 2022 it had reached 34,317,789, serving 52 domestic and 57 international destinations with 36 airlines, for which it has two runways.

El Dorado has a privileged strategic position as it is located in the north-central part of the subcontinent, in Bogotá, an intra-Andean city at 2,548 metres above sea level (masl).

4.2.2. Ecuador: Mariscal Sucre (Quito) and José Joaquín Olmedo (Guayaquil) Airports

Ecuador's various administrations have been planning to relocate Quito's old airport since the 1970s as it was cloistered within the city. Finally, in 2002, the Ecuadorian government commissioned a Canadian consortium to build the new air infrastructure in the town of Tababela, located 25 kilometres from Quito.

Nine years later, the new Quito airport operated by QUIPORT (majority owned by ODINSA of Colombia), was inaugurated in 2015; projected to handle a flow of 5 million passengers, by 2021 it had reached a little over 1 million (QUIPORT, 2022)[12].

The Quito terminal has a runway of 4.1 kilometres and serves 12 international destinations with 12 airlines and 11 domestic destinations; it has been recognised for its efficiency in the services it provides. It stands at an altitude of 2,411 metres above sea level.

Ecuador's other major airport is José Joaquín Olmedo (formerly Simón Bolívar Airport), whose new facilities were inaugurated in 2006. Projected to serve up to 7 million passengers, a new airport is already planned for 2030 with 3 runways.

Located 5 kilometres from the city of Guayaquil, it is currently the hub of the Latam-Ecuador airline. It serves 14 international destinations with 11 airlines and four domestic destinations with the same number of operators and is concessioned to the Argentinean-Panamanian-Ecuadorian consortium TAGSA (Terminal Aéreo de Guayaquil S.A).

4.2.3. Chile: Santiago International Airport

Arturo Merino Benítez International Airport or Santiago International Airport or Nuevo Pudahuel Airport, ranks as the fifth best airport on the South American coast according to the parameters of Skytrax London (see Table IV).

Inaugurated in 1967, it currently has two runways and with the commissioning of the new international terminal in February 2022 (in 2010 a strong earthquake almost completely destroyed its facilities leaving it inoperative), it has consolidated itself as an important hub in the region, the gateway to South America from Oceania and Polynesia.

12 Information from Quito Airport operator (QUIPORT) at the end of 2021.

It currently serves 30 airlines for international service and 4 for domestic flights. In 2022 it received 18.5 million passengers and with the current new international terminal it is expected to reach 30 million, according to the terminal's management body.

4.2.4. Peru: Jorge Chávez International Airport

From its inauguration in the 1960s until the end of the 20th century, due to its strategic location in the western centre of the South American coast, Jorge Chávez International Airport became an international hub for the subcontinent with well-known airlines operating routes to the north, east and south of the region.

After state administration of the airport was transferred to a European consortium in 2001 (Lima Airport Partners-LAP), a series of works were undertaken to modernise its facilities, allowing it to maintain its status as a regional air hub, handling up to 10 million passengers per year.

The constant increase in air traffic and the commissioning of other regional terminals such as the new airport in Santiago de Chile, Bogotá and Quito, ultimately impacted its status as a regional hub.

Since 2015, LAP undertook the remodelling of the current facility and the construction of the terminal's new airport infrastructure, including a second runway and new control tower (already inaugurated in the first stage) which, together with the construction of complementary works, will allow it to regain its status as a regional air hub by 2025 and serve 37 million passengers per year.

Jorge Chávez Airport currently serves 22 domestic and 37 international destinations. Five airlines cover the domestic service and 30 cover the international service. It is located at 5 m above sea level.

Ranking	**Airport/city/country**	**Number of airlines**	**Passenger flow**
1st	El Dorado/Bogota/Colombia	36	35
2nd	Mariscal Sucre/Quito/Ecuador	12	4.3
3rd	Jorge Chávez/Lima/Peru	20	18
4th	José J. Olmedo/Guayaquil/Ecuador	14	2 to 5
5th	Arturo Merino B./Santiago/Chile	30	18.5

Table IV. Ranking of South America's West Coast airports Source: SKYTRAX-OPAIN-QUIPORT-LAP-TAGSA-VINCI AIRPORTS. Prepared by RVB

5. The land component

According to a Chinese proverb: "if you want to create wealth, build roads first".

5.1. National Road Network

With regard to land road systems (longitudinal, transversal or penetration) within Peruvian territory, it is worth recalling a historical precedent. One of the most important state policies of the Inca Empire, which in this sense has nothing to envy of the most developed countries in the world today, was the conception, construction, maintenance and operation of the Great Road or Inca Trail[13], built on the Andean axis of the Inca domain as the vital backbone to develop the vast Inca territory.

Conceived as a strategic integration axis, this extensive network links the ancient Inca domains of southern Colombia to the north and north-western Argentina and central Chile to the south. This admirable feat of engineering aimed to unite and connect the various peoples of the empire for an efficient administration of the great historical, natural, cultural and resource diversity existing throughout the length and breadth of the territory.

This axis is linked to a series of transversal roads along its route, which, according to technical measurements, range from 4,000 to 6,000 kilometres. The track is between 2.5 and 10 metres wide, paved with cobblestones, with walls on the sides, suspension bridges or bridges carved into the rock, stairways and with posts suitably placed every few kilometres to provide food and other provisions.

Its impact on the administration, control and integration of the vast Inca Empire territory is admirable. It took only 5 days to get from Cusco to Quito. The itinerary is as follows:

- Colombia: El Angel National Reserve
- Ecuador: Lake Mojanda – Quito – Cuenca
- Peru: Cajamarca – Cordillera Blanca – Cusco – Lake Titicaca
- Chile: Atacama Desert
- Bolivia: Tiahuanaco – Salar de Uyuni – Cañón de Tupiza
- Argentina: Altiplano – Calchaquis Valley – Talampaya National Park – Mount Aconcagua.

An impressive work of engineering that has survived to the present day.

Peru's road network is currently made up of a set of longitudinal roads, penetration roads and link roads. In total there are 78,000 km of highways, asphalt roads and surfaced roads. In the case of the longitudinal coastal road, the project to convert it into a 4-lane highway is being built in sections, north and south. The National Road

13 UNESCO World Heritage List. Declared and registered as a World Heritage Site, category Cultural Itinerary, on 21 June 2014 at the 38th Session of the World Heritage Committee, Doha, Qatar.

Map 4. Inca Trail. Source: peruconoceloo/photos

Network (RVN) has 22,623 km of asphalt roads[14]. The final technical phase for the construction of the new road linking the capital Lima with the centre of the country in the Junín region has begun as the current central road is saturated. The new highway will be in operation by 2028.

This set of roads in turn comprises three longitudinal axes and twenty transverse axes. The longitudinal coastal road (PE 01) runs from the border with Ecuador in the north to the border with Chile in the south. The longitudinal highland road (PE 03) starts in the province of Ayabaca in Piura and goes to the town of Desaguadero in Puno. The longitudinal jungle road (PE 05) or marginal jungle road, begins in the town of Puente La Balsa, province of San Ignacio, Cajamarca Region and runs to the Junín Region jungle (province of Chanchamayo), projected to reach the Madre de Dios Region and the north of the Puno Region.

As for the transversal axes (PE 02 to PE 40) that connect the coast, mountains and jungle, the most important axis is the Central Road (PE 22). Also noteworthy are the

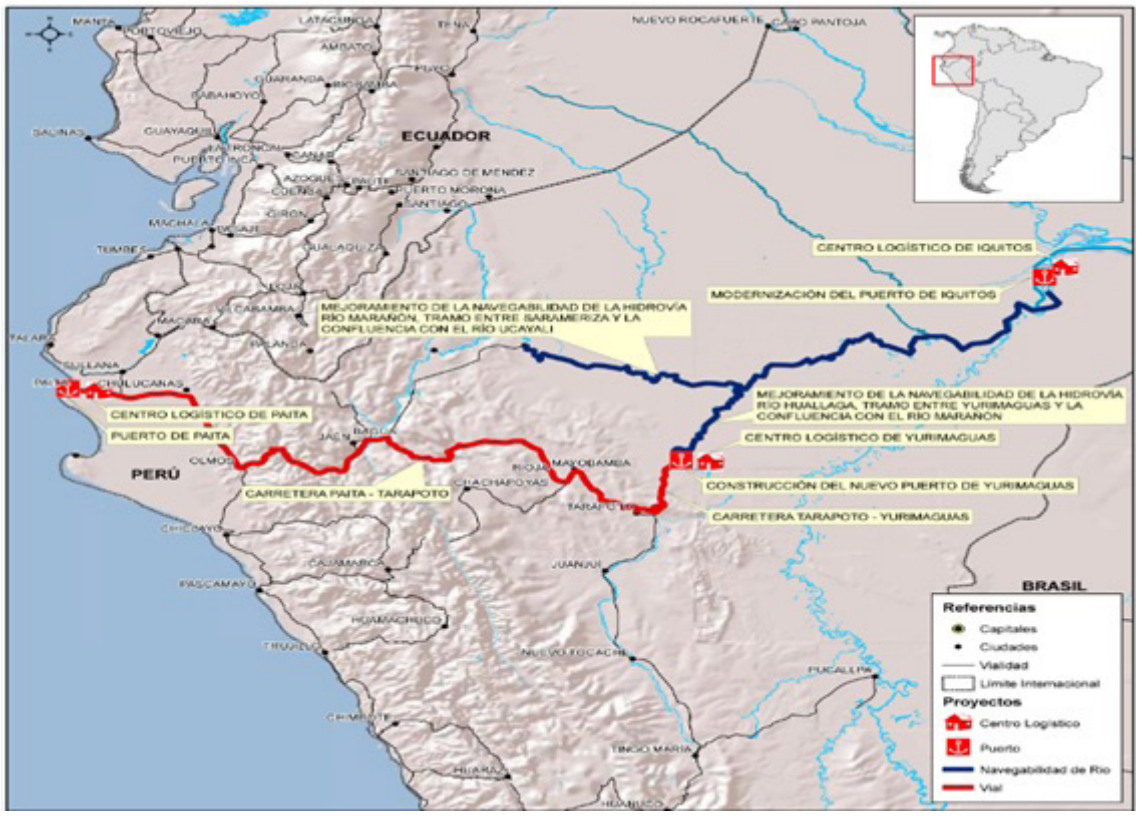
14 MTC (Ministry of Transport and Communications). Provias Nacional 2022. Datosabiertos.gob.pe

Map 5. National road network. Source: MTC

IIRSA (Initiative for the Integration of Regional Infrastructure in South America) highways, designed to interconnect South America's road networks.

5.1.1. IIRSA-North Highway

The IIRSA North road is 955 kilometres long. It starts in the port of Paita, in the northern Piura region and connects the Lambayeque, Cajamarca, Amazonas, San Martín and Loreto regions (river port of Yurimaguas), then, by river (Huallaga river) it connects with the port of Iquitos on the Amazon river and continues by that route to the Atlantic Ocean in Brazil.



Map 6. IRSA North Road Source: COSIPLAN-Unasur

The overland route (modern 2-lane highway) from Paita to Yurimaguas can be completed in 14 hours and has been operated by Concesionaria IIRSA NORTE S.A. since 2006 (Peruvian company).

The new river terminal in Yurimaguas (town of Nueva Reforma), on the banks of the Huallaga River, has a modern infrastructure to meet the demand for passengers, cargo and storage.

Map 7. Layout of the IIRSA North road. Source: IIRSA North

The project called: Amazonian Waterway, Marañón and Amazon Rivers, Saramiriza – Iquitos – Santa Rosa section; Huallaga River, Yurimaguas – Confluence with the Marañón River; Ucayali River, Pucallpa – Confluence with the Marañón River section, aims to establish a system capable of developing and maintaining navigation in safe conditions 24 hours a day, 365 days a year, in the area of the rivers that make up this system.

5.1.2. IRRSA-Centre Road

The IIRSA Centre road connects the Port of Callao (5 m above sea level) with the town of La Oroya (3,745 m above sea level, turn off to the city of Huancayo), heads to Cerro de Pasco-Tingo María until reaching the port of Pucallpa to continue along the Ucayali River waterway (confluence with the Marañón River) and reach the Port of Iquitos on the Amazon River. The extension of the IIRSA Centre is 856 km of road; the Pucallpa (Ucayali River)-Confluence with the Marañón River waterway has a length of 1,247 km and the section to Iquitos a little more than 200 km, all of which means 4-6 days to navigate to the Port of Iquitos. The section from Lima to

Map 8. IIRSA Centre Road. Source: COSIPLAN-UNASUR

the Cerro de Pasco turn off has been under concession to Consorcio Vial de los Andes (DEVIANDES SAC) since 2010.

The Pucallpa river terminal, operated by Logística Peruana del Oriente (LPO), is a modern port infrastructure to attend to the intense commercial movement of the Ucayali River, especially the dynamic commercial movement with the Port of Iquitos.

Construction of a road linking Pucallpa (Ucayali Region) with the road system of Cruceiro Do Sul (Acre State) in Brazil is planned for the future. It is worth mentioning that both cities are only a 35-minute flight away. The overland route is 240 km long, including two 1000-metre bridges.

5.1.3. IRRSA-South Road

The IIRSA South road links the town of Iñapari (Madre de Dios Region - Puerto Maldonado) on the Peru-Brazil border with the district of Inambari (point from which a branch road heads to the Port of San Juan de Marcona, passing through Cusco, Abancay, Puquio, Nazca and Marcona). Another branch goes to the port of Matarani, passing through Macusani, Azángaro, Juliaca and Arequipa. In Juliaca, the road turns off towards Puno and then continues in the direction of Moquegua and the Port of Ilo (map 9). This entire route covers a total of 2,592.46 km of paved roads.

Map 9. Layout of the IIRSA South road

Besides being a tourist destination for the city of Madre de Dios, the President Guillermo Billinghurst Bridge (over the Madre de Dios River), also known as the Continental Bridge and, before that, the Brazil Bridge, is also the second longest bridge in Peru after the Nanay Bridge in the city of Iquitos, as well as the most complex bridge built by Peru. Its importance is significant because it links the Peruvian road network with the Brazilian and Bolivian networks, allowing inter-oceanic transit, as an alternative to transit through the Panama Canal or Cape Horn.

Figure 3. Billinghurst or Continental Bridge in the Madre de Dios Region. Source: IIRSA South website

Map 10. Peru-Brazil roads. Source: COSIPLAN-Unasur.iirsa.org

All these national roads are integrated into the National Road System (SINAC), which groups together Peru's national, regional and rural roads.

5.2. The railway network

It is a reality in Peru that geographical relief has been one of the great obstacles that the people of these lands have had to face in order to communicate with the territory, maintain cohesion and safeguard sovereignty.

From the Pacific Ocean, a narrow stretch of coast (11.7% of the national territory) gives way almost immediately to the Andes Mountains massif, with peaks reaching 6,000 metres above sea level, the highland region (28%); on the eastern slope is the jungle region (60.3% of the jungle or high jungle and the Amazon plain). Peruvian territory is evidently varied and rugged, especially due to the verticality of the Andean peaks and snow-capped mountains.

This peculiar national territory is perhaps the cause of the scarce development of railways in Peru, although it should not be taken as a justification, since, when compared with other countries of similar orography (although much smaller) such as Switzerland and Italy, they have developed magnificent road and railway networks in their respective territories, despite the Alpine orography.

The Central Railway is a historical precedent with its marvellous engineering of tunnels and mountain bridges, the work of the engineer Henry Meiggs and completed in the first decade of the 20th century by Ernesto Malinowski, which links the coast and the highlands of Peru.

Railway infrastructure development has in practice remained unchanged for decades. Only the Tren Eléctrico de Lima (Lima Metro, 33.1 km) should be added to the stock of railway lines from the last century.

The World Economic Forum's Global Competitiveness Report 2021 assigns Peru a low score on the rail infrastructure indicator[15].

In times of absolute globalisation and technological explosion, today there are no barriers to building the railway network that Peru needs to boost its development. In this direction, the Peruvian State has been conducting the studies needed to complement the national road network by implementing ambitious projects to take shape in the medium and short term.

The Ministry of Transport and Communications has four major projects in its portfolio to be developed in the medium and long term that would increase Peru's railway network by more than 100%. These projects are:

The Coastal Train, renamed Tren Grau. As its name indicates, it is projected to cover the entire coast from Tumbes to Tacna (north border to south border) with a total extension of 2,445 km. It is expected to serve some 30 million passengers and 60 million tonnes of cargo per year; the Lima-Ica section is in the pre-investment study stage, as is the Lima-Barranca section.

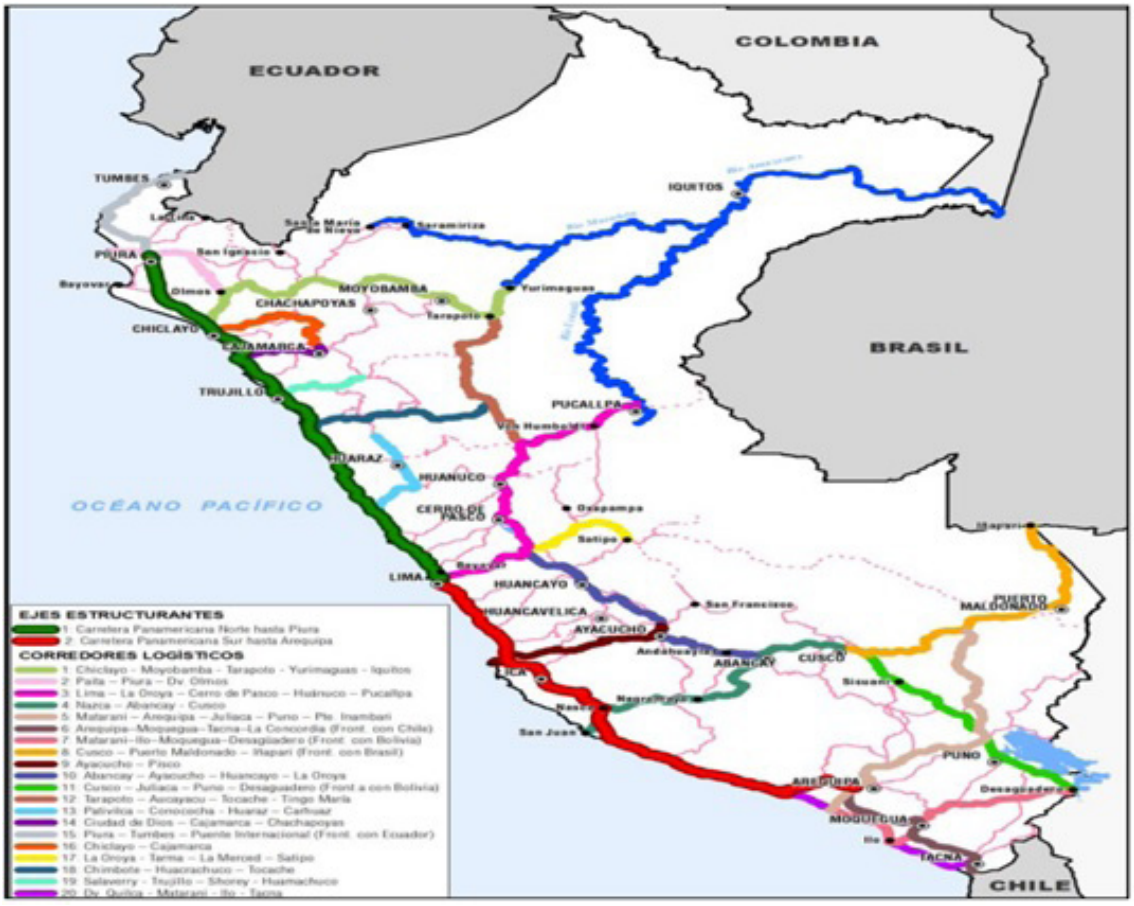
15 Source: WEF Global Report 2021. Pillar 2: Enabling Environment Infrastructure.

The Peru-Brazil Train[16], initially planned to link the Port of Bayóvar with Santos in Brazil. However, in 2016 China Railway Limited presented the construction project modifying the route to join the mega port of Chancay and connect with the Port of Pucallpa and follow the link to Brazil.

The Inca Train, which starts in Cajamarca and follows the route of the longitudinal highland road to Puno. Pre-investment studies for the Marcona-Andahuaylas train (577 km) are also underway.

5.3. Logistics corridors

In addition to the RVN and the railway network (existing and planned), both the Peruvian State and the private sector are implementing the so-called Logistics Corridors with different levels of progress in their execution. Twenty-two are planned for operation (2 structural axes and 20 corridors) organised radially from the main ports, land borders and national consumption centres. This is established in the Medium and Long Term Transport Logistics Services Development Plan (MTC-BID,



Map 11. Logistics corridors. Source: MTC

16 Established in the 2014 and 2015 China-Peru-Brazil Memorandum of Understanding and tripartite agreement to define the best connection route, signed by Presidents Xi Jinping, Lula and Humala, in Brazil.

2014), formulated by the Advanced Logistics Group consultancy firm of Barcelona, Spain, on behalf of the Ministry of Transport and Communications (MTC) and the Inter-American Development Bank (IDB), which points out the existence of:

> "four logistics basins: the Central Logistics Macrosphere, which includes the activity of the Lima-Callao node and the activity of the Sierra-Centro with the former; the Southern Peru Logistics Macroscope, centred on the Arequipa node and with complementary nodes in Juliaca, Puno, Cuzco and Tacna, which include links with Brazil, Bolivia and Chile through the border centres of Iñapari, Desaguadero and Santa Pink; the North-West Logistics Macroscope contemplates the Paita-Piura logistics axis and the border relationship with Ecuador; and finally, the North-East Logistics Macroscope, with its centre of gravity in the Chiclayo node as the main articulator, and which includes relations with Trujillo and towards the East with Yurimaguas and Iquitos, from where the river relationship with Brazil is organised" (MTC-BID, 2014, p. 8).

6. Strategic impact

6.1. At national level

The development of port, air, road and rail infrastructure (already implemented and projected in the short and medium term) means for Peru the opportunity for the longed-for national integration that had been absent for decades. What in the past apparently divided the country was the absence of road communication due to the complicated geography that nature imposes on Peru. However, our Inca ancestors more than proved that it was possible to develop the territory and built the great backbone that is the much-admired Inca Trail to link the entire domain.

Although unfortunately Peruvians have not developed an adequate level of political coexistence, public policies on infrastructure have essentially been maintained through public-private partnerships that have enabled works in the maritime, air and road sectors. In the maritime sector, the construction of the mega port of Chancay stands out; a purely private investment project (national and international). In a relatively short period of time, these superstructures will boost national economic activity to superlative levels in all areas: transport, trade, industry, services, employment, taxes, etc., generating sustainable opportunities and wealth.

In the coming years, the port of Chancay will become a magnificent centre for development with substantial improvements in the quality of life of its population, becoming a city for receiving migrants.

It should be noted that this mega-structure foresees the development (in addition to the port, road and logistics infrastructure) of an Industrial Technology Park

(Chancay Park), in an area adjacent to the port entrance complex on an extension of 870 hectares, including a railway station, applicable to the Special Economic Zone.

Taking the mega port of Chancay as a reference in the social field, the direct consequence is job creation. In the first stage of construction, 7,500 direct and indirect jobs are estimated. This gives us an idea of the economic potential that the thousands of kilometres of railways, highways, bridges and logistics centres that will make up Hub Peru will mean at national level, as well as the increased production of steel, cement, energy and services of all kinds involving national industry and suppliers.

6.2. At the level of South America

Undoubtedly, the positioning of the Port of Chancay as a regional maritime node will mean the reconfiguration of the goods transport system to and from the South American subcontinent. Traditional regular maritime routes will see the emergence of the Asia-Chancay route (Peru), a drop port on the 21st Century Maritime Silk Road, of which Peru is a part.

It is important to highlight the considerable savings in terms of distance, costs and time it will mean for South America as a whole to finally have a transhipment port in the South Pacific (transhipment currently takes place in North America) to consolidate and deconsolidate cargo from Shanghai, Singapore, Shenzhen, Busan and Hong Kong. Concentrating cargo in Chancay represents a significant saving for any country in the region; for example, in the case of Chile, moving cargo to Asia from Valparaiso means travelling 8,900 km to Long Beach (California, USA) and transhipment. Naturally, with the commissioning of the Port of Chancay, this route would be substantially shorter, allowing a reduction of up to 10 days.

On this matter, Miguel Vergara, president of the Chilean Maritime League, expressed himself in the following terms:

> "All our foreign trade with Asia-Pacific could be concentrated in the mega port complex of Chancay, which is being developed in Peru with Chinese capital. This complex would become what is technically known as a "hub" port, which would limit Chile's foreign trade to a sort of cabotage to and from Chancay-Callao[17]".

Operating a terminal of the characteristics of Chancay will not affect any country in the region, but rather will represent benefits for all. From a national security point of view, it is a challenge for Peru to secure such an important critical asset.

The economic hub-and-spokes system strategy will take shape almost naturally and logically, given Peru's excellent geostrategic location in the regional context. In this

17 Letter published in the *El Mercurio de Santiago de Chile* newspaper, 14 September 2022.

sense, the *hummingbird* of the Nazca culture[18], embodied in the architecture of the new Jorge Chávez International Airport, implemented with cutting-edge technology on a par with the most important airports in the world, will offer the best alternative for passenger distribution in the region.

Additionally, the National Road Network interconnected with routes to Brazil by means of three roads, two of which are bimodal, facilitates access to the Atlantic and vice versa to the Pacific. The Ports of Paita (IIRSA North), Callao (IIRSA Centre), San Juan de Marcona, Matarani and Ilo (IIRSA South), meet land connection requirements and provide storage, distribution and cargo cabotage services; the Port of Chancay also has the advantage of being a pivotal terminal for the region due to its capacity to handle the largest cargo ships in the world, generating regular Asia-Peru traffic, and concentrating containerised cargo for transhipment, all within an automated, functional and world-class superstructure, a global hallmark of the operator COSCO Shipping Ports.

By way of reference, the main Asian economies are the origin of imports for the four countries bordering the South Pacific (table V); a similar situation can be seen in the case of exports, for example, China is the main trading partner for both Peru and Chile.

Country of origin	Peru	Chile	Colombia	Ecuador
PR China	1st	1st	1st	1st
Republic of Korea	2nd	3rd	3rd	2nd
Japan	3rd	2nd	2nd	3rd
Australia	8th	6th	10th	10th
Indonesia	5th	8th	6th	6th
Thailand	4th	4th	5th	4th
Vietnam	6th	5th	4th	5th
Malaysia	7th	7th	7th	7th
Singapore	9th	9th	8th	8th
Hong Kong	10th	10th	9th	9th

Table V. South American West Coast countries trading with Asia Pacific (imports) Source: UN COMTRADE 2019. Prepared by RVB

Undoubtedly, Cosco Shipping Chancay Ports Peru and the new Lima International Airport will soon, in 2025, be the pride of Peru at the service of all South American countries. On the other hand, land interconnection with Brazil is of absolute importance.

7. Conclusions

Geographical determinism (a sort of updated *Lebensraum*), a theory at its height in the 19th century, is once again relevant in the geopolitics of our times (Domínguez,

18 Seventh figure in the shape of a bird, part of the Nazca Lines conglomerate, an ancestral culture of Peru from 550 AD.

2010). The strategic game of global powers such as the United States and China demonstrates this. The global capture of resources, the expansion of markets and the establishment of routes and seaports, the race for superpowers, is part of the national interests of the protagonists.

This same geographical determinism is now present in Latin America and, by a sort of lottery of nature (of geography), gives Peru a leading role because geostrategically the country is where it is and it was only a matter of time before it was included in the global geopolitical and geoeconomic game.

The design of the New Silk Road maritime component by the Chinese State and the decision to extend it to the Ibero-American coast of the South Pacific, specifically to the Port of Chancay, marks a turning point: the revolution of regional trade between Latin America and Asia has arrived.

Significantly, in addition to traditional regular maritime routes serving the region's trade, the new emerging Asia-Peru route with 18,000 TEU container ships is added, boosting maritime cabotage service to and from the south and north of the South Pacific coast.

This is aided by the intermodal connections of the Peruvian national road network and its logistic corridors, including inter-oceanic links that connect with the road networks of Brazil and Bolivia.

Railway infrastructure construction (Grau train, Inca train, bioceanic train, etc.), represents an enormous potential not only because of its mega-project scope (and its economic correlate in terms of employment and wealth generation) but also because it will add greater strategic value to the mega port of Chancay.

It is necessary to emphasise that for this type of mega-construction involving major investments, in view of the absence of Western capital (USA, EU and Japan), we have become accustomed to counting, so to speak, on a single bidder (capital from the People's Republic of China[19]), a situation apparent not only in Peru but also in Latin America, a region that is crying out for a way out of its underdeveloped conditions. However, for the time being there is no alternative to investments from the People's Republic of China, as evidenced by the mega-projects currently underway in Peru.

Although it is true that the airports of Bogotá, Quito and Santiago de Chile are relatively more important than Lima airport for the moment, in the short term and due to the geographical determinism that gives Peru natural conditions of unbeatable location, we will see the emergence of the air hub it has always been. This means that the new airport will be equipped with state-of-the-art technology for all services to both the airline operator and passengers; also the increase in airlines that will boost Peru's connectivity with the world, global positioning as a first class terminal and, of course, a valuable contribution to the country's competitiveness.

19 By 2023 China has invested more than US$ 30 billion in Peru. Source ComexPeru.

According to economic theory (applying the investment multiplier factor), the economic boom of Hub Peru infrastructure represents the generation of a significant increase in aggregate demand and, therefore, in production (and income), all of which will have a powerful impact on Peru's economic growth.

In connection with this, another advantageous consequence will be the necessary infrastructure for maintenance, repair, construction and logistics services by sea, air and land.

The direct Asia-Peru maritime connection will almost immediately benefit the Peruvian agro-export sector, which as we know is one of the most thriving and powerful forces for national development, having positioned the country among the leading producers of fruit and vegetables at global level; the agro-export sector of Chile, Colombia and Ecuador will also benefit. Brazil has expressed particular interest in using the port of Chancay for trade with Asia.

Peru had to experience the bicentennial of its republican foundation and periods of temporary bonanza at different times of its history (the fleeting wealth of guano, saltpetre and rubber in the 19th and 20th centuries) to reach this point and discover a very unique alignment thanks to its territorial heritage and also with characteristics of sustainability that can catapult it to higher levels of development.

In January 2012, the HSBC Bank (a British bank founded in Hong Kong) global research library, in a prospective economic analysis entitled *The World in 2050* written by Karen Ward[20], (HSBC, 2016), highlights emerging economies such as the Philippines, Peru, Vietnam and others on 5 continents, with the capacity and potential to reach developed country levels by 2050. This analysis ranks Peru 26th out of the 100 largest global economies. China, the US and India occupy the top three places in the report.

If the people of Peru make the necessary effort, the same effort showed to overcome all the adversities they have had to face (very few people on Earth are as resilient), and the State provides the political will, determination and dynamism required, Ms Ward will be proven right in her prospective analysis of 2016.

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