# Prospective scenarios for regional development in Bolivar, Colombia: Great Vision study 2014-2064

*Cenários prospectivos para o desenvolvimento regional em Bolivar, Colômbia: estudo de Grande Visão 2014-2064*

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## Abstract

Under the premise on how public policy can contribute to decision-making on the consolidation of the urban-regional system, physical-productive integration, connectivity and social mobility in the Department of Bolivar, Colombia, from its planning with a horizon of 50 years, the study determines strategic recommendations necessary for its competitive positioning before more developed regions in the country. The study intends to visualize territorial planning based on integrating elements such as the culture, geographic characteristics, economic vocation and infrastructure of the Bolivarian territory, based on its great wealth, but a great affectation for the violence of the Colombian conflict, and the forget about centralized development. Based on an integral vision of the department, a long-term perspective means an opportunistic vision supported on transversal and inclusive elements of the territory, leading the discussion towards the feasible application of adjusted prospective planning methodology, and even continental scales of vision in which the region registers but whose processes are very questionable.

**Keywords:** Regional planning. Prospective vision. Planning scenarios.

## *Resumo*

*Sob a premissa de como a política pública pode contribuir para a tomada de decisões sobre a consolidação do sistema urbano-regional, integração fisico-produtiva, conectividade e mobilidade social no departamento de Bolivar, Colômbia, desde o planejamento com um horizonte de 50 anos, o estudo determina as recomendações estratégicas necessárias para seu posicionamento competitivo antes das regiões mais desenvolvidas no país. O estudo pretende visualizar o planejamento territorial com base em elementos integrantes como cultura, características geográficas, vocação econômica e infraestrutura do território bolivariano, com base em sua grande riqueza, mas uma grande dissimulação pela violência do conflito colombiano e o esquecimento do desenvolvimento centralizado.Com base nessa necessidade, e sob uma visão integral do departamento, é apresentada uma perspectiva de longo prazo, com base em elementos integrais transversais e inclusivos do território, levando a discussão para a aplicação viável de metodologias de planejamento, escalas prospectivas e até continentais de visão em que a região se registra, mas cujos processos são muito questionáveis.*

**Palavras-chave:** *Planejamento regional. Visão prospectiva. Cenários de planeamento.*

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## Background

In 2014, the Center for Thinking and Governance of Bolivar called for the participation of specialists for the development of broad-spectrum social studies called "Integrated Bolivar". This made possible the study of Great Vision Scenarios for Regional Development 2014-2064, inorder to glimpse a long-term perspective of studies, plans, and existing projects and to highlight those required for their future development.

The regional development policy in Colombia is based on three supports: first, a base of strategies, objectives and fundamental projects established in the Regional Development Plan. For its management and financing, articulated with the previous one, the second and third support present two tools of national consensus: the National Council of Economic and Social Planning (CONPES), in terms of public policy for development, and the National Revenues System (SNR), in terms of finance resources and their distribution among country regions.

National-regional policy is articulated with the agreement with the National Department of Planning and the Planning Secretary of each Colombian region to develop environmental, poverty, infrastructure in investment projects. Under this scheme, access to the financing of projects in Colombia was possible through the Revenues Law of 2012, which regulates the allocation of resources and financing mechanisms available for territorial development), are approved in the terms of the municipal-regional-national organization (OCAD, Caribbean Zone)[1].

## Planning with vision 2032

Main goals of research was a) to define the potential of the Bolivarian territory in terms of economic vocation, the exceptional universal values of cultural heritage and infrastructure networks for development; b) to interpret and to redirect the competitive advantages identified in the planning history of the territory towards its impact and comparative advantages at the international, regional and national levels in which they take place; and c) to define medium and long-term future scenarios, with a horizon of 50 years and the conditions that must be given to achieve them, based on the assessment of the variables that affect the scenarios (political, macroeconomic, socio-cultural and environmental).

The Bolivar Region and its capital: the Tourist and Cultural District of Cartagena de Indias are included among the major themes of the Caribbean Region of Colombia. Following the Cartagena and Bolivar Regional Competitiveness Plan (CBRC) 2008-2032 (RCC, 2008), which focuses on development based on attraction for the growth of tourism clusters, industry (plastic and petrochemical), logistics for foreign trade, shipbuilding construction and repair design, agro-business, increase of science and technology transverse the development objectives for these clusters.

Regional planning development bets on a competitive scenario expressed as:

> In 2033, Cartagena will be the main logistics center of the country. Its tourist, naval, maritime and fluvial industry will be recognized worldwide for its high standards of quality and service, which will position it among the three most competitive cities in the Caribbean. Bolivar will be one of the five most competitive departments in Colombia, the first in the Colombian Caribbean region, it will have a per capita income level equal - or higher than a high middle-income country. The region is characterized by a high level of human, economic and business environment that encourages productive investment of high added value and innovation, mainly through petrochemical-plastic and agro-industrial, business formalization and generation of employment, with an emphasis on the export of goods and services (RCC, 2008, p. 19).

Although in terms of competitiveness the line of opportunities for regional development bets on limited economic and social growth, it is necessary to open the discussion and integrate it into binding horizons, tending to give a response to the areas of the departmental territory that do not count with clear opportunities today. It requires more accurate definitions of their intrinsic vocations related to the long-term future.

The inequality of the territory is reflected in communities separated by a long shaped region.

[1] Collegiate Bodies of Administration and Decision. The OCAD Caribbean Region is made up of the Colombian departments of Atlántico, Bolivar, Cesar, Cordoba, La Guajira, Magdalena, San Andres and Sucre.

Caribbean coast concentrates northbound development that contrasts with more poverty and violence affected people on the southbound. Bolivar south people are related more with neighboring regions than their own.

The proposal includes complementary visions to put them in the same route towards 2064, based on the challenges towards the future seen as potential for a balanced, sustainable and more equitable development of the territory. The methodology was proposed under two initial conditions: a multiscale reality, and the setting of term values.

The multiscale reality originates in three processes of approximation based on a series of endogenous or exogenous conditions to be evaluated: the first process of spatialization, through the identification of global, regional and local regional potential development scales of Bolivar; the second process of timing, through the prospection of the components according to their potentiality and the definition of the horizon based on equidistant time slices on which to prospect scenarios; and the third process, identifying the areas of development that the structure of the document are:

a) Culture and heritage;

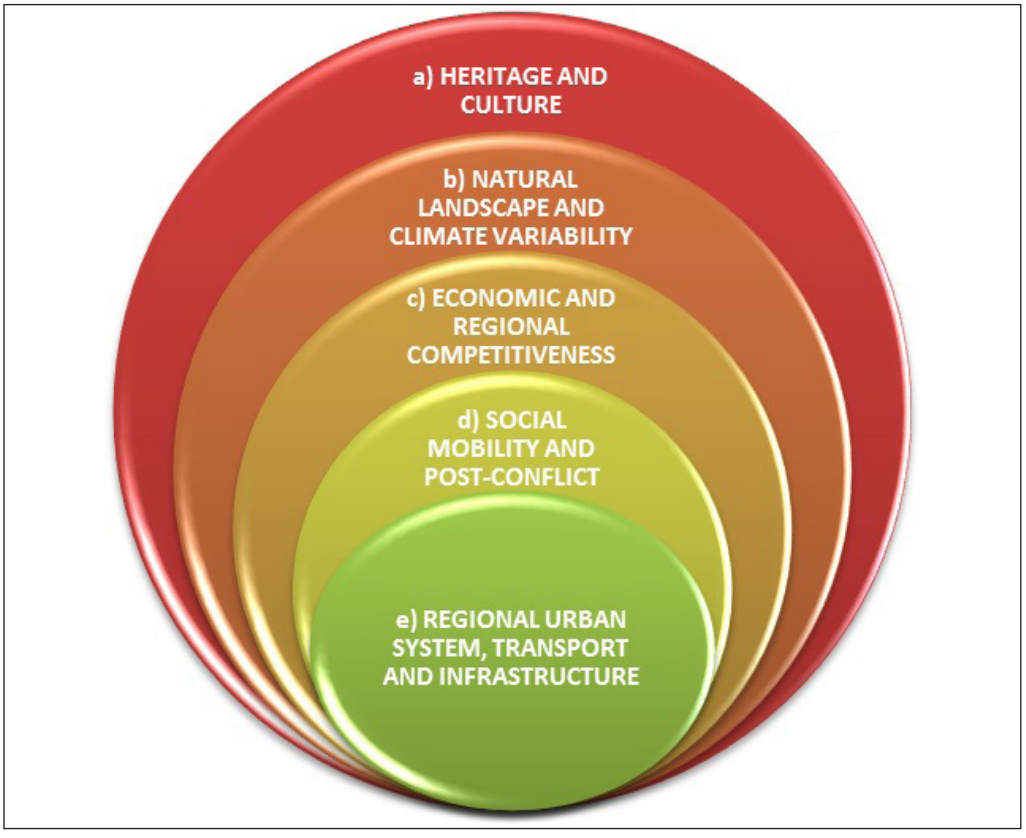
b) Natural landscape and climate variability;

c) Economic and regional competitiveness;

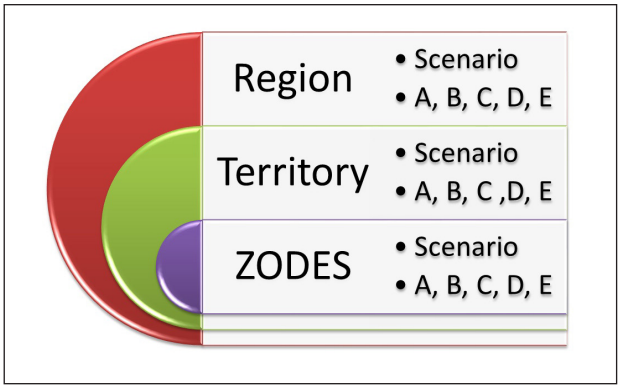
d) Social mobility and Peace Process; and

e) Regional urban system, transport, and infrastructure.

The components (a, b, c, d, e) were related to the spatialization conditions to find their representativeness in the big scale of exogenous implications of the territory articulated with the Caribbean and Latin America Region, and the medium scale of the endogenous articulation from its Zones of Economic and Social Development (ZODES). Then, we will focus on the future scenarios in the immediate, short, medium, long, and very long term (A, B, C, D, and E). See Graphs 1 and 2.




**Graph 1** - Areas of Development
Source: Author.




**Graph 2** - Performance scales
Source: Author.

## Integrated regional Bolivar

Bolivar's geography has two dimensions: one dimension is related to the Caribbean region in all its magnitude. It refers to the supra-regional positioning and its exogenous implications, and one dimension is related to the micro-regions and municipalities characterized by their endogenous implications. For the study, development planning was noticed in accordance with the "Bolivar with Regional Competitive Economy" policy of the "Development Plan 2012-2015", under the objective of "boosting the department's productive priorities prioritized within the CBRC 2008-2032" and the CONPES (DNP, 1995a, 1995b, 2005, 2008a, 2008b, 2009a, 2009b, 2009c, 2010, 2013a, 2013b).

### Development plan of Bolivar

In "Bolivar winner" Development Plan 2012-2015 (Bolivar, 2012), the concept "Integrated Bolivar" refers within a broad framework to a general policy called "Bolivar as a territory that integrates all of us" from "the physical infrastructure for integration" establishing the objective of "Articulation and maintenance of the road infrastructure network, the protection of river borders for risk management and adaptation to climate change." Also, the sustainability guarantee of projects adapted to climate change, improving the commercialization in the areas of our Department with high potential for agriculture, tourism, mining, and fisheries, contributing to regional integration and socio-economic development, with an improvement of competitiveness levels within the national context (Bolivar, 2012, p. 162).

In the same way, the objective "Environmental sustainability and integrated risk management" is based on "incorporating the principles of sustainable development into the various programs, projects and initiatives of the departmental order" to reduce the depletion of natural resources and the degradation of the environment, conserving the capacity of natural ecosystems and "[...] advancing in the consolidation of a model of sustainable environmental management in the department" (Bolivar, 2012, p. 172).

In the objective "Instruments for the management, financing and enforcement of regional development," is expected

> Bolivar department will define associative schemes and management with other territories, its financing and execution instruments within the Colombian legal framework such as public-private partnerships for local, departmental and regional development, articulating the relevant budgetary and financial projects and resources (Bolivar, 2012, p.179).

It must be affirmed that the policy of physical integration of the Plan arises alternately to cultural policy, defined as "Bolivar Cultural Territory," which

> [...] seeks to contribute to the promotion and strengthening of cultural institutions and identity of Bolivarian tending to constitute the cultural dimension as the axis of development. Likewise, it constitutes a commitment for local and departmental development (Bolivar, 2012, p. 187).

Also, the economic policy "Bolivar with regional competitive economy" is alternated with the objective of

> [...] boosting the productive stakes of the department prioritized within the CBRC 2008-2032, aimed at improving productivity and competitiveness, in order to project it as one of the five most competitive departments in the country. This is where an initiative of great vision is consistent with regional planning (Bolivar, 2012, p. 192).

The impulse to administrative management is limited to the government policy "One Government for all" through the strategy of

> [...] developing internal strategies that allow to adapt the structure, processes, procedures and human resource necessary to fulfill the missionary functions of the Administration and external services aimed at providing efficient and timely services to citizens (Bolivar, 2012, p. 244).

## World heritage component

Bolivar territory plays a fundamental role that transcends the regional and local dimension on a world scale in the cultural — heritage context. Of sixteen manifestations inscribed on UNESCO's World Heritage List, seven are located in the Caribbean Region, of which three belong to Bolivar. According to the World Heritage Convention of 1972, UNESCO emphasizes the exceptional universal values of the *Port, fortifications and monumental complex of Cartagena de Indias*, inscribed in 1984; *Katios National Park*, inscribed in 1994; and the *Historical Center of Santa Cruz de Mompox*, registered in 1995. Related to the 2003 Intangible Heritage Convention, UNESCO registered the *Cultural Space of San Basilio de Palenque* in 2005, the *Barranquilla Carnival*, registered in 2003, the *Normative Wayuú System-Putchipu'ui*, registered in 2010 (Bogota, 2013a), and the *Vallenato songs of the Magdalena Region* (UNESCO, 2017). See Figure 1.

Colombia as a State Party to the World Heritage Convention acquired a worldwide position for its exceptional universal value, which commits to its preservation and sustainability in the framework of their respective management plans. Even with this strong added value of being on the World Heritage List, it is only in recent years that there has been a growing interest in incorporating culture as a strategic element of the development of regions, nations, and concerns about their safeguard and protection. Recently, communities reaffirm the need to ensure the preservation of all the manifestations and sites that reflects their cultural heritage.

Although main challenges of these sites focus on mitigate or reduce threats, and ensure their sustainability, according to the Beltrán (2009), challenges are concentrated in the strategic plans of articulation with the ordering and sustainability of the territory; adjusting them to the new ones to require their preservation with the old inscriptions, in which protected areas caused spatial segmentation such, is the case of the Cartagena and Mompox sites.

Nowadays, main challenge is social adaptation of Peace process, and the dispersion or the influence of uncontrolled impacts of tourism social, such as San Basilio de Palenque.

## Regional transnational component

The key facts to linking integration of national and regional-global matters are based on the vision of the Caribbean region into Colombia's strategic positioning

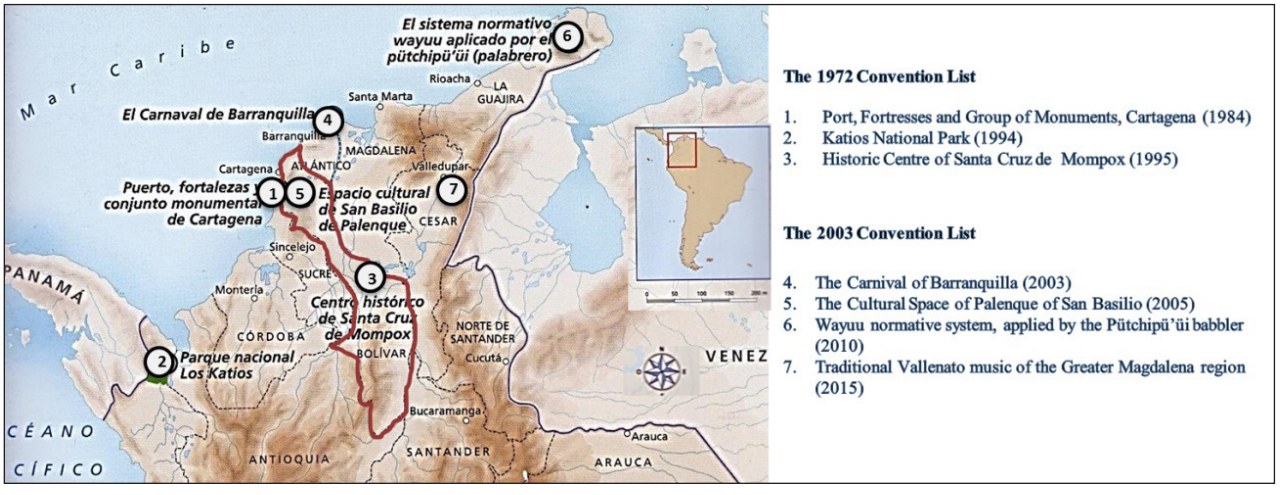



**Figure 1** - Location of world heritage sites in Caribbean region of Colombia
Source: Author based on image of World Heritage in Colombia (Bogota, 2013a).

has a strong influence on the "Pacific Alliance". Founded in June 2012 by Colombia, Chile, Mexico, and Peru, it is oriented towards free trade, emerging from a global geopolitical and macroeconomic situation. Since NAFTA treaty with the United States, Colombia has increased its strategy of expanding agreements with several nations.

In terms of infrastructure integration, the Caribbean region is articulated in two axes: the east-west axis, between Panama-Venezuela, and the north-south axis, between Caribbean-Andean Region. The east-west axis represents the point of articulation of two hemispheres, having Colombia as a pivot between Central America and North America seeking to integrate regional initiatives as the Mesoamerica project or Initiative for Regional Integration in South America (IIRSA, 2012). But, it is a need also to have a critical position about this directed regional planning, its failings, and/or achievements.

Despite this, Bolivar has an exceptional role, since everything that happens there in terms of land transportation, cargo shipping and tourism, energy infrastructure and fiber optics, has to pass transversally through its territory.

The most ambitious regional impact projects are included in the Conpes (DNP, 2009d). Project called "Transverse Highway of the Americas" aims to promote the economic and social progress of the departments of northern Colombia, through the facilitation of trade between Panamanian and Venezuelan borders. The approach of the "Transversal of the Americas", called "Marginal highway of the Caribbean" is contemplated in 2019 Colombia Vision II Centennial Plan (DNP, 2009e), in which project is highlighted as a way to interconnect main internal nodes of foreign trade in the Caribbean region (Cartagena and Barranquilla)".

## Sea freight transport

Maritime cargo transport transcends the region given the relations of the Colombian Caribbean ports (Cartagena, Barranquilla and Santa Marta) with the international ports of Rotterdam, El Callao, Houston — Savannah — Miami — New York, Buenaventura, Long Beach, Singapore — Hong Kong and Shanghai. A strategic form of regional integration is the link with Panama Canal, located 493 kilometers from Cartagena Port facilities that currently represent more than 90% of the Colombia's exports and imports. See Figure 2.

Public and private actions in the Port of Cartagena recorded a growth of 19.34% compared to 2011 and a record number of 2,018,389 containers mobilized at the end of 2012. In cargo volume, Cartagena is the fourth most important port in Latin America, after Balboa and Colon in Panama and Santos in Brazil. Cartagena currently has 35%[2] of the country's capacity, compared to 12% in Barranquilla and 19% in Santa Marta[3].

In addition, terminals of Cartagena are prepared with cranes and equipment compatible with the new vessels using the Panama Canal expansion, constructed with locks of 55 meters width that allow the transit of the ships of greater capacity, surpassing standard *Panamax* ships of 4,800 TEU[4]. The port of Cartagena is receiving international transshipment of cargo from the large *postpanamax* vessels of 12,000 TEU. According to future projections, a demand for 20 million additional containers is expected for the next 13 years.

The positioning of Cartagena corresponds to three facts: the first fact as a strategic stop of the Panama Canal for global transit, the second fact as the distribution node to the Caribbean and North America[5], and the third fat as intermodality port through the interior of the Colombian territory. See Figure 3.

The interaction between Caribbean-Andean Region have manifested in north-south relations of convenience, developed and historically positioned according to commercial exchanges dependent on the Magdalena River and becoming as a route for conquer and colonization from the Spanish crown since 1500s. It links most of Colombian cities system and originated the business vision for the Andean region according to the main following clusters of

[2] It contains a sum of several terminals among the largest ones, the Colombian Regional Port Company of Cartagena, the logistic distribution center in the Contecar terminal and the Kuehne + Nagel maritime cargo agency (CONTECAR, 2011).

[3] According to the Ministry of Industry Trade and Tourism (Bogotá, 2013b).

[4] TEU: Twenty-foot Equivalent Unit. Container port traffic measures the flow of standard-size intermodal containers from land-to-sea mode of transport and vice versa, in equivalent units to TEU (2017).

[5] 63.1 percent of the distribution cargo, but it plays a key role in cargo traffic on both the East Coast of the United States and the West Coast, relating to the world's largest ports: Long Beach and from this position towards Hong Kong and Shanghai.

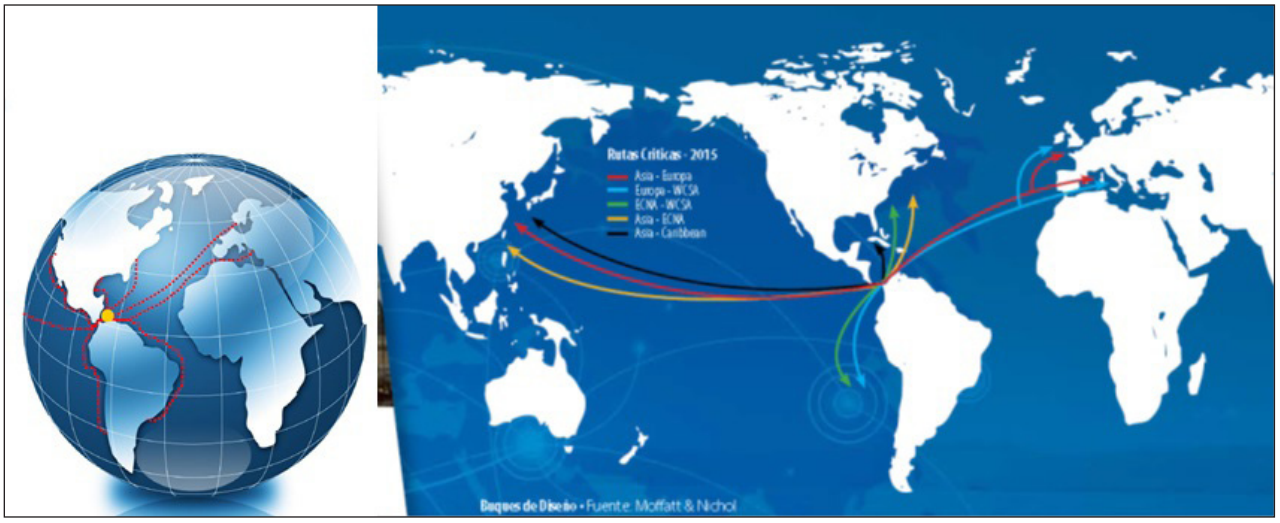



**Figure 2** - Critical Maritime Shipping Routes
Source: Cartagena Port Regional Society (2011).

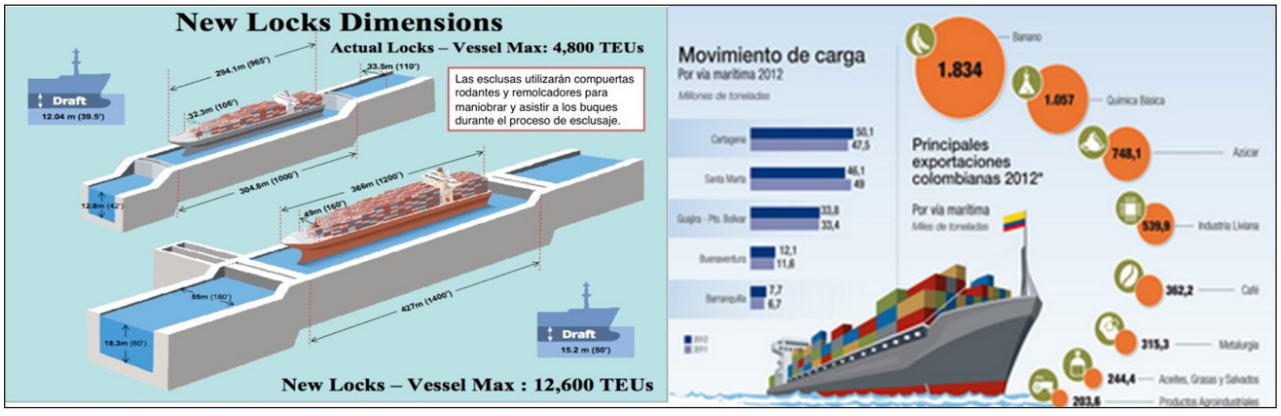



**Figure 3** - Load movement and new load dimensions
Source: Google Images (2017).

traditional economy: coffee, livestock, and leather, tourism, hydrocarbon, and sugar. To understand this, economic competitiveness has been visualized through the detection of clusters[6] and the conformation of logistic corridors.

## Navigability by Magdalena River

The Magdalena River constitutes the structural column of Colombia regions and determines the geographic and morphological territory of Bolivar. Also, it is a historical element on which the national and regional vision has gone from being a limiting and an example of the centralized backwardness of the national administration to a tendency to be viewed now as an opportunity for national and regional development.

It should be noted that 80% of the Colombian population lives in the Magdalena river basin, with 128 municipalities and six departments, where 85% of economic activity is generated, which generates 80% of the Gross Domestic Product (GDP) of the country. Today the Magdalena is navigable only between Barrancabermeja and

[6] Term defined by Michael Porter (1998).

> Barranquilla, with frequent interruptions during the year (DNP, 2013a, p. 27).

The river integration for logistics, tourism, water supply and heritage as productive cultural activities must be highlighted as a challenge of the water management and the conservation of biodiversity.

It is important to mention two main projects in the region: the Caribbean Integration Train, to improve integration north-south and west-east (called Integrated Regional Transport System); and the Sun Route highway (Trunk of Magdalena). Sun Route highway is one of the priority corridors at the national level integration, to which are added other investments in process such as the double way between Cartagena and Barranquilla, as part of the Transversal of Caribe; and the double way between Barranquilla and Cienaga, as Trunk of Magdalena. See Figures 4 and 5.

## Main considerations about first scale of analysis

According to the areas of analysis expressed in the methodology, the conclusions obtained for this first part are related to:

a) The culture and heritage of Bolivar expressed in its exceptional universal values.

Bolivar's strength about cultural and heritage attributes is expressed in the exceptional universal values of the Caribbean region recognized by UNESCO and the National Government, on which the need to develop methodological planning tools to guide its management, aimed at strengthening cultural policies that, in an attempt to respond to the new demands of cultural heritage, need to be an active leading part in the development of the economic, social and cultural conditions of the territories in which it is framed. For this, the design of cultural industries for entrepreneurship,

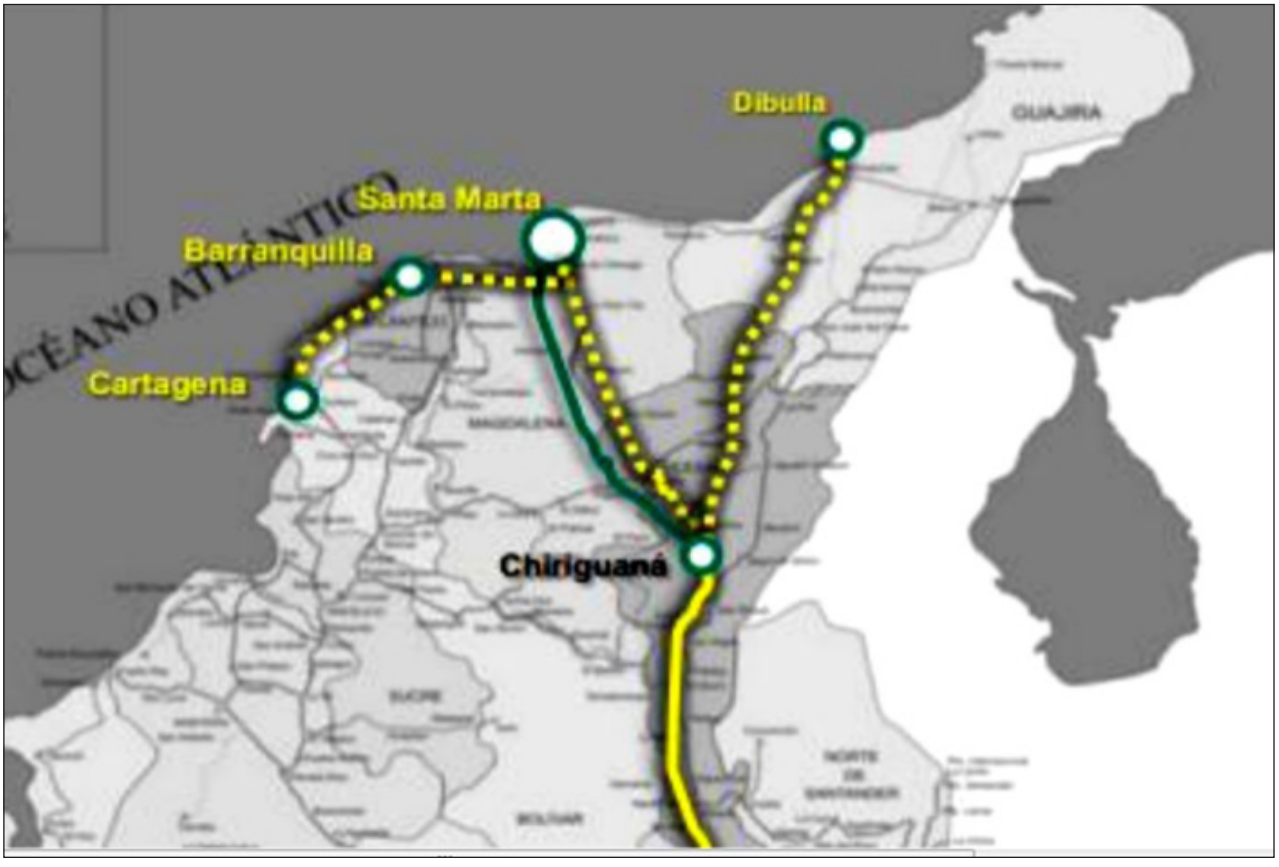



**Figure 4** - Route of the Caribbean Integration Train
Source: Colombian Chamber of Infrastructure.

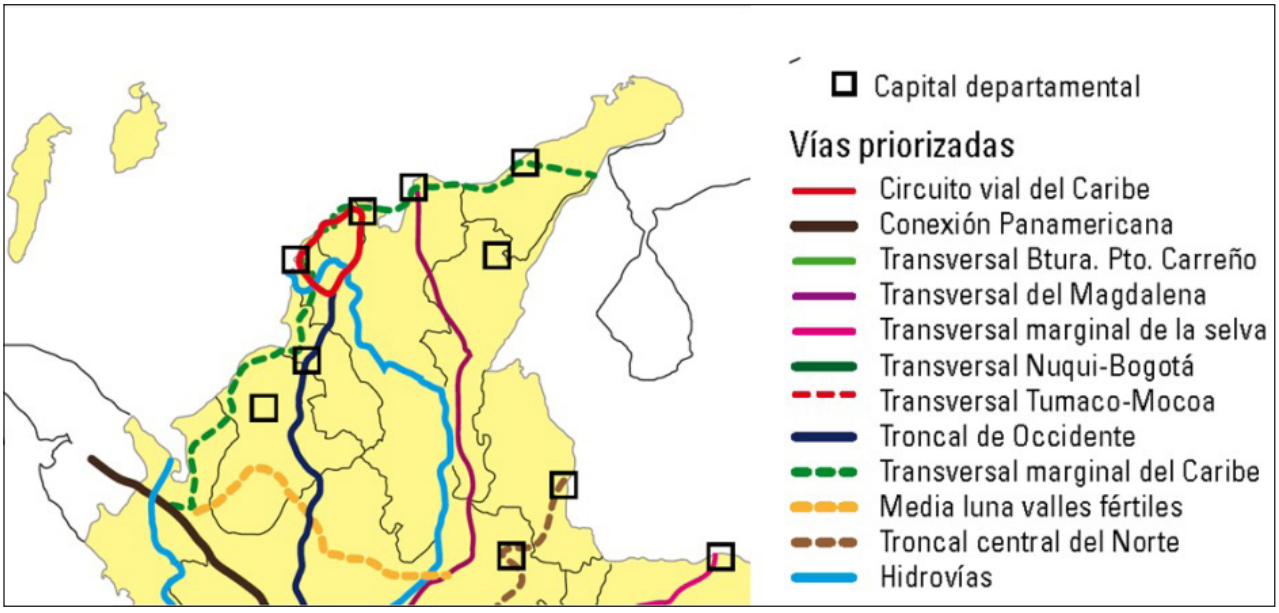



**Figure 5** - Prioritized routes in the Caribbean Region
Source: Sánchez (2008).

the design of sustainable tourism product appropriate by the communities must be strengthened.

However, the challenges of the sites inscribed on UNESCO's World Heritage List are broad for future maintenance and conservation, and that, apart from their respective Management and Protection Plans, they require a greater and more committed ownership of territorial entities, as regards projects proposals of entrepreneurship and concertation[7], and of preservation of the material and intangible heritage financed from the corresponding part of the VAT[8] established by the Ministry of Culture.

b) The competitiveness of Bolivar's economic productivity

The regional competitive capacity of Bolivar and the mobility of its exogenous and endogenous exchanges is equivalent to the transnational conditions manifested in the actions of the continental integration of the Caribbean Region, in which the department of Bolivar is strategically located.

This does not end up adopting integration with the northern hemisphere with Panama — Central America and North America. It is a situation to be analyzed in depth, since time of the planning of integration projects have been disarticulated between two different universes in which the Caribbean Region is in the middle, still endowed with a high regional comparative advantage.

An example is the regional integration on the east-west axis. Panama-Bolivar-Venezuela is not traced as a consolidated axis, but rather it is about two isolated points of connection. As mentioned by Sánchez (2008, p. 18) in some cases "[...] the connection is promoted but not the integration". More neither led by conveniences of countries competitiveness like islands nor integrated neighbors.

According to Sánchez (2008) this policy is supported by connectivity of commodities and infrastructure

[7] Proposals must accomplish terms of annual call of Ministry of Culture of Colombia.

[8] As of January 10, 2013, in order to develop what is established in the regulations, the national consumption tax "surcharge for the provision of the mobile phone service for culture", formerly called "VAT Resources for Mobile Telephony". The consumption tax service will be taxed at the rate of four percent (4%) on telephony, data, internet and mobile navigation services, not including sales tax, specifically 30% for promotion and development of culture and artistic activity in Colombia. The Ministry, without prejudice to the principles of decentralization and autonomy of the territorial entities, will guide and enable the development of the established procedure to carry out the investment established in article 201 Law 1819 of 2016.

(production, distribution and consumption) that only are satisfying globalization interests of public-private policies like a response to local economies for internationalization, that generates a particular geographical discourse, characterized by the prevalence of networks that operate as if in space there was nothing more than neoliberal interest and denying the existence of local dynamics and the multidiverse relationship of peoples with the natural and cultural landscapes. This type of integration generates a consolidation of regional inequalities, integrated with global dynamics, while its purpose is not the real integration of cultures.

Despite the lack of transnational integration effective policy, national policy of Colombia has strengthened a port system to serve as a support for the improvement of the country's competitiveness focused on capacity and potentiality. It has several challenges and achievements in a huge transition from intermodality to multimodality expressed as follows:

1) The growth of the port of Cartagena as a port hub for the Caribbean region, with projected targets for 5 million TEU annually in 2017;
2) The future construction of the port at the mouth of the Magdalena River in Barranquilla;
3) The development of a Logistics Activity Zone (ZAL) between Cartagena and Barranquilla;
4) The project of the Caribbean Integration Train or Integrated Regional Transport System linked to the recovery of the navigability of the Magdalena River as a intermodality escalation (rail, road, sea and river transport) to multimodality.

The Port of Cartagena and its logistic operators are seen in stages through 2020, in accordance with the actions planned by its stakeholders, national port planning of the DNP in accordance with the respective Conpes, physically integrated with the Integral Plan of Port Ordinance (PIOP) (DNP, 2009c) and the land management plans (municipal POT-departmental POD).

Consequently, a vision of relationship and integration with the multimodality of the Magdalena River as supply/wholesale node, dry ports, distribution logistics areas, multimodal logistics zones, and services should be prepared in the future whether by Barranquilla or Cartagena.

The development of the Magdalena River as a logistic corridor and the future construction of logistic platforms in adjacent cities like Bosconia (Cesar), Cienaga (Magdalena) means that innovation and improvement of regional, competitive and logistic integration is driven by the logistic multimodality between ZAL supported by the fluvial infrastructure of the Magdalena River and the accessibility of national road system through Bolivar (Sun Route, Caribbean State Route, and Las Americas motorway project). See Figure 6.

c) The natural landscape under the effects of climatic variability

Conclusions about natural landscape focuses on The recognition of the unique conditions of the natural landscape subjected to the effects of climatic variability and identified in the environmental territorial vision for the integration in the Bioceanic Corridor according to the United Nations Environmental Program (UNEP).

The continuity for monitoring and generating the indicators of the Latin American and Caribbean Initiative for Sustainable Development (ILAC) established as indicators for regional sustainability as a fundamental (UNEP, 2004).

The environmental challenge of the Magdalena River navigability works project must be highlighted since recovering of the river will not only an economic matter. Based on an expectation of sustainability, the project is endowed with a component specifically aimed at incorporating into the benefits program of the Kyoto Protocol, for the acquisition and supply of carbon credits.

d) The system of cities and transport networks, infrastructure and communications.

There is a regional challenge in Bolivar due to achieve the articulation of a system of cities at local and regional level subject to the requirements of intermodal and multimodal transport and communications networks, accelerated by the Logistic Corridor of the Magdalena River.

The integration of the cities system is based on management through various agents already proposed, such as the Strategic Agency for the Development of Corridors (Subregional at Cartagena - Barranquilla - Santa Marta, and Logistic Corridor of the Magdalena River).

The Caribbean Region is on the verge of integration into its energy and communications infrastructures foreseen in energy planning and Information and Communication Technologies (ITC) in development,

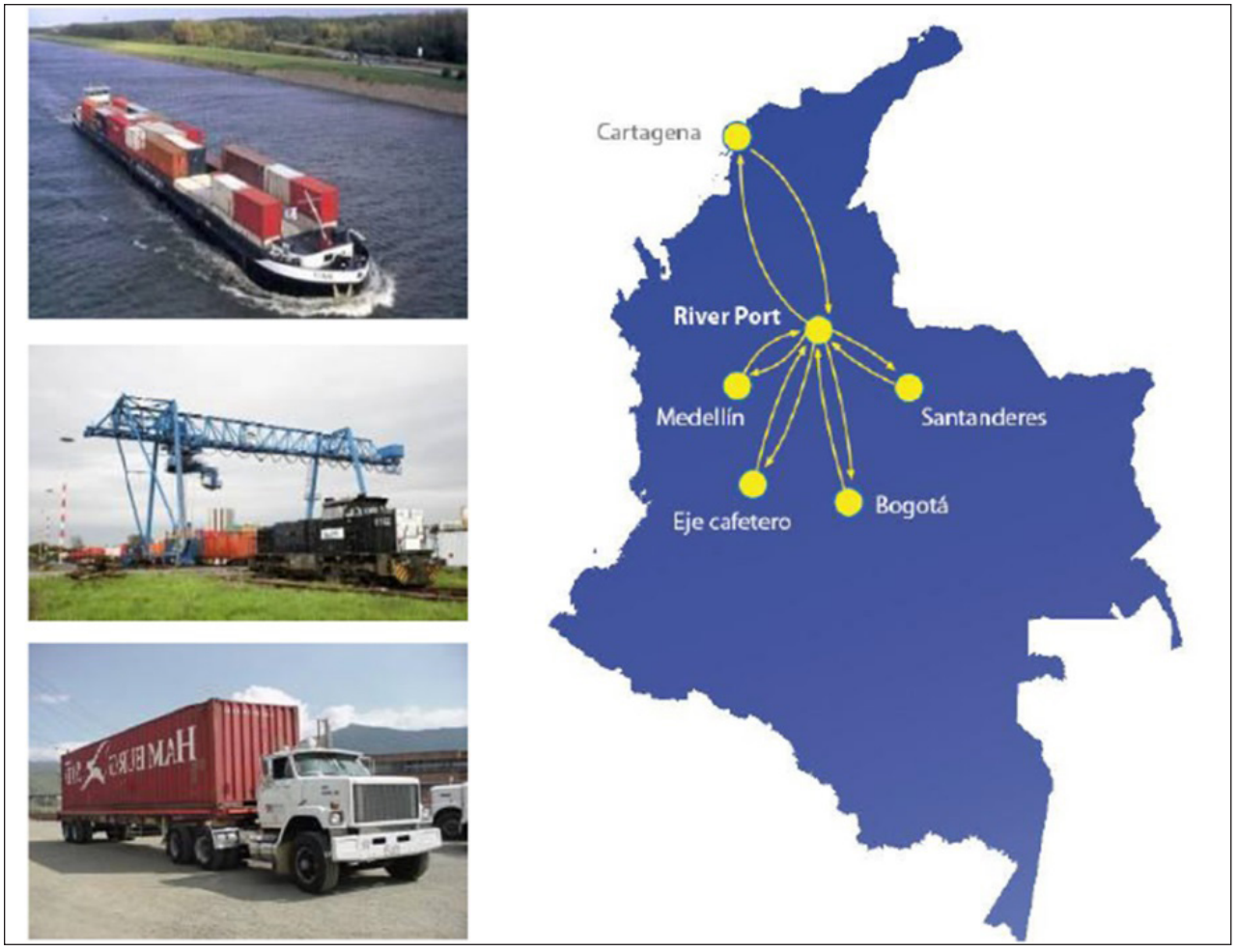



**Figure 6** - Magdalena River origin-destination links
Source: CONTECAR (2011).

which despite its difficulties requires a strengthened territorial entity in its system of cities and prepared in their territorial vocations to address the challenges of local-regional competitiveness.

## Integrated Zonal-Municipal Bolivar

By Ordinance 012 of May 17, 2001, approved by the Deputies Assembly of the Government of Bolivar, it was agreed to organize the territory accordingly with the extension and social and economic characteristics to plan economic and social development more equitably in six Zones of Economic and Social Development, (ZODES) as an added value of supra-municipal association, consolidating the administrative political structure of the territory.

The management of Bolivar region in ZODES are reinforced at the same time with "Peace Development Plans" (in Bajo Magdalena, Dique Canal, Magdalena Medio and Montes de Maria) advancing local development projects in associated municipalities.

In 2008, the Regional Priority Actions Plan for Sustainable Development of La Mojana, a Bolivar sub-region, was published as part of the regional planning process with technical and financial assistance of Food and Agriculture Organization (FAO). This plan will be one of the main inputs for the creation of strategic corridors and Territorial Development Areas, as set out in the National Development Plan.

## Cultural integration

The analysis of the regional-local scale of cultural integration means in an articulation of *corregimientos* and *veredas*[9] as subdivision of municipalities. In addition to the heritage sites recognized by UNESCO, it is observed the presence of an integrating concept constructed from the natural and cultural values. This is the cultural landscape[10].

It is understood as the transformation and adaptation that man makes over nature and constituted as an inclusive notion from which it is possible to integrate the patrimonial resources to a territory, making more and more evident the relation that must exist between the natural and cultural heritage. The cultural heritage requires an articulation with the conditions of territorial order, to be a resource that promotes human development in the regions that bends the economic and cultural development of the people.

Bolivar has the Natural Momposino Ecosystem landscape; the Cultural Landscape of the Dique Canal and having a near relationship with the Prehispanic Hydraulic System of the San Jorge River (Last two on UNESCO's Tentative List).

## Peace and social integration

Since 1990s social mobility by forced displacement (induced by war conflict or by illegal mining), generated big population movements in Bolivar that have modified the processes of social appropriation of the territory.

Some of the ZODES historically has been presented migratory mobility by conflict, post-conflict and it is place of reconciliation programs by National Government, to set attention of victims, the restitution of lands and to execute Plan of Life programs for the ethnic communities.

In Bolivar, the State Cooperation Program for Peace Development (CERCAPAZ) was created in 2007 and implemented in Colombia by the German Cooperation Agency GIZ[11]. The mission of GIZ is to promote agreements and synergies between Civil Society and the State, which are translated into joint peace building initiatives, in thematic lines as Inclusion, Coexistence, and Regional Development Visions. Its work has a cross-cutting emphasis on youth, the gender perspective, and alliances with the Private Sector.

According to the methodology proposed, the scaling of the integration actions are visualized through layers, which overlapping allow to observing the articulation of current and potential regional-local process. The following layers are presented below.

## Regional urban system

This layer identifies the system of cities supported by corridors, road networks and infrastructure: integration of a regional-local urban system organized by ZODES, which requires addressing the new challenges of maritime and inland waterway infrastructure, capacity of vehicular mobility, cargo transportation and tourism, as well as the modernization of communication and service support networks. See Graph 3.

The Bolivar territory has a great opportunity to facilitate the consolidation of the regional system and cities, starting with the Corridor of Metropolitan Area of the Caribbean (City-Region), coupled with the Metropolitan Area of Barranquilla, including the municipalities linked to Dique Canal and Maria la Baja ZODES.

## Land management

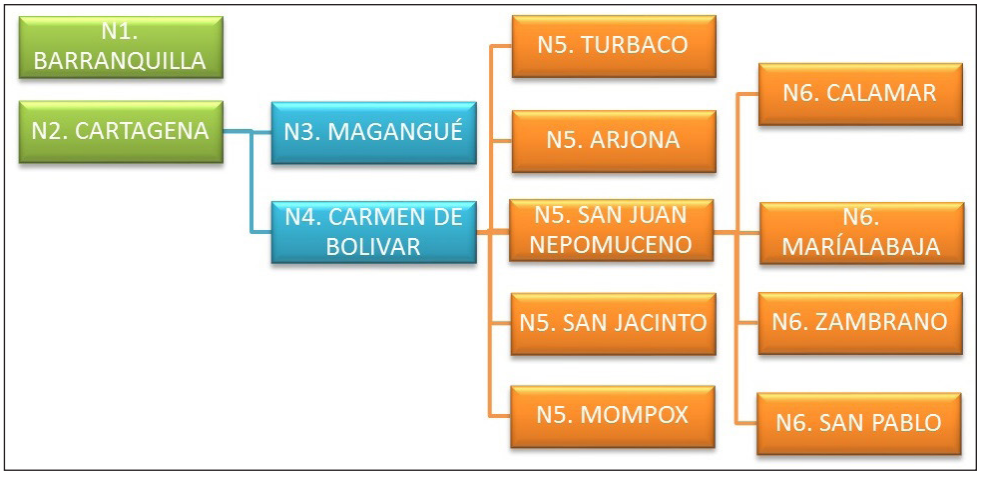
The regional urban system is related to the layer of land uses and vocations consolidated in the Land Management Plans (POT[12]), assigned to municipal entities from Law 388 of 1997. However, there are two fundamental inputs

[9] Minimum administrative unit or land subdivision.

[10] "By definition cultural landscapes cover large areas embedded in the economic and social networks of the territory. It includes a wide range of expressions of societies in various natural environments. Their scale and continuity are factors of the first order in defining them and drawing up their management plans. [...] Due to the number of threats that can affect a cultural landscape, and problems of sustainability of the basic natural resources, it is need to select a set of representative spaces, in which conservation can be guaranteed and at the same time concentrate outstanding natural and cultural values" (Osorio & Acevedo, 2010, p. 25).

[11] German Agency for International Cooperation: Deutsche Gesellschaft für Internationale Zusammenarbeit.

[12] Basic Plans of Land Management, PBOT, for municipalities with population between 30,000 and 100,000 inhabitants, Schemes of Land Management, EOT, for municipalities with population below 30,000 inhabitants, and POT, for municipalities with population greater than 100,000 inhabitants.




**Graph 3** - Hierarchies of the Bolivar Regional Urban System
Source: Author.

that challenge a departmental integration in matters of territorial organization, municipalities association, and connectivity of the cities system that requires:

A) To develop departmental Land Management plans (POD). DNP (2013c) proposed a territorial planning model for the regions that articulates the POTs in terms of risk, environment, infrastructure and social-economics and municipal association;

B) To review and adjust municipal land management plans (POT second generation). Colombian municipalities have to update their territorial land management plans (POT), an instrument defined as the set of objectives, guidelines, policies, strategies, goals, programs, actions and standards adopted to guide and manage the physical development of land use[13].

## Transport and communications

Following the integration of Bolivar's territory with multimodality as structuring layer increasing, boosting and investing in connectivity, it advances in a preliminary simulation (World Bank, 2012) analyzed the competitiveness of three forms of transportation: roads, railways, and rivers.

Under the assumption that all cases had to improve accessing to fluvial terminals, railways proved to be more competitive than fluvial, and both routes were more competitive than overland transport. As the distance between Bogota and the Caribbean is approximately 1,000 km., the model suggests that the implementation of multimodal transport would be more favorable. "Inland trade would benefit if an inter-multimodal corridor was built along the Magdalena route. If it exists, the rail and river routes would be economically viable for stretches of more than 300 km" (World Bank, 2012, p. 63). See Figure 7.

## Actions of productive and economic integration vs competitiveness

In this scale of analysis, the strategy of the CBRC 2008-2032, retaken by the "Bolivar Winner" Development Plan, and the Competitiveness Profile of the Bolivar Department (RCC, 2011; Bolivar, 2011), the strategic objectives relating to competitiveness production chain are: plastic, petrochemical, tourism, logistics for foreign trade, construction design and repair of naval vessels and agroindustry.

However, internal and external integration based on economic vocation and productivity competitiveness of Bolivar are contrasted with the Departmental Competitiveness Index (DCI) (Private Council on Competitiveness, 2013a) according to the global competitiveness guidelines established by the World Economic Forum.

Monitoring and measurement of competitiveness is fundamental; additionally when DCI is linked to

[13] Article 9. Law 388/1997.

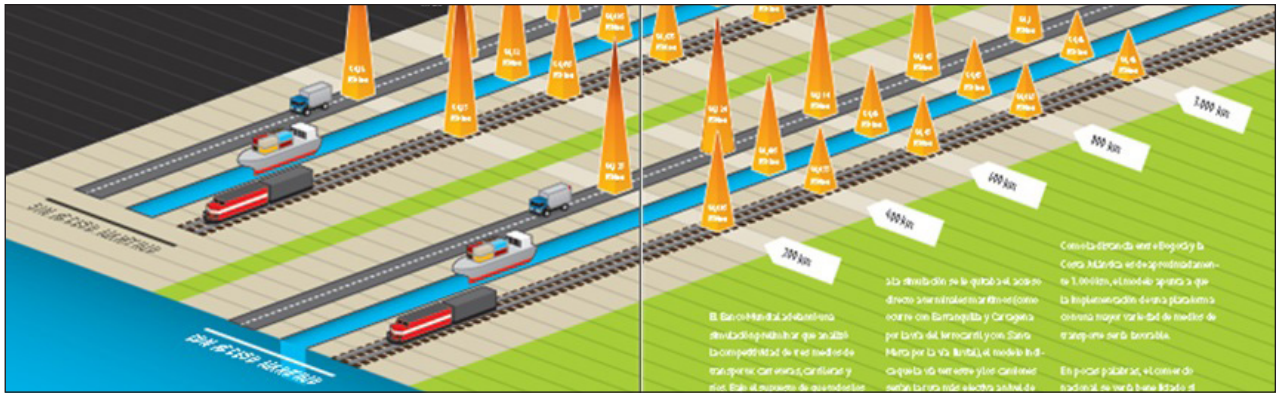
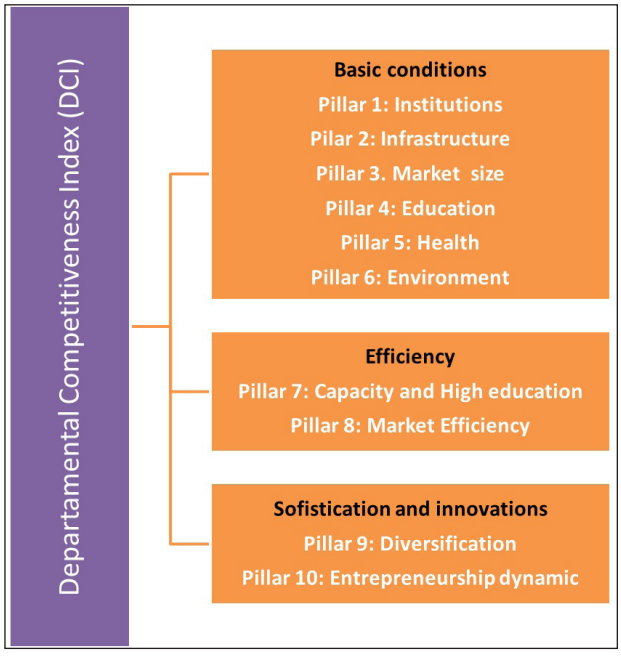


**Figure 7** - Intermodal transportation network to improve connectivity
Source: National Planning Department -World Bank.

the National Competitiveness Report (Private Council on Competitiveness, 2013b). Its follow-up allows the analysis of Bolivar's evolution in different dimensions of its competitiveness and it isan input for the continuous improvement of public policies at the local level, as well as an adequate decision-making to establish the pertinent continuous improvement. See Graph 4.

The departments of Meta, Antioquia, and Bolivar obtained the best performance among the results of DCI in Pillar 6: Environment. These departments have the highest levels of public investment per capita for environmental management and for disaster prevention and response. According to the departmental positioning in the pillars of DCI, Bolivar does not belong to the group of leading departments (located in the first three places). See Graph 5.




**Graph 4** - DCI Pillars
Source: Private Council on Competitiveness (2013a).

Pillar 1: Institutions, leaders: Antioquia, Risaralda, and Bogota. Position 21: Bolivar

Pillar 2: Infrastructure, leaders: Risaralda, Meta, and Caldas. Position 5: Bolivar

Pillar 3: Size of the market, leaders: Bogota, Antioquia and Valle del Cauca, in the domestic market the leader is Bogotá and in foreign market, Antioquia is the largest in Colombia. Position 14: Bolivar

Pillar 4: Basic and middle education, leaders: Boyacá, Santander, and Meta. Position 19: Bolivar

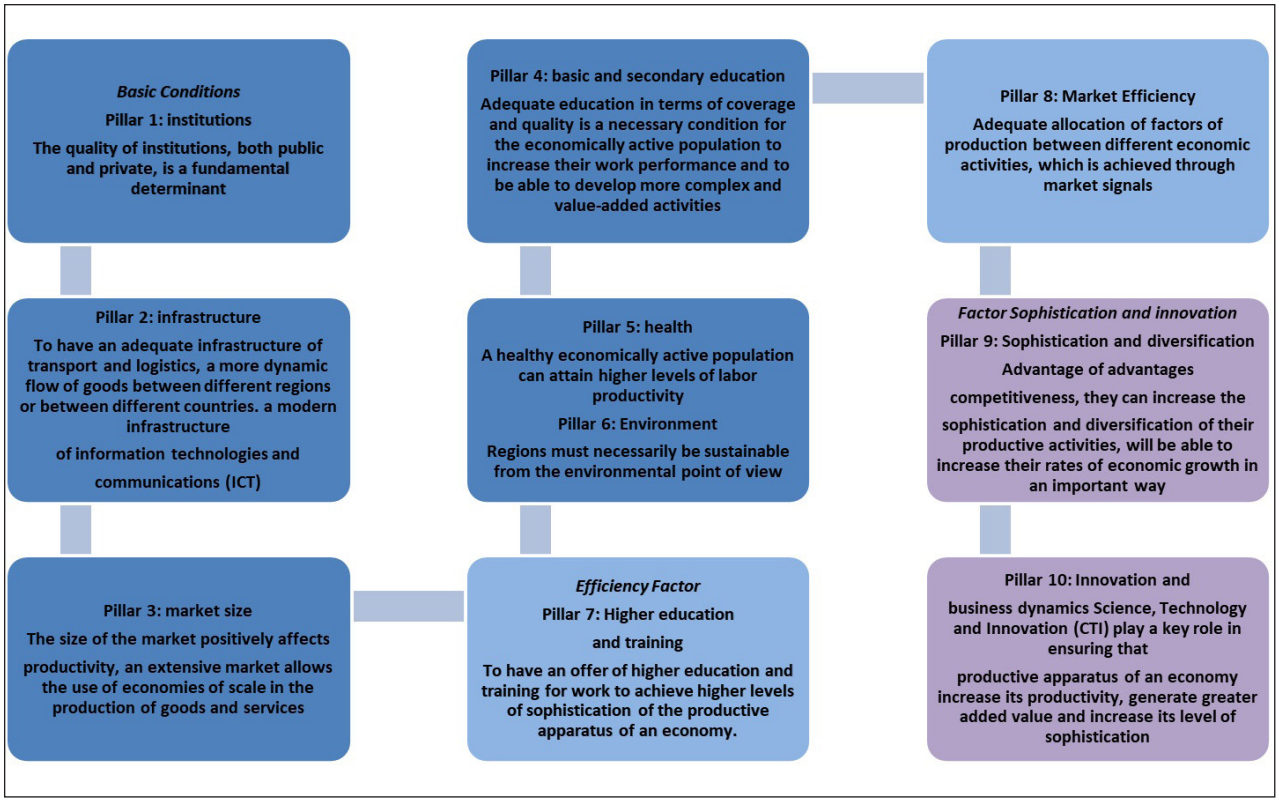
Pillar 5: Health, leaders: Bogotá, Cesar, and Santander. Position 8: Bolivar

Pillar 6: Environment, leaders: Meta, Antioquia. Position 3: Bolivar

Pillar 7: Higher education and training, leaders: Bogotá, Santander, and Boyacá. Position 14: Bolivar

Pillar 8: Efficiency of markets, leaders: Bogotá, Antioquia, and Santander. Position 16: Bolivar

Pillar 9: Sophistication and diversification, leaders: Bogotá, Atlántico, and Antioquia.




**Graph 5** - CDI Pillars and factors
Source: Author and Private Council on Competitiveness (2013a).

> The diversification of Atlantic exports is relatively high, both by destination (item 1) and by-product (item 3). Position 6: Bolivar
>
> Pillar 10: Innovation and business dynamics, leaders: Bogotá, Antioquia, and Caldas. Position 10: Bolivar (Private Council on Competitiveness, 2013a).

Finally, according to the Private Council on Competitiveness (2013a, p. 19-21), Bogota has the highest level of competitiveness in the country, with a DCI score of 7.54 out of 10. Antioquia ranks second with a score of 5.64. The third is Santander with a score of 5.21. Caldas is the fourth place with a score of 4.94. The fifth place is Boyacá with a score of 4.66.

Bolivar occupies the 13th place above Norte de Santander, Cauca, Cesar, Tolima, Sucre, Nariño, Magdalena, Córdoba and La Guajira. However, it is the second competitive department of the Caribbean Region under Atlantico. On average, Bolivar ranks 14 in Basic Conditions, 11 in Efficiency, and 8 in Innovation and Sophistication." See Chart 1.

The Colombian Caribbean Cities indicator (Global Competitiveness Index (GCI) measured by Colombian Caribbean Observatory, 2012) ranked competitiveness of 22 cities at national level. Cartagena City was in the position 12 in 2010 and 10 in 2009. In terms of Human factor, the city was placed in position 11; for Science and Technology factor, it was placed in the position 12; for Infrastructure factor, it was placed in position 16; in the Private Finance factor, it was placed in position 16; in the Environment factor, it was placed in the position 19; for the Economic Strength factor, it was placed in position 8; for Internationalization factor, it was positioned in first place; and in the Public Finances factor, it was positioned in the 16th place.

In conclusion, the main strength of Cartagena is internationalization, and its greatest weakness is the environment. The study concludes that

> [...] the competitive level of the capital cities of the Colombian Caribbean, is not satisfactory according to the measurement of the GCI. In the period 2009-2010, but also in the

**Chart 1** - 2013 IDC positions by factor

| | IDC 2013 | | Factors | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Basic Conditions | | Efficiency | | Sofistication & Innovation | |
| | Position (from 22) | Score (10.00) | Position (from 22) | Score (10.00) | Position (from 22) | Score (10.00) | Position (from 22) | Score (10.00) |
| **Bogotá D.C.** | 1 | 7.54 | 1 | 6.49 | 1 | 7.42 | 1 | 9.40 |
| **Antioquia** | 2 | 5.64 | 2 | 6.25 | 3 | 5.23 | 2 | 5.75 |
| **Santander** | 3 | 5.21 | 4 | 5.69 | 2 | 5.27 | 7 | 4.33 |
| **Caldas** | 4 | 4.94 | 10 | 5.12 | 4 | 4.87 | 6 | 4.67 |
| **Boyaca** | 5 | 4.66 | 5 | 5.30 | 5 | 4.57 | 11 | 3.19 |
| **Risaralda** | 6 | 4.64 | 6 | 5.24 | 7 | 4.44 | 10 | 3.62 |
| **Valle del Cauca** | 7 | 4.54 | 15 | 4.48 | 6 | 4.49 | 4 | 4.78 |
| **Meta** | 8 | 4.39 | 3 | 5.69 | 13 | 3.18 | 15 | 2.69 |
| **Atlantico** | 9 | 4.37 | 9 | 5.14 | 10 | 3.61 | 3 | 5.11 |
| **Quindio** | 10 | 4.24 | 8 | 5.18 | 8 | 4.00 | 17 | 2.43 |
| **Cundinamarca** | 11 | 4.12 | 7 | 5.22 | 12 | 3.21 | 5 | 4.76 |
| **Huila** | 12 | 3.87 | 11 | 4.88 | 9 | 3.61 | 20 | 1.97 |
| **Bolivar** | 13 | 3.85 | 14 | 4.54 | 11 | 3.35 | 8 | 4.08 |

Source: Private Council on Competitiveness (2013a).

> period 2006-2008, most of Caribbean cities occupied the last places of ranking, which shows a state of stagnation or little advance in the competitiveness of the region (Colombian Caribbean Observatory, 2012, p. 70).

According to scale of analysis of the second part, the conclusions are:

a) The cultural heritage and the Bolivarian landscape

Cultural landscape can be a tool strategy to disseminate the cultural heritage linked in Bolivar and adjacent areas. The traditional way in which professionals have led the processes of valuation and intervention of the cultural heritage, the role of the institutions in charge of their safeguard and cultural regional legislation have to harmonize their management with the laws of territorial organization.

Conceived as an association of human development linked to heritage resources, cultural landscape may validate the anonymous stories of women and men and reaffirming the self-esteem of the communities, reconciliation of peace process and discouraging the migration of people.

Cultural assets of municipal and departmental scope are susceptible to be requested as National heritage assets and/to opt for the Tourism Network of Heritage Towns. A project of this nature could be financed by Revenues System and support of the Tourism Ministry, it would have a great impact in attracting investments generating sustainable economic benefits and social appropriation, and relaunch the rural environment of the department at national and international level.

It will be a need to promote the Strategic Plan of Tourism of the Cultural Landscapes of Bolivar and Sucre and the design of sustainable tourism product that tether the sites inscribed in the World Heritage List with the cultural landscapes and the tourist river route of the Magdalena River.

b) The competitiveness of Bolivar's economic productivity

From the national competitiveness view, it is concluded that high diversification of main cities of the country,

their low specialization and lack of complementarity in productive and logistical matters are due to serious lags in terms of infrastructure and connectivity between the system of cities, which together constitute a factor that causes long losses of time and high costs of travel, reduced market access and difficulties in the mobility of people, goods and services.

Bolivar shows a high level of specialization, responding to the great concentration in petroleum and petrochemical products. It can be thought that a better articulation between the cities of Bolivar and Santander region would consolidate an urban system and strengthen the national economic system.

Priority is given to the articulation of regional initiatives to structure areas of territorial development such as the Forestry Plan of the Montes de Maria and Plan of Priority Actions of La Mojana, added to the natural association of these subregions with the departments of Sucre and Magdalena. Likewise, actions related to Dique Canal will impact on the sustainability of the region, as long as the plan to recover the navigability of the Magdalena River is completed.

For this, it is important to accompany the infrastructure with a project to integrate the ZODES with the Magdalena River. Proportions preserved, although the Panama Canal constitutes a tourist attraction, a ladder or tourist river route should be promoted to accompany the route between the cultural landscapes of the Dique Canal, the Momposina Depression, and the San Jorge River Hydraulic System.

Bolivar has to adopt a national policy of economic, tax, legal and legal incentives for its clusters to achieve CBRC strategies; to promote the Shipyards Law for better design, construction, and repair industry growth; and to implement Conpes policies for the development of multimodal transport. Then, it is necessary to generate incentives that encourage the articulation of heavy loading transport companies to different modes, even it must consider a prioritization of logistics corridors.

In this context, the innovation and business dynamics pillar of the DCI, which measures the performance of departments in areas such as capacity and quality of scientific research, investment in science, technology and innovation, of industrial property protection, density, and business growth, could increase as long as the actions concerned are encouraged, otherwise the Bolivar DCI is low especially in this area (8 out of 22).

c) The system of cities, transport, and communications networks

Undoubtedly Bolivar's POD design should integrate the ZODES and the identification of potentialities, the harmonization of the model with the municipalities, consider the process of revision and adjustment of POTs, as well as incorporate the new functional areas of ports and free zones.

d) Social mobility and Peace

People forced mobilization is a phenomena with historical and territorial implications in Bolivar. In Colombia, almost a half of million people were expulsed of their lands because conflict with major intensity in 2002 and decreasing in 2008. (Martinez, 2002; Jiménez, 2007; Sayago, 2011).

The Peace process encourages the National Government to articulate actions by the regional Pro-reparation Agenda for the Land Restitution and Victims Care with Bolivar Winner Plan. An agenda is enforced with a political-legal perspective, which refers to the set of formal actions that will be undertaken to demand the right to reparation; an organizational work to strengthen the citizen movement and make it sustainable over time through the empowerment of victim organizations and the articulation of their action through networks of exchange and collective action.

Also, the agenda has to focus on actions that achieve sustaining demands of the movement of victims as priorities of the national and international political community; and victims must articulate with governmental and non-governmental institutions and networks in the national and international order so their voices are heard. Finally, the recognition of the perspective of gender and generation as a specific to guarantee the recognition of the differential affectation and consequently of the reparation with differential criterion; this type of action seeks to make visible those particular ways in which men, women, young people, and children have been differentially affected.

The Land Restitution Unit (URT), created by Law 1448 of 2011, demands that Colombian State will adopt the measures required for the legal and material restitution of lands to the dispossessed and displaced. Through this process, people are recovering socio-productively, reinstalling their fences, establishing on them, working on maize, yam,

cassava, banana, cacao and rice crops, among others, and dual-purpose livestock projects.

## Strategy: scenarios for the future

Scenarios methodology is a tool for visualization of future options or different alternatives in the long-term, integrating complex components in a scope of foresight. Like industry scenarios of Porter (2004), they can be endowed with internal coherence as a future model of stages. "The stage is then also a promise of the future based on what we interpret, along with the past, the present actions" (Garduño, 2004, p. 14). A scenario can be a theory, a hypothesis or a structured idea, so the scenarios are abstractions of reality and arise from the need to simplify the complexity of the world, which are constructed from a scale of observation of a phenomenon and an objective (Haggett & Chorley, 1971).

Hindle (2001) states that the main objective when developing scenarios is to use them to develop and explore effective strategies. Thus, the scenarios can be used as support for the development of strategies and long-term planning. "A strategy is a policy or a path that allows achieving goals or objectives of a general nature" (Hindle, 2001, p. 167)

The application of scenarios is suitable for long-range strategic planning, and they are very useful when uncertainties about the future begin to overcome security, usually related to paradigms, or reinforce the anti-*status quo* view or the event traditionally in crisis that have not solved a problem or kept a persistent situation over time.

The methodology of the scenarios was also applied by the private sector in certain companies (Ringland, 2002), its precedent dates back to the early 1970s when Shell International announced its use coinciding with a phase in which the oil industry was recovering from the shock of doubled crude oil prices.

> Shell International developed the use of scenarios to provide an additional planning tool more sensitive to the complexity and unpredictability of the economic, social and political environments that make up the context of planning for this company (Leney, 2004, p. 14).

The scenarios foresight method helped to reorient companies towards success, despite unexpected changes in globalization environment. Based on these dynamic variables events, scenario-based planning is often used today as a practical tool that helps decision-making processes in complex contexts and when future circumstances are charged of uncertainty.

The use of scenarios offers policy makers, planners, and managers a tool that encourages them to design possible strategies of "alternative" futures to better understand the various uncertainties. The scenario planning process is a permanent analysis of the likely effects of using different strategies, against a set of plausible and transformative possibilities. Scenario methodology allows managing expectations of the future according to the critical vision of the present with its variables projected through probable futures.

Unlike other policy-making methodologies, the scenarios method is based on empirical data, engages participants in a permanent review and considering the uncertainties of the external environment. Strategies are always under review, and with the risk of oversimplifying, it can be contrasted with two different models of change direction (Leney, 2004, p. 15). See Chart 3.

This process of change management allows delimiting the performance of the changes to seek a transformation, starting from a desire to improve the initial conditions: a minimal modifications of baseline scenario, initial or short-term, and the possible improvements or actions that will determine changes in later stages in the time, testable with an evaluation of its positive or negative impact, related to the success or failure of future stage like: "desirable", "achievable" and "possible".

By evaluating different alternative combinations of possible strategies as the context of their application changes, it is widely used by organizations or companies that frequently find in teamwork by themselves the scenario elaboration so valuable and which is sometimes as important as the data collected for strategic planning.

The essential contribution of the scenario method to strategic planning is its ability to expand ideas towards the medium or long-term: according to the theoretical framework consulted, its validity covers future periods of 10 to 20 years, tending to the long-term but not effective in short deadlines. According to Van Der Heijden (1996, p. 98),

> Scenario planning is ideally suited precisely when the number of possible uncertainties

**Chart 2** - Bolivar strengths and weaknesses in DCI

| Strengths | Score | Weakness | Score |
|---|---|---|---|
| ✓ *Environmental public investment* | 10.00 | • *Paved primary road network* | 0.27 |
| ✓ *Diversification of exports destination markets* | 9.72 | • *Investment to promotion of productive development* | 0.23 |
| ✓ *Unemployment* | 9.60 | • *Public investment in early childhood integral protection* | 0.12 |
| ✓ *Primary and secondary education dropping out* | 9.38 | • *Gap between public and private schools* | 0.00 |
| ✓ *Health insurance coverage* | 9.10 | | |

Source: Private Council on Competitiveness (2013a).

**Chart 3** - Process of changes management in scenarios methodology

| Gradual change, short-term | Strategic change, long-term |
|---|---|
| Problems are detected at present time and place | Problems are detected at present time and place |
| Custom practices or political intentions set or impose schedule of changes | Real data is gathered form specialists and contacts networks are included in the changes agenda |
| Set of final goals | Factors that will probably influence changes to model different possible futures are used |
| Short-term strategies are developed and implemented | Strategies are built and implemented to achieve long-term goals |
| Plans are successful or fail | In case of failure, cycle starts again.<br>Impact assessment: strategies are continually adapted as future becomes reality |

Source: Leney (2004).

> with respect to a particular planning object coincides with the number of predictable quantities (S). For shorter planning periods, traditional prediction methods (F = Forecast, prediction) are more effective. For longer periods, according to Van der Heijden, only (H = Hope, uncertainty) can be used.

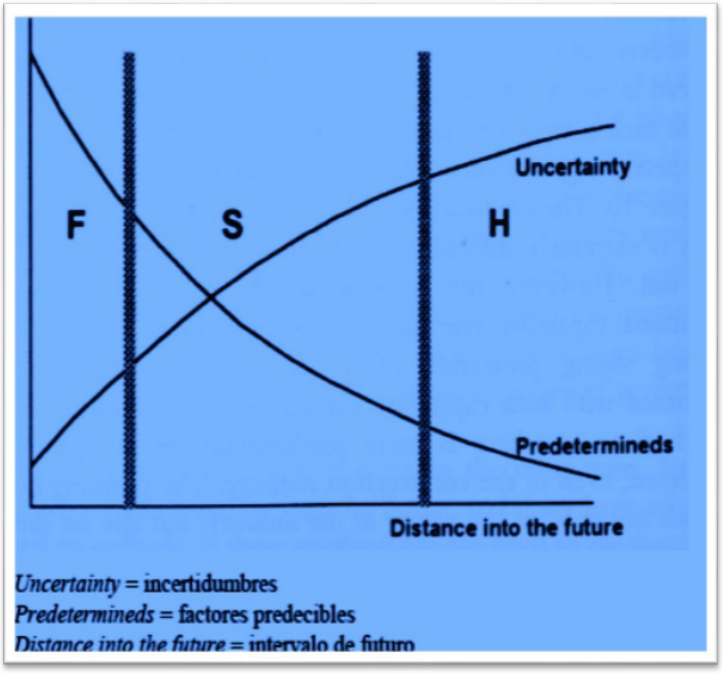
See Graph 6.

As prediction methods based on the extrapolation of observable trends begin to lose their reliability, the usefulness of the scenario method grows. Although it is a gradual trend, traditional predictions are generally of little value after about five years. The data that these methods generate are also used for informative elements to elaborate scenarios. "Complemented with other factors -often qualitative- data collected by traditional prediction techniques are a basis for generating scenarios" (Leney, 2004, p.45).

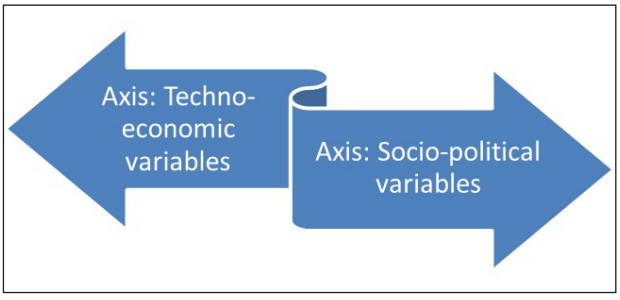
In the one hand, the scenarios must be plausible, coherent and have a strong challenge to be appropriate and it must involve the stakeholders. On the other hand, the use of multiple scenarios increases the range of possible futures to be analyzed, with a matrix that can be easily visualized bi-directionally, unlike a unidirectional point projection as seen in Graph 7.

The definition of the scenarios allows to identifying additional factors that expand the vision of the possible, although it is not very probable. Some scenarios may reflect unexpected events (such as "surprises" that can be identified with the *Real-Time Delphi* procedure) with high impact and significant consequences. See Graph 8.

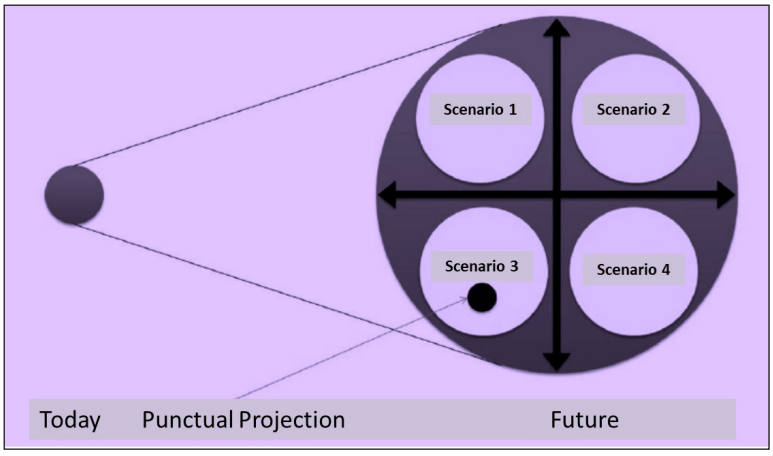
In 2012, The Millenium Project developed the Latin America 2030 study (Cordeiro, 2012). During two Delphi rounds in 2010 and 2011, in order to visualize possible scenarios for Latin America within a globalized world, with the participation of more than 800 specialists from 70 countries, the initiative started from the fact that some countries in the celebration of the independence bicentenaries were



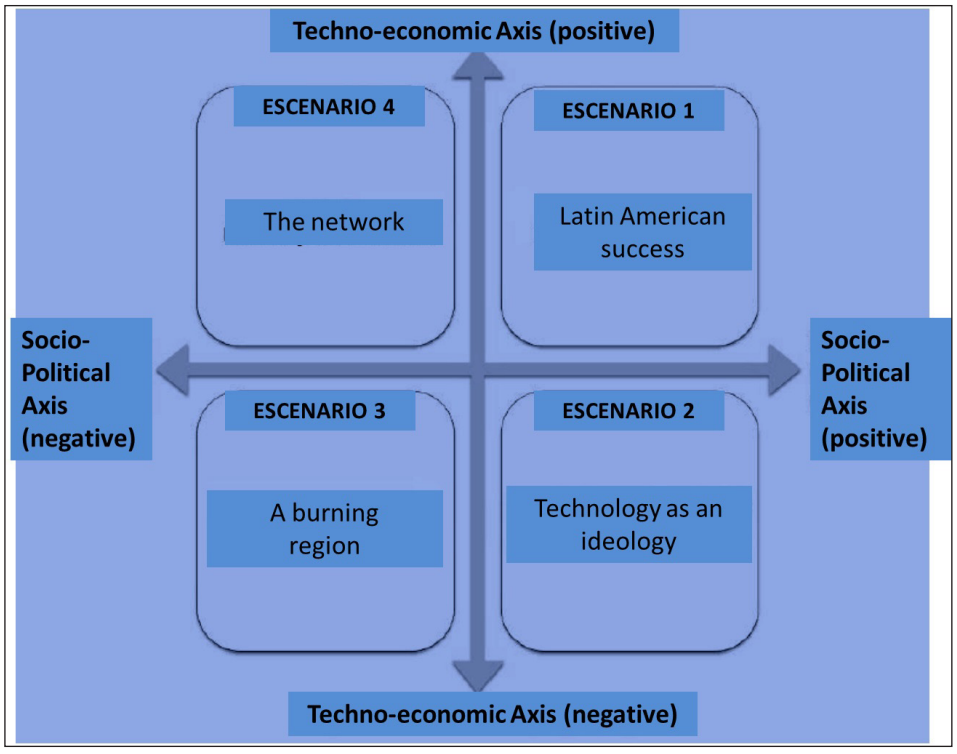

**Graph 6** - Scenarios prediction as planning instrument
Source: Leney (2004).




**Graph 7** - Variable axes
Source: Author.




**Graph 8** - Spot projections against scenarios
Source: The Millenium Project. Cordeiro (2012).




**Graph 9** - Matrix of scenarios of Latin America 2030
Source: The Millenium Project. Cordeiro (2012).

already working on the development of visions for the future and long-term development plans[14].

Some important findings of the Delphi methodology include, according to the structure of the components proposed in this study, are about competitiveness the following: (See Graph 9).

1) 50% chance that Latin America will follow the model of the European Union; food prices will increase twice as much as they are today;
2) Notable increases in tourism, GDP per capita will increase by 50%;
3) The region will remain the main producer of biofuels; threat of protectionism for growth;
4) In terms of infrastructure and networks, wireless networks will connect the largest cities;
5) Concerning conflict, organized crime will possibly acquire more power than some governments;
6) There will be an uncertainty about the ability to reduce corruption;
7) In environmental matters, there will be an increase in CO2 emissions.

Finally, the study Latin America 2030 grouped the surveys and scenarios according to the components: environment, economy, politics, society, and technology that conclude in an ideal and a catastrophic scenarios. See Chart 4.

## Scenarios planning in Colombia

In Colombia, the state of the art of scenarios exploration based on the regional common vision at the national-local level, have a necessary reference (Mojica, 2011a, 2011b, 2012) in the "Colombia

[14] They are: "Chile Developed Country Agenda: More Opportunities and Better Jobs, 2010-2018"; "Brazil 2022"; Ecuador "National Strategy 2010-2025"; Mexico "National Vision 2030"; "Plan Peru 2021"; Dominican Republic "National Development Strategy 2030, A journey of transformation towards a better country, 2030"; Uruguay "National Development Strategy 2030" and "Colombia Vision Plan 2019".

**Chart 4** - Latin America 2030 Ideal and catastrophic scenarios

| Ideal scenario | Catastrophic scenario |
|---|---|
| 1) Society<br>- Education and development alleviate the unfavorable effects of growth.<br>- Region as a whole experiences considerable HDI improvements<br>2) Technology<br>- "Made in Latin America" becomes a symbol of quality and state of the art technology.<br>- The E-Readiness index is advancing positively throughout the region.<br>3) Economy<br>- Latin America sidesteps the economic gap with advanced economies.<br>- GDP increases substantially in the region.<br>4) Environment<br>- Natural resources of Latin America make the region unique in the world.<br>- CO2 emissions per capita are the lowest in the world.<br>5) Politics<br>- Democratic governments create a great Latin America with popular support.<br>- Levels of corruption decrease to those of advanced nations. | 1) Society<br>- Gap between the rich and the poor continues to widen and living standards fall for the least disadvantaged;<br>- The Region HDI plummets.<br>2) Technology<br>- Most of technology is imported and there are very few companies and schools dedicated to develop technology;<br>- The E-Readiness index decreases compared to other regions.<br>3) Economy<br>- Unemployment rises. Hyperinflation and stagflation occur;<br>- GDP falls due to stagflation.<br>4) Environment<br>- Forests are destroyed, glaciers melt, deserts grow and rivers, lakes, and seas are contaminated;<br>- CO2 emissions and other environmental indicators worsen rapidly.<br>5) Politics<br>- Crime, terrorism, ethnic clashes and demagoguery emerge in several states in the region;<br>- Latin America reaches the worst levels of corruption in the world. |

Source: The Millenium Project. Cordeiro (2012).

Second Centenary Vision Plan 2019" and plans such as: "Bucaramanga 2030", "From the Cities to the Regions: Integrated Regional Development in Bogota–Cundinamarca", "Neiva City Region 2022", and "Pereira 2032", among the relevant examples. And multi-mentioned "Bolivar Regional Competitiveness Plan 2008-2032" and "Montes de Maria Foresight Vision Plan 2032".

In 2011, the Colombian Caribbean Observatory (2011) and National Planning Department (DNP, 2011) carried out the construction of the prospective vision and development strategies of the Montes de Maria. This effort had an objective for the positioning of the Bolivar sub-region of the Montes de Maria to the future, (affected in recent years by paramilitary violence) as well as formulates the strategic guidelines that guarantee its achievement, through the active participation of the actors and institutions that influence its development.

Endogenous territorial development approach is complemented by the guidelines of human development, sustainable development, local economic development, land management with population focus and democratic governance. The strategic lines set out the objectives and actions for the six challenges posed:

> Challenge 1: Collective construction of the conditions for a lasting peace and peaceful coexistence.
>
> Challenge 2: Equity.
>
> Challenge 3: Revitalization of the rural and population stabilization of the region.
>
> Challenge 4: Environmental sustainability.
>
> Challenge 5: Strengthening the sub-regional capacity to establish Montes de Maria as a determining nucleus in the development of the Colombian Caribbean
>
> Challenge 6: Inclusive competitiveness (Colombian Caribbean Observatory, 2011).

Alternatively, it should complemented by Conpes document 3241 "Strategies for the economic and social reactivation of La Mojana" (DNP, 2006), and the "Regional Action Plan for Sustainable Development

of La Mojana" (DNP, 2008c), as well as undertaking the articulation of regional initiatives to structure areas of territorial development, since the studies cited determine a series of actions of impact both Montes de Maria and La Mojana as ZODES and Bolivar territory.

## Basis for time cuts

Applying background basis on the CBRC Plan 2008-2032 can be established specific cuts:

1. Immediate enforcement actions;
2. Actions expected to culminate in 2011;
3. Actions expected to culminate in 2019, a date that coincides with the bicentennial Vision Colombia 2019;
4. Growth actions that are expected to end in 2032 with a general horizon of 25 years to 2033, a date commemorating the 500 years of Cartagena foundation (RCC, 2008);
5. And this study proposed time cut off for very long-term actions for consolidation to 2064.

## Prospective adjustments

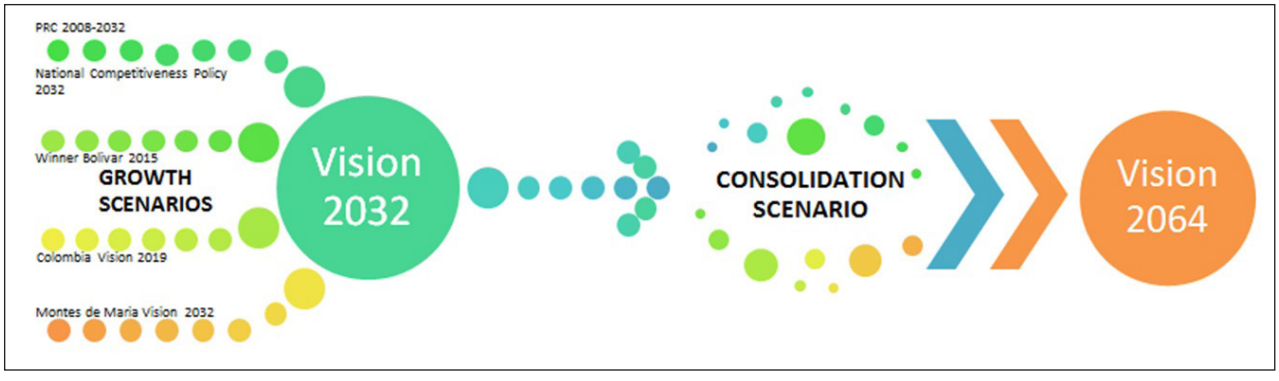
Consequently, prospective improves its vision from the multiscale analysis of Bolivar Regional and Bolivar Zonal-Municipal, as well as to replicate the Montes de Maria Foresight Vision 2032, in its methodological form and territorial implications for ZODES. Given the above, it is proposed to adjust the time horizons in the selected scenario in such a way that the survey is adjusted, for the purposes of the present study, as seen in Graph 10.

The construction of the 2032 vision by the active sectors of territorial-departmental planning can be synthesized in POD - POTs, Cultural Landscapes and Sustainability, Cluster Growth and Impulse, Multimodality and Urban Integration and New Territories of Peace. See Graph 11.

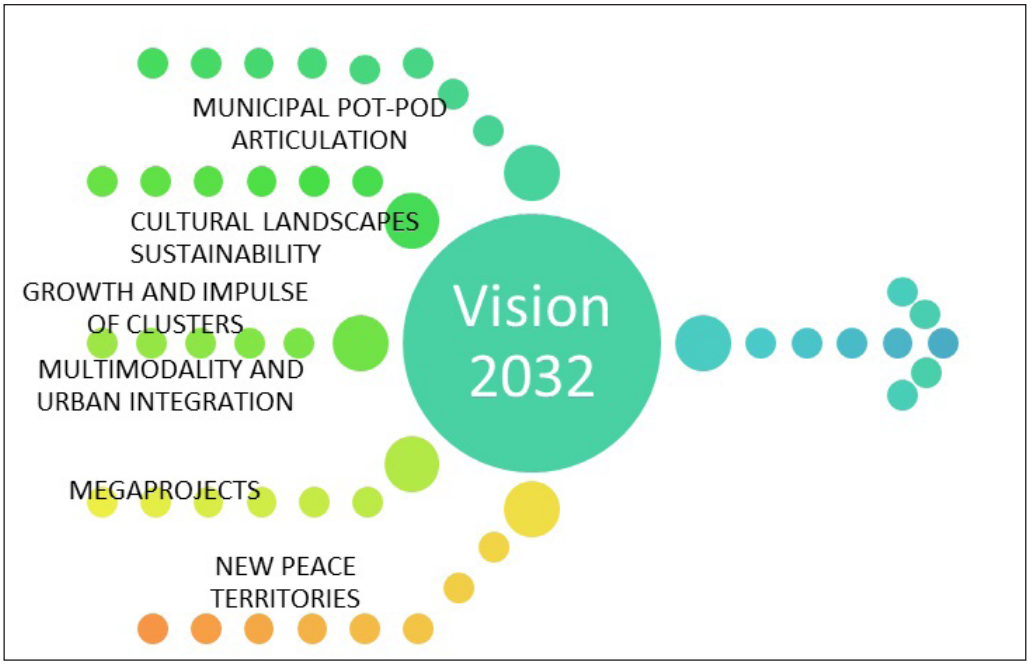
Based on this preliminary construction, and its subsequent adjustment, it is proposed to relaunch a vision to 2064 based on a consolidation inducted-trend, based on the strengthening of the fundamental components developed.

According to the theoretical framework of the scenarios construction methodology and the state of the art of the prospective planning exercises reviewed previously, the feasible scenarios continuing the vision towards the 2032 goal, it is interpreted which have been built based on an expectation of growth or strategy of continuous improvement to achieve the goals set. For the case, it must be thought that following a process of continuous growth, a process of consolidation must follow. See Graph 12.

However, it should be considered among the general variables to be noticed, that in the period after 2032 and by 2064 there is the feasibility of desirable-undesirable scenarios: such as deterioration and crisis of the growth process, or a stagnation




**Graph 10** - Prospective adjustment proposal
Source: Author.




**Graph 11** - Strategies of the Background Stage of Growth traced to 2032
Source: Author.


**Graph 12** - Consolidation Scenario Strategies proposed to 2064
Source: Author.

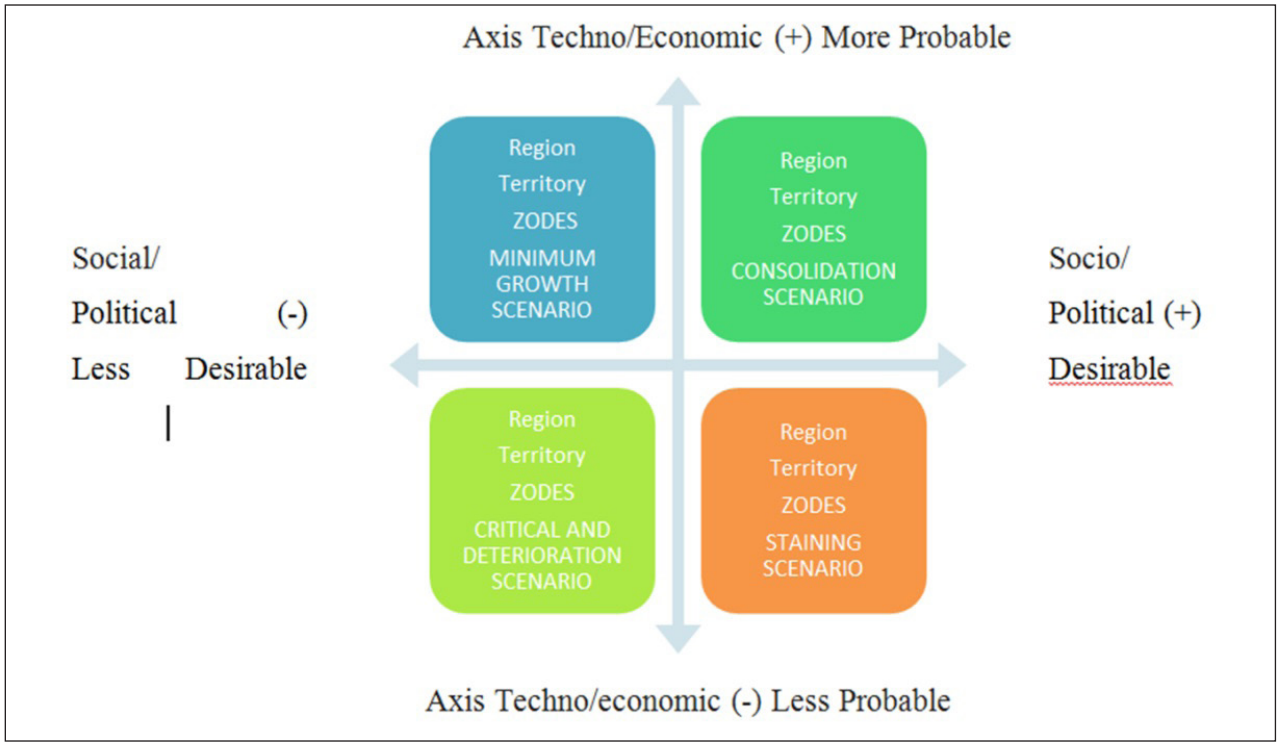
process; minimal growth, or a definitive consolidation of growth[15]. See Graph 13.

This could be backed up with key studies like Montes de Maria Foresight Vision 2032 document, quoted earlier, Latin America 2030 and the Vision Colombia Centennial II 2019 plans. They contain an important reflection of the country's expectations and the state of the art of its global positioning towards the future.

According to this plus the uncertainty of the future, it is feasible to outline the theoretically the consolidation scenario. It could be defined as: Bolivar leading territory at regional and national level, competitive, fair, integrated, winner. Its statement could be as follows:

> In 2064, the most desirable and probable vision refers to the consolidation of the strategies, objectives, goals, and actions raised in 2012. Since the peace agreement in 2016,

[15] As required by methodology this theoretical proposal needs consultations, collective validations, measurements and surveys that specify or redirect it.




**Graph 13** - Scenarios proposal
Source: Author.

Colombia and Bolivar are territories of peace and reconciliation, which has attracted the attention of the world, making Bolivar one of the centers for social and cultural research and development of renewable energies technology, attracting research laboratories worldwide. From the POD and the third update of the municipal POTs, there are articulated the prospective plans for the ZODES and the achievements in competitiveness, education, health, transport, and culture.

Bolivar already has five sites inscribed on the World Heritage List, such as the Dique Canal, the cultural landscape of the momposina depression integrated to the archaeological hydraulic system of the San Jorge River, which summons the participation of regions of Sucre and Bolivar to follow the management and protection plan.

Bolivar is the most competitive region of Colombia and the Caribbean. The Magdalena River, navigable since 2018, carries 5 million tons of products and oil, which embark in the ports of Cartagena, Barranquilla and Santa Marta. Tourism between the south of Bolivar and Cartagena has been triggered thanks to the trunk of Bolivar which interconnects regional urban system with the route of the sun, the highway of the Americas, and Caribbean train. Logistics Activity Zone (ZAL) of Cartagena mobilizes 100 million tons multiplied by *postpanamax* ships traffic driven from the Panama Canal. As a result, Colombia took advantage of the transfer of investments and GDP. Employment and annual growth rates to two digits and inflation, making Cartagena the most important logistics center in the Caribbean, interconnecting the export and import of the Magdalena River, Bogota and Buenaventura in the Pacific coast. Due to the high competitiveness and reduction of transportation tariffs, countries like Argentina, Bolivia, Paraguay, Venezuela and northern Brazil, without access to the Pacific Rim are importing and exporting all the production through the port of Cartagena.

Escalation of fluvial ports of the Magdalena River and Dique Canal linked to the terrestrial links allow interconnecting and diversifying the routes for tourist activities. A project of this magnitude allows investments to maintain environmental processes and preservation of ecosystems from the activities of cultural tourism, and simultaneously generate opportunities for the development of cultural industries.

## Conclusions

### Desirable-probable scenario for Bolivar

Beyond works and actions, the proposal for a very long-term vision of development and future scenarios leads us to think about Bolivar since ZODES basis, its vocations and forms of integration. It is true that methodology is positivistic but considering to define a *desirable-probable* scenario and defining *less desirable-unlikely* scenarios and *probable but undesirable* scenarios. All from the theoretical point of view structured in variables of deterioration and crisis, stagnation, minimum growth and consolidation of growth.

The *desirable-probable* scenario reviewed Bolivar's strengths the regional economic competitiveness supported by megaprojects and articulation needing between them for the attainment of desirable logistic levels. Thus, megaprojects interact through logistic corridors: the Magdalena River and its integration with the Dique Canal and the ZAL of Cartagena, the Integration Train, and the Caribbean road circuit, the Airport Hub and the Science and Technology District and of them Renewable Energies in a Metropolitan Area of the Caribbean Region City.

Strengthen the port infrastructure platform of the ZAL articulated with the investment to the transport infrastructure for the consolidation of logistics corridors (Cartagena-Barranquilla, Santa Marta, Río Magdalena-Dique Canal) for the increase the competitiveness of companies and industries as a result of lower costs of supply and distribution and commercial integration, by enabling the dynamic flow of goods between the center of Colombia and the Caribbean region, which modifies the intermodality of land (road or rail) to river and maritime mobility.

To project the growth and consolidation of science, technology and innovation (STI) in the future and investment in research and development (R & D) processes must achieve the use of innovation as an engine of fundamental growth. Therefore, the departmental projects to be submitted to the National Revenues System (SNR), should follow the sectors prioritized in their regional competitiveness plans. It should be stressed that the aspect of productivity in technology generation and R & D cluster in an ambitious way is not visible in the CBRC 2008-2032.

Despite being presented as one of the four transversal axes, it includes the need to implement the Strategic Plan of the Technological District of Cartagena and Bolivar (CCC, 2010) additionally it is required to propose a Scientific-Technological District and Renewable Energies for the promotion of a broader scientific and technological District politically and strategically equated with the scope of education, health, and quality of life. It must provide concrete targets for the increase of the global competitiveness index, the DCI, and the national competitiveness index.

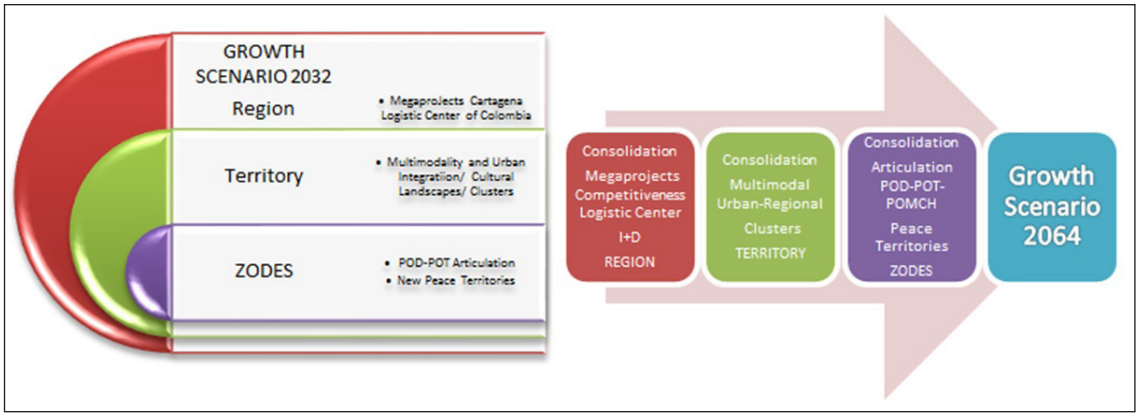
On the other hand, the proposal of consolidation of the regional urban system of the cities of Bolivar and ZODES has to be linked by the longitudinal road axis and the crossing of the transverse highway of the Caribbean.

As mentioned, articulation with the Cultural Landscape of the Momposina Depression and the San Jorge River Hydraulic System provides possibilities for the development of cultural sustainable industries and a greater qualification for tourism, integration and the appropriation by its inhabitants, since this linkage the protected natural areas linking UNESCO sites already inscribed in the World Heritage List.

Complementation in environmental matters is proposed through the development of sustainability indexes through following up to ILAC (UNEP, 2004), and continuity of the Departmental Risk Plan and application of climate change measurement models like CIAT.

According to the overlapping of the proposed conceptual layers, maps are presented that illustrate the strategic vision to 2064 in Graph 14.

In the Graph 15, it is proposed the strategies of Consolidation Vision 2064.




**Graph 14** - Development of the Scenario 2032-2064 by scale of action
Source: Author.


**Graph 15** - Proposal of Vision strategies 2064
Source: Author.

## Planning challenges and contradictions in Bolivar development level

Finally, it should be added that two processes were confirmed at the level of national planning that at present integrates the relations of the local and regional planning with the policy of territorial organization. As a first step, the National Planning Department carried out the study "Mission to Strengthen the Cities System" (World Bank, 2012).

The Mission determined the strategic basis for a prospective view for cities system in Colombia and its articulation with the planning of cities with the regions, (in contrast of current development leaded before by cities concentration and by a centralized government vision since 70s) which led to the entry into operation and reinforcement of the mentioned Modern POT-POD program as a second measure and, in turn, confirmed the need to establish in its the prospective methodology of development by the departmental government in the POD. In fact, this "Scenarios for Great Vision" study is being used as background of the Bolivar POD 2018 (Colombia, 2017).

Bolivar's plan beyond its name "Winner" reiterates the inequalities of a region characterized by being historically privileged for its cultural and environmental potential. Bolivar is positioned in stage 4 of the most developed departments among them: Antioquia, Atlántico, Bogota D.C., Cundinamarca, Santander and Valle del Cauca (See Figure 8). On the other hand, this contrasts with Chart 1, where Bolivar is 13th place in the DCI 2013 ranking among the 22 regions of Colombia and a ranking of 14th (medium-low level) in the aspect of Basic Conditions. In spite of this, it evolves to a ranking of 11th place in Efficiency and 8th place (medium-high level) in Sophistication and Innovation. But, according to cities of Caribbean region like Cartagena (district that concentrates economic development), DCI measurement is not satisfactory. See Chart 2.

It is clear that Bolivar has only begun with long-term plans and projects since 2012, which also represent the challenges that launched from a perspective of the future, acquire a highly valued and representative dimension in culture, infrastructure and land management that complement not only competitiveness but the outstanding debt for the reconciliation of peace, equity and justice with the inhabitants of Bolivar.

## Map summary

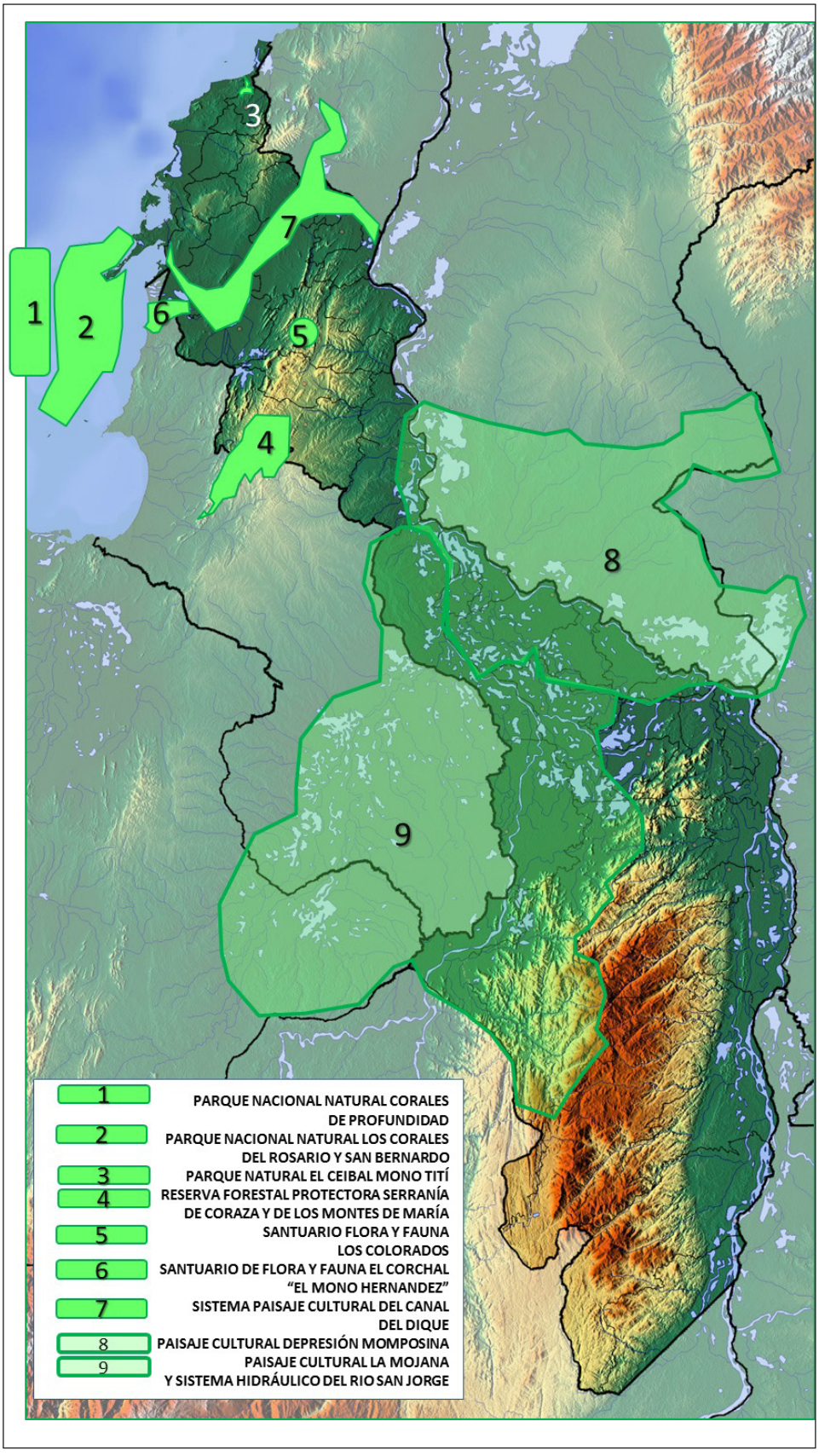
The projects are compiled in four maps that overlap layers of nature and culture, competitiveness, regional urban system, roads system, and transport to achieve under final scenario. See Maps 1 to 4.

The result of the spatialization by stages illustrates a summary map of the strategic vision to 2064. See Map 5.

## Megaprojects files

In addition, the following megaprojects files were prepared. See Figures 9 to 14.

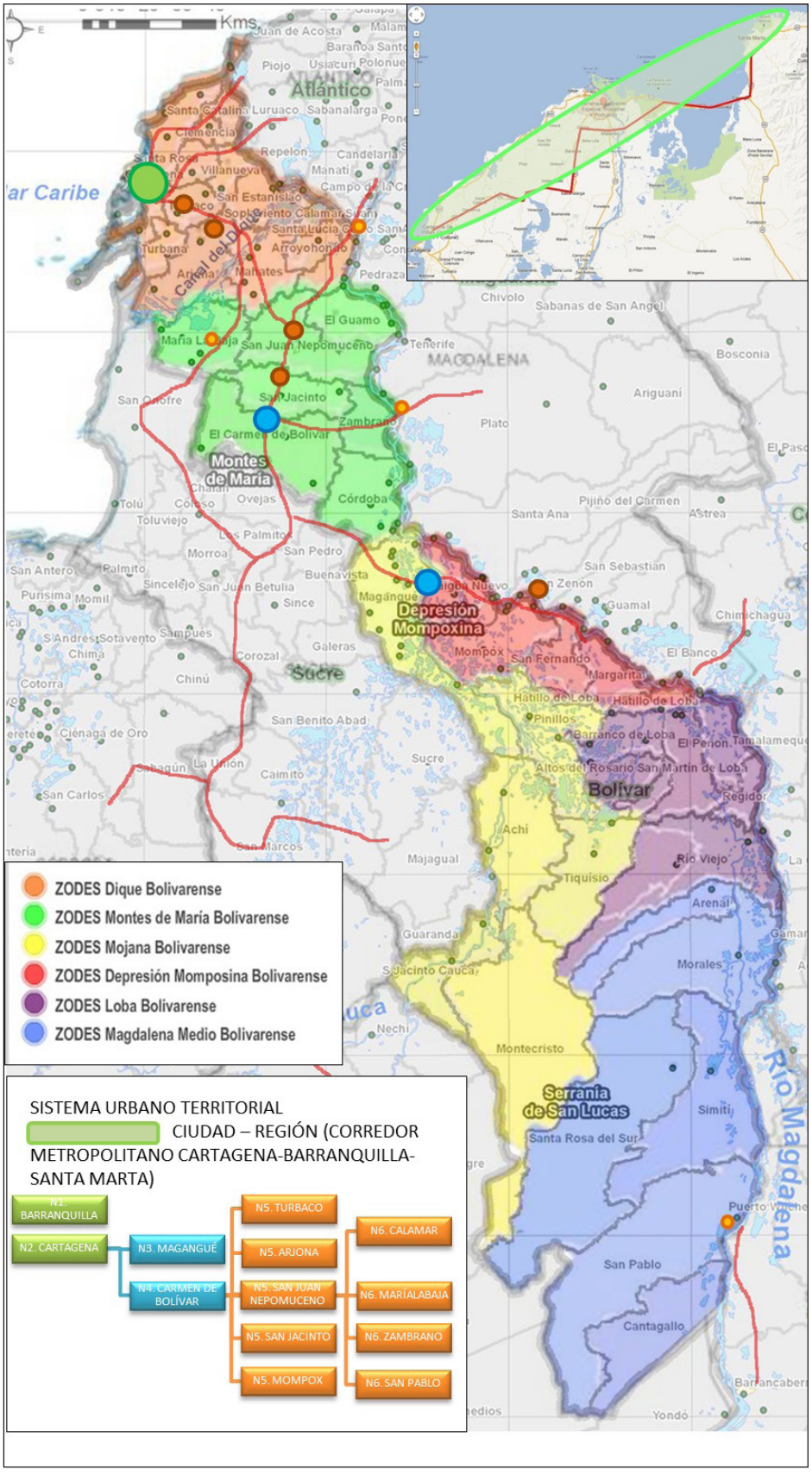

**Figure 8** - Departments ranking by development stage
Source: Private Council on Competitiveness (2013a).



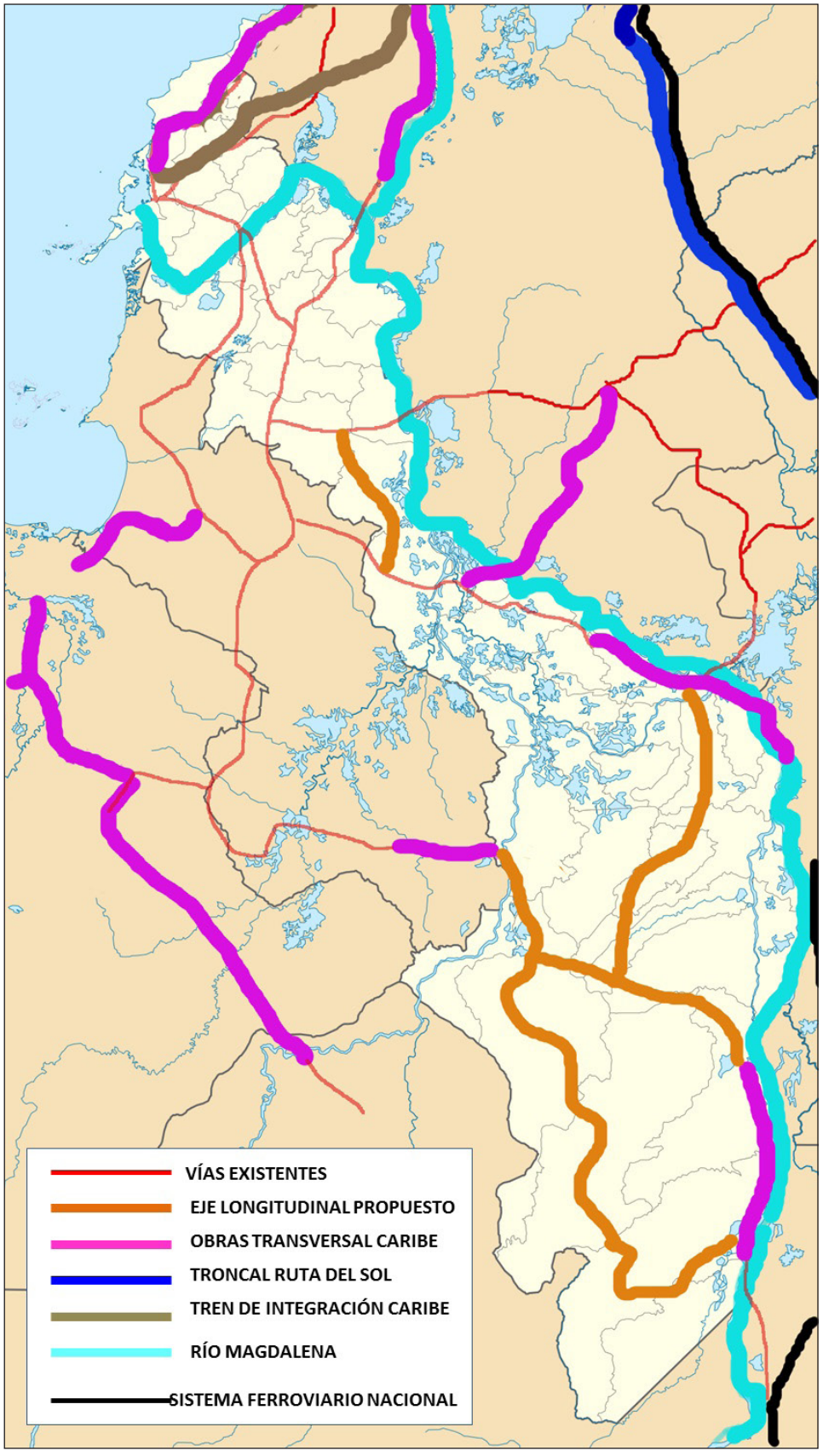

**Map 1** - Proposed conceptual structure or layer (Nature and Culture)

Source: Author over cartographic base of Creative Commons.

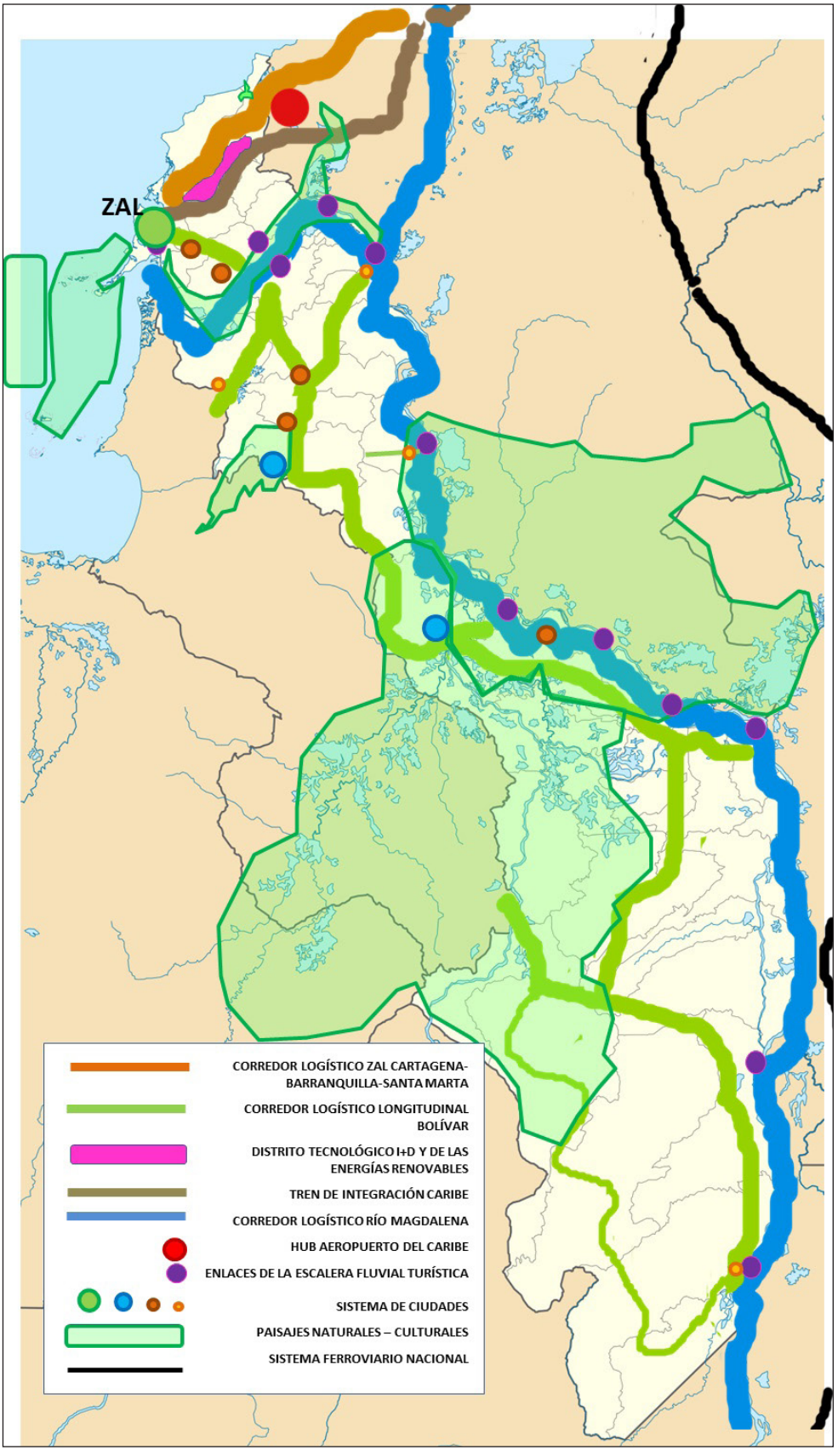

**Map 2** - Proposed conceptual structure or layer (Competitiveness)
Source: Author over cartographic base of Creative Commons.




**Map 3** - Proposed conceptual structure or layer (Regional Urban System)
Source: author over cartographic base of Creative Commons.

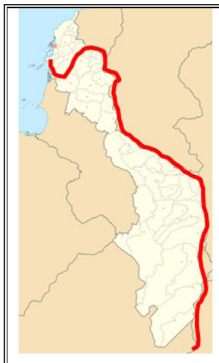



**Map 4** - Proposed conceptual framework or structure (Road and Transport System).
Source: Author over cartographic base of OCHA and Creative Commons.




**Map 5** - Map summary

Source: Author over cartographic base of Creative Commons.



**Megaproject 1**: Environmental recovery and navegability of Dique Canal and Magdalena River Logistic Corridor

Goal: To promote multimodal transport and logistic development of Magdalena River as a waterway corridor, guaranteeing environmental sustainability and integrality use of water resources.

Location: river banks and towns along Magdalena River and Dique Canal.

Status: On November 19th, 2013, a tender was opened for a concession to recover Magdalena River navigability along 908 kilometers between Puerto Salgar and Barranquilla with participation of three international consortiums. They prequalified to carry out works to maintain minimum conditions of navigability about 2.18 meters depth, 52 meters wide and 900 meters curvature in the next 13 years.

Related projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena
- Hydraulic system of Dique Canal (Unesco Tentative List)
- Tourist fluvial scailing
- Road axis – Bolívar lenghtwise Corridor

**Figure 9** - Megaproject 1
Source: Author over cartographic base of Creative Commons.

**Megaproject 2**: Caribbean Train – Integrated Regional Transportation System

Goal: Regional integration of cargo and passengers transportation

Location: parallel to Caribbean State Route

Status: Tender CM020-2012 for evaluation of Integrated Regional Transportation System (IRTS) technical studies and implementation. Project in management stage and mobility studies.

Related projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena-ZAL Barranquilla-ZAL Santa Marta
- Caribbean Airport Hub

**Figure 10** - Megaproject 2
Source: Author over cartographic base of Creative Commons.

**Megaproject 3**: Planning of the Caribbean Metropolitan Region

Goal: To develop a strategic proposal for regional development and planning of territory based in an integral vision of urban-rural land. To bind POT and POD land management in the Metropolitan Region vision.

Location: Metropolitan areas of Cartagena, Barranquilla and Santa Marta structured by State Caribbean State Route and Regional Integration Train.

Related Projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena-ZAL Barranquilla-ZAL Santa Marta
- Caribbean Airport Hub
- Caribbean Integration Train
- Technological District of Science and Renewable Energies

**Figure 11** - Megaproject 3
Source: Author over cartographic base of Creative Commons.

**Megaproject 4**: Technological District of Science and Renewable Energies
(Strategic Plan of Technological District of Cartagena and Bolivar)

Goal: To develop a strategic proposal for regional development of innovative companies acceleration

Location: Logistic Corridor of Caribbean Region (Caribbean Metropolitan Region)

Related Projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena-ZAL Barranquilla-ZAL Santa Marta
- Caribbean Airport Hub
- Caribbean Integration Train

**Figure 12** - Megaproject 4
Source: author over cartographic base of Creative Commons.

**Megaproject 5**: Caribbean Airport Hub

Goal: To build a regional airport for cargo logistics and tourist transportation linked to multimodal transportation system (Caribbean Integration Train, Caribbean State Route-Sun Route) and ZAL Cartagena, ZAL Barranquilla and ZAL Santa Marta.

Location: boundaries of Bolivar and Atlantic departments

Related Projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena-ZAL Barranquilla-ZAL Santa Marta
- Caribbean Integration Train
- Caribbean State Route – Sun Route

**Figure 13** - Megaproject 5
Source: Author over cartographic base of Creative Commons.

Proyecto: Consolidation of Logistics Activity Zone (ZAL) Cartagena

Goal: To carry out the modernization works and future operation expansion of ZAL Cartagena terminals (Cartagena Port Company - Contecar) in accordance with 2020 Plan (updated because Panama Canal expansion and navigability of Magdalena River assesment).

Location: Port of Cartagena

Status: Due to growth of investments, Contecar has enabled state of the art facilities for 12,000 TEU ships operations.

Required works:

- To build El Varadero: a new access channel to Cartagena Bay. It requires navigability works to get 17.5 meters deep and 200 meters wide.
- To finalize Contecar and Manga Terminal for expansion. To handle 5 million TEU per year in the short term.
- To locate a new terminal for 10 million TEU per year handling in the medium term, according to Contecar and SPRC 2015-2018 Vision Plan.
- To enourage new industrial-logistic areas development linked to Port of Cartagena.

Related Projects / Integration requirements with:

- Caribbean Logistic Corridor - ZAL Cartagena-ZAL Barranquilla-ZAL Santa Marta
- Caribbean Integration Train
- Logistic Corridor of Magdalena River and Dique Canal.

**Figure 14** - Megaproject 6
Source: Author over cartographic base of Creative Commons.

## References


Beltrán, L. (2009). World heritage sites: sites of the humanity heritage, challenges in its handling. studies on cultural heritage. *Journal of Cultural Heritage Studies*, 2(22), 102-220.

Bogota. Ministry of Culture. (2013a). *World heritage in Colombia*. Bogota: Planeta-Lumwerg.

Bogotá. Ministry of Industry Trade and Tourism. (2013b). *Publicaciones*. Retrieved in 2017, May 16, from http://www.mincit.gov.co/publicaciones.php?id=5871

Bolivar. (2011). *Departmental roads plan*. Cartagena: Government of Bolivar.

Bolivar. (2012). *Development plan Bolivar 2012-2015*. Cartagena: Government of Bolivar.

Cartagena Chamber of Commerce – CCC. (2010). *Strategic plan of the technological district of Cartagena and Bolivar*. Cartagena: CCC.

Cartagena Port Regional Society. (2011). *Port of Cartagena: a vision 2020* (Vol. 12, No. 15). Cartagena: Port of Cartagena. Retrieved in 2017, May 16, from http://www.puertocartagena.com/sites/default/files/15%20-%202011%20Enero.pdf

Colombia. (2017). *As of today, 100 municipalities and 25 departments will be betting on modern territories: DNP*. Retrieved in 2017, May 16, from https://www.dnp.gov.co/Paginas/A-partir-de-hoy,-100-municipios-y-25-departamentos-le-apuestan-a-ser-territorios-modernos-DNP.aspx#googtrans/gl/en

Colombian Caribbean Observatory. (2011). *Profile urban regional Per Caribe*. Cartagena: OCARIBE.

Colombian Caribbean Observatory. (2012). *Global indicator of competitiveness of the cities of the Colombian Caribbean evolution 2009-2010*. Cartagena: OCC-Chamber of Commerce.

CONTECAR. (2011). *Port of Cartagena, Logistics for Competitiveness*. Cartagena: CONTECAR.

Cordeiro, J. (2012). *Latin America 2030: Delphi study*. Santiago de Chile: The Millennium Project, Pedro Valdivia University.

Garduño, R. (2004). *Prospective to everyone: building scenarios: the Millennium Project*. México: UNAM.

Google Images. (2017). Retrieved in 2017, May 16, from https://images.google.com.br

Haggett, P., & Chorley, R. (1971). *Geography and socioeconomic models*. Madrid: Ieal.

Hindle, T. (2001). *The economist: pocket strategy*. London: The Economist Profile Books.

Initiative for the Integration of Regional Infrastructure in South America – IIRSA. (2012). *Strategic action plan 2012-2022*. Paper. Retrieved in 2018, May 3, from http://www.iirsa.org/admin_iirsa_web/Uploads/Documents/II_COSIPLAN_2011_PAE_ing_final.pdf

Jiménez, S. (2007). *Regional dynamics of the conflict and forced displacement in Bolivar: case study of the Montes de María subregion*. Cartagena: GIDES-University of San Buenaventura, International Center for Research for Development.

Leney, T. (2004). *Manual of scenarios*. Luxembourg: Office for Official Publications of the European Communities.

Martinez, C. (2002). *Internal migrations in Colombia: territorial and demographic analysis according to the censuses of 1973 and 1993*. Barcelona: Autonomous University of Barcelona. Paper. Retrieved in 2017, May 16, from http://hdl.handle.net/10803/4943

Mojica, J. (2011a). *Pereira and its area of influence, scenarios for 2017, 2014 and 2032: executive report*. Bogota: Universidad Externado de Colombia.

Mojica, J. (2011b). *Territorial prospective for the construction of a sustainable city model region for the AMB 2030*. Bucaramanga: CMDB.

Mojica, J. (2012). *Neiva city region 2022*. Bogota: Universidad Externado de Colombia.

National Planning Department – DNP. (1995a). Conpes 2764: P*lan for the Recovery and Management of the Rio Grande de la Magdalena 1995-1998*. Bogota: DNP.

National Planning Department – DNP. (1995b). *Conpes 2814: action plan for the fluvial sector*. Bogota: DNP.

National Planning Department – DNP. (2005). *Conpes 3342: port expansion plan*. Bogota: DNP.

National Planning Department – DNP. (2006). *Conpes 3241: strategies for the economic and social reactivation of La Mojana region*. Bogota: DNP.

National Planning Department – DNP. (2008a). *Conpes 3527: national policy on competitiveness and productivity*. Bogota: DNP.

National Planning Department – DNP. (2008b). *Conpes 3547: national logistics policy*. Bogota: DNP.

National Planning Department – DNP. United Nations Environmental Programme – UNEP. (2008c). *Plan of priority regional actions for the sustainable development of La Mojana*. Bogota: Rey + Naranjo Studio.

National Planning Department – DNP. (2009a). *Conpes 3582: national science policy: technology and innovation*. Bogota: DNP.

National Planning Department – DNP. (2009b). *Conpes 3568: follow-up to Conpes 3547 of 27 october 2008: national logistics policy*. Bogota: DNP.

National Planning Department – DNP. (2009c). *Conpes 3611: port expansion plan 2009-2011: ports for competitiveness and sustainable development*. Bogota: DNP.

National Planning Department – DNP. (2009d). *Conpes 3612: strategic program of motorways phase I:* PROESA I. Bogota: DNP.

National Planning Department – DNP. (2009e). *Vision Colombia Centennial II: 2019*. Bogota: Planet.

National Planning Department – DNP. (2010). *Conpes 3674: human capital management strategy*. Bogota: DNP.

National Planning Department – DNP. (2011). Observatory of the Colombian Caribbean. *Governance with a vision of the future: construction of the prospective vision and development strategies of the Montes de Maria*. Cartagena: DNP-Ocaribe.

National Planning Department – DNP. (2013a). *Conpes 3758: Plan to restore the navigability of the Magdalena River.* Bogota: DNP.

National Planning Department – DNP. (2013b). *Conpes 3762: policy guidelines for the development of projects of national and strategic interest - PINES*. Bogota: DNP.

National Planning Department – DNP. (2013c). *Preliminary proposal for territorial planning guidelines*. Bogota: DNP.

Osorio, J., & Acevedo, A. (2010). *Coffee cultural landscape: Risaralda Colombia*. Pereira: UCP-UTP-CARDER. Retrieved in 2017, May 16, from http://www.almamater.edu.co/sitio/Archivos/Documentos/Documentos/00000065.pdf

Porter, M. (1998). *Cluster and the new economic of competition*. Boston: Harvard Business Review. Retrieved in 2017, May 16, from http://www.dotcomventuresatl.com/Downloads/HBS_Clusters.pdf

Porter, M. (2004). *Competitive advantage: creating and sustaining superior performance*. New York: Free Press.

Private Council on Competitiveness. (2013a). *Departmental competitiveness index*. Bogota: Punto Aparte.

Private Council on Competitiveness. (2013b). *National competitiveness report 2013-2014: path to collective prosperity*. Bogota: Punto Aparte.

Regional Commission for Competitiveness of Cartagena and Bolivar – RCC. (2008). *Regional competitiveness plan for Cartagena and Bolivar 2008-2032*. Cartagena: CRC.

Regional Commission for Competitiveness of Cartagena and Bolivar – RCC. (2011). *Competitiveness Profile of the Department of Bolivar*. Cartagena: RCC.

Ringland, G. (2002). *Scenarios in business*. Chichester: Wiley.

Sánchez , V. (2008). *Elements for geopolitics of infrastructure megaprojects in Latin America and Colombia*. Bogota: Cuadernos de Geografía.

Sayago, J. (2011). *Forced displacement in Colombia: expulsion and mobility, two interacting dynamics*. Bogota: National University of Colombia.

Twenty-foot Equivalent Unit – TEU. (2017). *Container port traffic measures the flow of standard-size intermodal containers from land-to-sea mode of transport and vice versa, in equivalent units to TEU*. Retrieved in 2017, May 16, from http://datos.bancomundial.org/indicador/IS.SHP.GOOD.TU

United Nations Educational, Scientific and Cultural Organization – UNESCO. (2017). *Traditional Vallenato music of the Greater Magdalena region*. Retrieved in 2017, May 16, from http://www.UNESCO.org/culture/ich/en/USL/traditional-vallenato-music-of-the-greater-magdalena-region-01095

United Nations Environment Programme – UNEP. World Bank. (2004). *Indicators ILAC 2004*. San Jose: UNEP, World Bank, University of Costa Rica.

Van Der Heijden, K. (1996). *Scenarios: the art of strategic conversation*. Chichester: Wiley.

World Bank. National Planning Department – DNP. (2012). *Cities system: a visual approach to Colombian case*. Bogota: Punto Aparte. Retrieved in 2017, May 4, from http://documents.worldbank.org/curated/en/702891468025750716/pdf/NonAsciiFileName0.pdf

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