


Strategies for the economic and territorial regeneration of the Magdalena River: the case of the city of Girardot, Colombia

Estratégias para a regeneração econômica e territorial do rio Magdalena: o caso da cidade de Girardot, na Colômbia

Estrategias de regeneración económica y territorial del río Magdalena: el caso de la ciudad de Girardot en Colombia

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Abstract

The complexity of social and productive factors has changed the perspectives of urban centers. Although the first forms of territorial organization arose from human settlements and their need for subsistence within the special conditions provided by geography, in the last thirty years, this strategy does not seem enough to generate the permanence of populations and their development. Girardot, located on the banks of the Magdalena River, Colombia, was a reference of economic progress, being the second most important city in the country's center in the first half of the twentieth century. The railroad, aviation, and the Magdalena River consolidated the city as the epicenter of local development. Despite having a strategic infrastructure of services, the new social dynamics derived from using the river brought a phenomenon of degradation, isolating the city from progress. This condition opens a perspective to delimit adequate management mechanisms, understanding that rivers were essential for consolidating large urban centers. The research addresses functionality, understood from the continuity of projects and plans in charge of governmental entities, which affect the connectivity of these cities, promoting a vision of more sustainable ecosystems.

Keywords: River; Territory; Historical Heritage; Economic Development; Project Strategies.

Resumo

A complexidade dos fatores sociais e produtivos tem alterado as perspectivas dos centros urbanos. Embora as primeiras formas de organização territorial tenham surgido a partir dos assentamentos humanos e sua necessidade de subsistência, dentro das condições especiais proporcionadas pela geografia, nos últimos trinta anos parece que essa estratégia não foi suficiente para gerar a permanência das populações e seu desenvolvimento. Girardot, uma cidade situada nas margens do rio Magdalena, na Colômbia, foi um ponto de referência para o progresso econômico, sendo a segunda cidade mais importante do centro do país na primeira metade do século XX. O caminho de ferro, a aviação e o rio Magdalena consolidaram a cidade como o epicentro do desenvolvimento local. Apesar de contar com uma infraestrutura estratégica de serviços, a nova dinâmica social derivada do uso do rio trouxe consigo um fenômeno de degradação, isolando a cidade do progresso. Essa condição abre uma perspectiva para delimitar mecanismos de gestão adequados, entendendo que os rios foram um elemento fundamental para a consolidação dos grandes centros urbanos. A pesquisa aborda o fator da funcionalidade, entendida a partir da continuidade de projetos e planos a cargo de entidades governamentais, que afetam a conectividade dessas cidades, promovendo uma visão de ecossistemas mais sustentáveis.

Palavras-chave: Rio; Território; Patrimônio Histórico; Desenvolvimento Econômico; Estratégias de Projeto.



Resumen

La complejidad de los factores sociales y productivos han cambiado las perspectivas de los centros urbanos. Si bien las primeras formas de organización del territorio surgieron a partir de los asentamientos humanos y su necesidad de subsistencia, dentro de condiciones especiales que brindaba la geografía, en los últimos treinta años pareciera no ser suficiente esta estrategia para generar la permanencia de las poblaciones y su desarrollo. Girardot, ciudad ubicada a orillas del río Magdalena, Colombia, fue referente de progreso económico, siendo la segunda ciudad en importancia del centro del país en la primera mitad del siglo XX. El ferrocarril, la aviación y el río Magdalena, consolidaron la ciudad como el epicentro del desarrollo local. A pesar de contar con una infraestructura de servicios estratégica, las nuevas dinámicas sociales derivadas del uso del río, trajeron consigo un fenómeno de degradación, aislando la ciudad del progreso. Esta condición abre una perspectiva para delimitar mecanismos de gestión adecuados, entendiendo que los ríos fueron pieza clave para la consolidación de grandes centros urbanos. La investigación aborda el factor de la funcionalidad, entendido desde la continuidad de proyectos y planes a cargo de entidades gubernamentales, que inciden en la conectividad de estas ciudades, promoviendo una visión de ecosistemas más sostenibles.

Palabras Clave: Río; Territorio; Patrimonio Histórico; Desarrollo Económico; Estrategias Proyectuales.

INTRODUCTION

As in many Latin American countries, in Colombia, populations developed from an economic activity, expressed in a social and spatial development; some of these activities were born as a form of subsistence, which over the years became an exchange, resulting in a profit for the inhabitants. The rivers were a key element, and in the areas closest to them, many of these populations developed, whose livelihoods were based on primary activities such as fishing, agriculture, and the exchange of products. With the widening of the territory and the technical and technological evolution, rivers were used as a means of transportation. With them, the adoption of new and better lifestyles was where the innovative vocation of the new cities continued its development focused on this new trend. As transportation systems were consolidated as critical networks, spaces such as ports, free trade zones, marketplaces, and storage places for exchanging transported products, which functioned according to the existing demand, were also configured (Ortiz Gonzalez, 2012, p. 5). Towns located on the banks of the Magdalena River, such as Mompox, Puerto Wilches, Puerto Salgar, Girardot, and Neiva, grew in importance and provided an alternative for nearby towns to market their products throughout the country. With time and the improvement of the road infrastructure, river transport was relegated to the background due to maintenance costs, as well as for the towns; the rivers ceased



to be a significant part of their economic systems and, therefore, their ports. In the case of Girardot, this condition was no exception; its deterioration began with the consolidation of new urban centers around new productive forms and transportation infrastructure. Girardot gave way in importance and hierarchy, becoming a degraded center with little or no port and commercial activity. In the 21st century, the strategically located city is a large container of spaces, transportation, and communications infrastructure, totally disconnected from local and national development. In addition, the profound deterioration of its main environmental corridor, the Magdalena River, caused by uncontrolled overpopulation on the riverbanks, has meant that the former wharves are now the embrace of small urban centers, in extreme poverty and underdevelopment, increasing the deterioration of the riverbanks due to deforestation. Rebuilding the urban, social, and environmental fabric within a macrosystem that includes economic and productive dynamics linked with governmental strategies consistent with the territory seems to be the only alternative left to this city on the banks of the Magdalena, proposing participatory processes that connect people with their territory, governance, and international organizations will be the proposal of this research.

Girardot: river port on the Magdalena River

According to several academic and statistical documents, the changes in the different historical periods of the city of Girardot are linked to economic factors. Although the Magdalena River plays a leading role and is the epicenter of most productive activities, the railroad, aviation, coffee, the livestock fair, and tourism are fundamental axes of constructing the city's infrastructure, with tourism being the predominant activity during all historical periods (National Museum, 2010, p. 12). Ana Milena Fayad, in her thesis "Girardot: Stories of a port and a train," delimits three economic periods, the boom, the transformation, and the decline, as a reference point to understand the development and growth of Girardot. This study, unique in the region, emphasizes three study zones: the Port, the Market Square, and the Magdalena River (Figure 1).

According to the author, the so-called boom period (1905 - 1938) is established as the most important historical period for the economy thanks to the development of trade, the presence of foreign migrants, and the importance of the country's river port, positioning Girardot as the second most important city after the capital. During this time, steam navigation on the Alto Magdalena was in all its splendor, which allowed the establishment of many exporting trading houses belonging to foreign migrants. From the beginning, Girardot's commercial activity was in regional, national, and international markets; thanks to its privileged geographical location, it allowed the crossing of different transportation routes and strategic population development (Fayad Álvarez, 2009, p. 22).



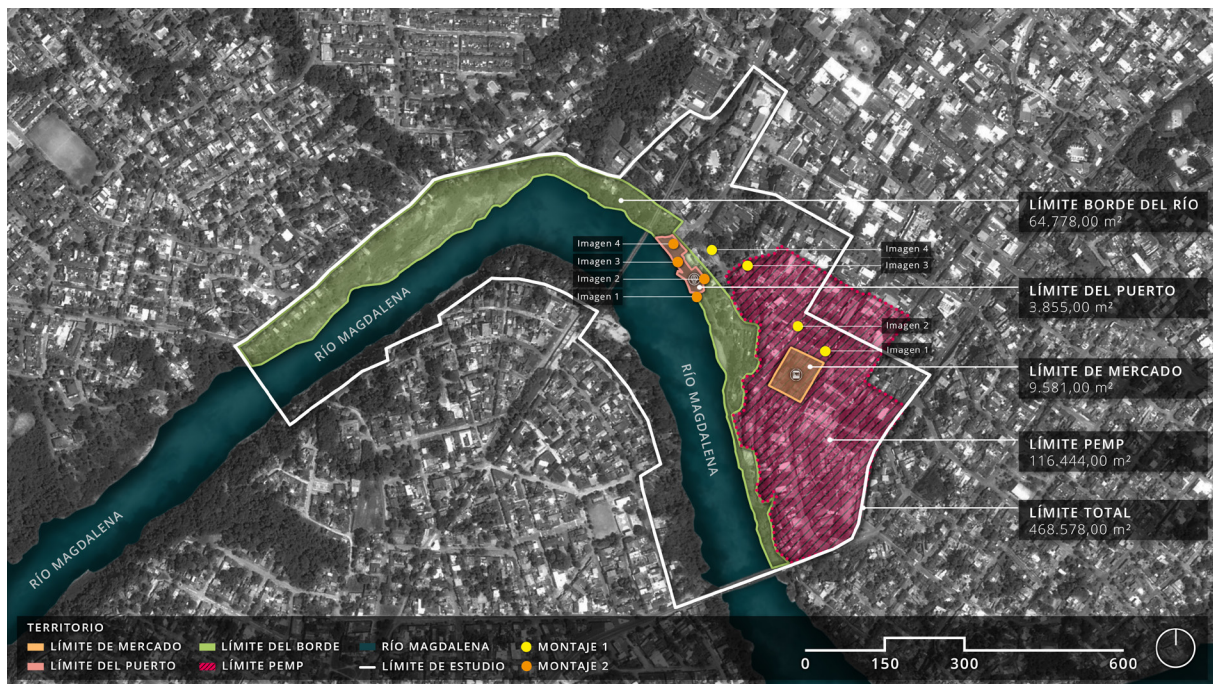


Figure 1: Areas of Influence within the study polygon and demarcation of photographs. Demonstrating the relationship between the river edge boundary with the existing port edge facilities boundary and its connection with the market boundary area where it is within the established PEMP boundary demarcation, all of these sectors are inserted within a common research boundary. Source: Lab Strategy; FAUMack; Girardot, 2023.

In the same study, the author suggests that during the period entitled the transformation (1939-1952), the decline in income was linked to the decrease in the massive use of the Magdalena River due to the positioning of railroads, aviation, and land transportation of cargo and passengers. However, the river continued to be used for trade on a more local scale because traders brought local products or products from neighboring municipalities in small canoes. During this period, Girardot continued to be a collection center and functioned as a regional epicenter for the distribution and commercialization of agricultural products. At the same time, tourism was consolidating as an alternative to take advantage of the infrastructure already in place in the territory. The centennial of 1952 was a key date for consolidating this activity as a pillar of progress, modernity, and development.



Figure 2: Table of images. Image 1: Girardot Market Square; Image 2: Immediate context of Girardot Market Square; Image 3: Old Embarcadero of Girardot in front of the Magdalena River; Image 4: Immediate context of the Girardot Embarcadero. Source: Lab-Strategy; FAUMack; Girardot, 2023.

Within these social and economic dynamics changes, the value of the Market Square and its wharf as the axis of the financial infrastructure was favored. Although the city already had a market square built in 1913, after the fire of 1945, its reconstruction was proposed, a project assumed by the municipality and headed by private enterprise. The new square was the work of the German architect Leopoldo Rother, who emphasized in the project, carried out between 1946 and 1952, its strategic location on the banks of the Magdalena River. The architectural project was planned with its wharf even though, by that time, the decline in river use was quite remarkable. The market square was a work that repositioned Girardot as a modern city by providing an infrastructure with high technological development; with this work, an extensive list of civil works and road and transportation infrastructure such as the Mariano Ospina Pérez bridge (1950), the Circumvalar Avenue, today Carrera 15, and different buildings of heritage value and services (Figure 2) (Fayad Álvarez, 2009, p. 47-49).

The period of decadence (1952-1960), so-called because of the tremendous economic decline, brought with it a reflection on the economic character of the city. In this period, the reality of Girardot as a city dependent on activities outside the territory, where tourism was positioned as its primary source of income, became evident. Colombia was also suffering the aftermath of the bipartisan war, which caused an increase in national migrations due to violence, a fact that stimulated a significant population increase with an exponential decrease in job opportunities

as a result of the lack of proper planning of the city, the population had to settle on the banks of the Magdalena River (Fayad Álvarez, 2009, p. 55-64).

Starting in the 1960s, the concern to maintain Girardot as a tourist and commercial hub in the country's center was a banner of private initiative. Some urban housing projects on the city's outskirts boosted the achievement of land management plans, focused on consolidating service networks within the city of Girardot. With the arrival of large construction companies and the city's widening, the center and the river's edge lost importance, relegating their development to the city's growth (Figure 3).



Figure 3: Table of images. Image 1: Perspective on the Magdalena River, El Embarcadero, and the Iron Bridge; Image 2: Perspective on the Magdalena River overlooking Flandes, Tolima; Image 3: Iron Bridge and boats on the Magdalena River; Image 4: Boat on the Magdalena River. Source: Lab-Strategy; FAUMack; Girardot, 2023.

Girardot and its insertion in the global scenario

In the global scenario, sustainability has gained significant relevance in countless academic discussions and international organizations, being the environmental, social, and economic issues are the fundamental pillars to consider when establishing any future scenario for intervention in the regions. In our particular object of study, the Magdalena River, besides having been the fundamental axis of the regional economy, seems to be, in the last decade, the only alternative to reactivate productive activities in the city of Girardot, as well as in the other towns of the upper and middle Magdalena.



For the academic Sandra Villardy (2015), in her article “Complex Dynamics of the Magdalena River: Need for a Comprehensive Framework for Resilience Management in the Face of Climate Change,”

sustainable development depends on the health of ecosystems and their capacity to provide the most incredible diversity of services; in the case of the health of the ecosystems of the Magdalena basin and, in particular, those of the lower basin, the situation is critical, due not only to their deterioration and transformation but also to the cumulative effects of many of the basin's activities. The vulnerability of the populations that inhabit the basin and the developed economic activities will increase because these ecosystems are affected by climate change and cannot respond to the loss of their ecological functionality (Vilardy, 2014).

After the collapse of the Magdalena River navigability boom, the closure of the port, and the beginning of the decline of the city of Girardot, many of its inhabitants returned to fishing as a productive activity to achieve basic sustenance. The efforts of the Colombian government in structuring public policies, elaborating development plans, and territorial planning have placed Girardot and the Magdalena River on the public agenda at the national and global levels. Thus, in 2015 and subsequent years, macro-project initiatives for the rehabilitation and expansion of river transport infrastructure emerged, including the Magdalena River Navigability Plan, a document prepared by the Netherlands Cooperation Agency and the Colombian government.

Several authors agree that a project of great magnitude, such as the one proposed in the Navigability Plan, would not only have a severe impact on the local economy but would also cause environmental damage of great magnitude.

The study of the Foundation for Higher Education and Development (Fedesarrollo) recognizes that the infrastructure works could pose severe threats to the integrity of the river's fish species richness and fishing activity (Rodríguez Becerra, 2015, p. 27). Another important aspect addressed by the study is the growing peasant, indigenous and urban movements against different infrastructure or extractivist megaprojects in the Magdalena basin (Rodríguez Becerra, 2015, p. 21).

Contrary to what is stated by these authors, although there is resistance from the regions to the construction of megaprojects, historically, the Magdalena River and the ecosystems that make up its basin have interacted in a profound way with the human communities settled along the river, which has generated high levels of dependence between them and their ecosystems (Vilardy, 2017, p. 4). This aspect is fundamental when it comes to achieving concertation on the expectations provided by the territory in the face of public policies, development plans and future infrastructure projects. Taking into account Vilardy's approach to



sustainable development, applied to the populations on the Magdalena, should be consistent with the delimitation of productive strategies by local governments, who, through the instruments of territorial management and planning, will be able to develop the respective plans for the construction of a new city that is more urbanistically efficient and with a vision aimed at economic productivity.

Faced with this scenario, we could say that Girardot currently has its land management instruments, which, although insufficient, delimit a path in the construction of new urban scenarios. Agreement 024 of 2011 demarcates the Land Management Plan (POT) implementation, which is being updated for its latest publication in 2023. This document modifies the protected and conservation areas, including the importance of the Magdalena River, the population settled on the banks of the river, and its productive activity in fishing and tourism. With the arrival of the national heritage law, Law 1437 of 2011, another land management instrument that has taken strength and relevance in the city is the Special Management and Protection Plan (PEMP) implemented by resolution 1743 of 2020; this instrument seeks to recover the importance of tangible and intangible heritage of the city. This instrument aims to recover the significance of the material and immaterial heritage of the city, with particular emphasis on sectors of conservation of architectural heritage, such as the market square declared as historical heritage by decree 1932 of 1993, and include its surroundings through participatory strategies to engage citizens in the construction of maintenance projects, care and protection of the buildings and the activities that take place inside them.

Objectives

The research aims to point out the elements present in the Special Management and Protection Plan of the Girardot Market Square (Cundinamarca) of the City of Girardot in Colombia, Resolution 1743 of September 15, 2020, the Development Plan 2020-2023 and the POT comparing and proposing strategies that complement the re-structuring of the territory in the Market Areas, Port of Los Guamos, and how these relate to the needs of the edge of the Magdalena River – Cundinamarca.

The research proposes a territorial analysis that addresses the historical aspects of improvements in the territory and the current PEMP. It identifies the study areas to dynamize the development of new expansion areas and remodel the border next to its fluvial port.

The research seeks to evidence a territorial analysis that allows the city of Girardot to enhance the territory's restructuring by applying strategies to generate production capacities and urban development.

The research will establish strategies for formulating scenarios categorized into Economic, Governmental, Urban, Social, and Tourism. These strategies will



make possible the re-qualification of the space under study, responding to the research question: What is the process of territorial restructuring necessary for the development of the coastal border of the Magdalena-Cundinamarca River in the City of Girardot that promotes the restructuring and territorial development of its historical and logistic infrastructures in a new node, which supports urban scenarios for the occupation of the river?

Methodology

The methodological process of this research has been defined in five stages for the development of the results and the answer to the critical question:

1. Field visit to the three zones of the City of Girardot, Market Zone, Puerto de los Guamos, and fluvial edge, with records made “in situ” for the formulation of conceptual maps, evaluation of the urban aspects, recognition of the problematic and understanding of the urban environments.

2. Mapping of the historical aspects collection of territorial data arising from the support of the governmental actors of the Municipality of Girardot.

3. Historical bibliographic review of the Management and Protection Plan of the Girardot Market Square (Cundinamarca) of the City of Girardot, focusing on the recovery of the fluvial border of the Magdalena River, inducing processes that result from the Economic, Governmental, Urban, Social, and Tourism fields. It is considered in this analysis of the works of Strategic Planning (Fernández Güell, 2016), (Gausa, 2009) (McLoughin, 1969), and (Andersen, 1984) (Table 1). From this process, the hypothesis of the research is established:

“The reconfiguration and territorial expansion of the degraded sectors of the fluvial border of the Magdalena River is only possible from the structuring of a model for a new network integrated with the river, which allows the emergence of new dynamics and infrastructures that generate urbanity and productivity as development strategies to the territory of the city of Girardot.”

4. Territorial analysis of the city of Girardot concerning the elements presented in the PEMP and the POT, and the factors that are considered as physical and geographical, historical and natural heritage within these management instruments and that are framed within the area of protection and impact of the Magdalena River. Next, a direct relationship will be established with local historical demands and economic, social, and environmental aspects that are articulated within the local development plan to incorporate strategic actions aimed at the formulation of a future scenario of tangible development to be applied in public management.

5. Delimitation of strategies articulated to the process of historical demands of improvement to the territory. The strategies identified in the analysis will



be prioritized, looking for an adequate implementation within economic and productive scenarios, together with the new governmental activities, to generate new local and urban policies and establish new spatiality elements within the city.

CHART 1 | METHODOLOGY USED FOR THE ANALYSIS OF THE TERRITORY OF THE CENTRAL AREA OF GIRARDOT AND THE MARGIN OF THE MAGDALENA RIVER

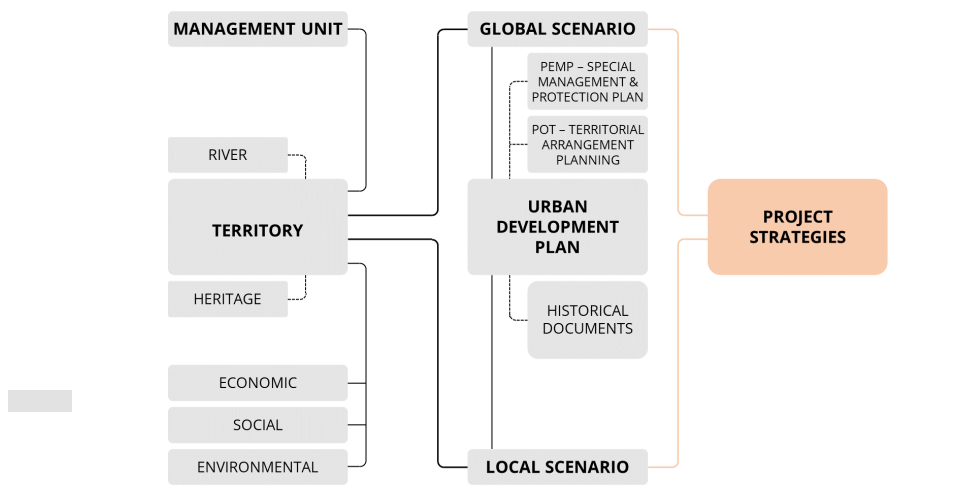


Chart 1: Methodology used to analyze the territory of the Girardot's central zone and the Magdalena River's border. Source: Lab-Strategy; FAUMack; Girardot.

Discussion

Understanding the territory from an economic point of view has allowed us to confirm the importance of some urban and productive scenarios in city planning. Although Girardot had significant developments in its urban structure and historical events that positioned it as the second most important city in the center of the country, the undeniable deterioration of its territory and the total loss of vocation of some spaces within the urban area has disconnected the city, isolating it from the growth and development of other capitals and ports, with which the most important network of services in the country was once articulated.

This disconnection between the urban and coastal areas has resulted from the lack of structuring instruments and public policies that allow mechanisms of successful intervention in the territory. Looking at the river as a source of productivity and development, ignoring the social and economic dynamics present in the areas connected to the river, such as the extended center, the market square, and 15th Street, continues to be an error in the design of local and regional development plans, which propose the activation of the river for the navigability and development of the Magdalena River (Table 1).

TABLE 1 | SYNTHESIS CHART OF THE ANALYSIS OF THE GIRARDOT AREA AND THE MARGIN OF THE MAGDALENA RIVER

GOVERNANCE INSTRUMENTS	PUBLIC MANAGEMENT	URBAN INTERVENTION
<p>PEMP SPECIAL MANAGEMENT & PROTECTION PLAN</p>	<p>SOCIAL, CULTURAL AND HERITAGE VALUE WITHIN THE DOWNTOWN AREA</p>	<p>PEMP INFLUENCE AREA MARKET PLAZA HERITAGE BUILDINGS HERITAGE LEVEL 1</p>
	<p>URBAN REDEVELOPMENT PROCESS OF THE DOWNTOWN AREA</p>	
	<p>INFLUENCE AREA – URBAN ELEMENTS, MAGDALENA RIVER, PLAZA DE LA CONSTITUCIÓN, OLD RIVER PORT SYSTEM, URBAN RELATION WITH THE MALECÓN (BOARDWALK)</p>	
	<p>IMPACT ON THE SOCIAL FABRIC OF THE CITY</p>	
	<p>IMPROVEMENT OF THE PUBLIC AND BUILT ENVIRONMENT SURROUNDING THE PLAZA</p>	
	<p>SOCIAL TOURISM</p>	
	<p>PUBLIC-PRIVATE PARTNERSHIPS</p>	
	<p>PLAZA – CITY ARRANGEMENT</p>	
<p>POT TERRITORIAL ARRANGEMENT PLANNING</p>	<p>BIC (CULTURAL HERITAGE SITES) – ECONOMIC, SOCIAL, AND CULTURAL INTERACTIONS</p>	<p>RIVERBANK</p>
	<p>MALENCÓN (BOARDWALK) ARRANGEMENT</p>	<p>IMPACT AREAS: FLOOD ZONES</p>

Table 1: Summary table of the analysis of the Girardot cutout and the Magdalena River border. Source: Lab-Strategy; FAUMack; Girardot.

The hypothesis proposed will be the result of the evaluation of the conditions of the current urban and functional infrastructure of the territory of Girardot, starting from three elements: the analysis of the territory and its relationship with the urban scenarios that configure the Magdalena River; the regional and geographical dynamics from the social perspective; finally, the historical heritage present in the existing architectural language in the Leopoldo Rotter Market Square, all of them transversally connected with the impact of the economy and the productive sector that reinforce the coastal edge and the current dynamics between wharf and port areas.

The research establishes elements of verification of the hypothesis from the proposal of project strategies of urban intervention focused on the configuration of the city, starting from the articulation of the instruments of the local government, such as the PEMP (Special Management and Protection Plan) and the POT (Land Management Plan) thus allowing to direct the actions from the public management for the approach of urban, architectural and service infrastructure projects for the city of Girardot.

In identifying the main challenges facing public management in the city, eleven (11) fundamental objectives to be considered by public management in territorial



reorganization were identified in Table 1. These objectives prioritize the natural impacts of the coastal edge and its flood zones, the valorization of the current built historical heritage, and the improvement of the quality of life through the establishment of a new economic development network based on tourism and public-private actions to generate impacts on the social fabric of the city.

Results

The research focuses on understanding the legal instruments for territorial recovery of the fluvial border of the Magdalena River in Girardot, Colombia, establishing the evaluation of a potential micro-zone of transformation between two areas demarcated by railroad connection, vehicular, port area, and historical sector of the city. In this way, it seeks to establish a possible model for recovering the border between the induction of strategies as a tool for analyzing and implementing the development plan.

As part of the planning (Andersen, 1984), a systemic process is established for the directed creation of a better future for the territory through an analysis that allows the identification of problems and opportunities, which, in a conducive way, amplifies the high points, and minimizes the most fragile ones.

This process, theoretically (Fernández Güell, 2016), to achieve the improvement of a local development plan with strategic characteristics, considers the different economic and political agents that make possible the integration of other realities that act in a given territory.

Strategic planning is the result of guided actions, where integrated sectorial visions occur on the part of the territorial administration (Hudack, 2006), which promotes the mastery of the process with integrated and coordinated actions, acting in an indicative manner in the face of problems, orienting to urban demands that surpass administrative limits, working in an anticipatory and focused way.

The strategies act as possibilities for restructuring the territory. These strategies potentiate the productive and regenerative capacities of the degraded fabric, generating urban characteristics that serve as mitigators of risk areas in the implementation along the fluvial border, expanding the effective capabilities and establishing possible new development scenarios to establish territorial relations of new uses, landscapes, and dynamics of new infrastructures for the city.

The strategies contribute to the current development plan, implementing common objectives that give the opportunity and possibility of scenarios for the restructuring of the territory (Table 2). The use of the strategies, then, will seek the benefit of the territory, defining relationships between the actions and the historical reality of the locality:



- a. Define the long-term global vision among the different sectors.
- b. Identify trends, uncovering opportunities.
- c. Promote coordination among public institutions.
- d. Establish community actions for the commitment of actions.

In this way, the strategies behave as a system (McLoughlin, 1969), where any variation, whether spatial or structural, will give rise to a chain reaction that modifies and influences other parts of the system.

TABLE 2 | ECONOMIC, GOVERNMENTAL, URBAN, SOCIAL, AND TOURISTIC STRATEGIES EMPLOYED IN THE MAGDALENA RIVER IN GIRARDOT

ECONOMIC STRATEGIES	A1	LOCAL COMMERCE REVALUATION
	A2	IMPLEMENTATION OF GALLERIES IN INDUSTRIAL SHED AND WASTELAND AREAS
	A3	ECONOMICAL RECONVERSION: OLD SHEDS TO MIXED USE
	A4	SUSTAINABLE CONNECTIVITY SOLUTIONS FOR INFRASTRUCTURE
	A5	AREAS RECONNECTION THROUGH COMMERCIAL, HOUSING AND INSTITUTIONAL ACTIVITIES
	A6	TOURISM AND COMMERCE INCENTIVE
	A7	RECOLOCATION OF GREAT DEGRADING AREAS ON CITY ECONOMICS
GOVERNMENTAL STRATEGIES	B1	URBAN AND ECONOMIC CONVERSION FOR A HISTORICAL CENTER
	B2	PUBLIC CONSULTING FOR ACHIEVING SUSTAINABLE DEVELOPMENT
	B3	INTEGRATION BETWEEN TOURIST SPOTS
URBAN STRATEGIES	C1	URBAN CENTER RECOVERY AND DEGRADED AREAS
	C2	URBAN CENTER CONFIGURATION AND DEGRADED AREAS RECOVERY
	C3	AREAS DESIGNATED FOR PUBLIC USE
	C4	CONNECTION BETWEEN PORTS AND CONTINENTAL RAIL NETWORKS
	C5	URBAN RECONVERSION PROJECTS: CITY AND PORT
	C6	ECONOMIC AND URBAN RECONVERSION THROUGH TOURISM
SOCIAL STRATEGIES	D1	PUBLIC POLICIES FOR INCENTIVES IN CENTRAL ZONES
	D2	ECONOMIC INCENTIVE ZONES - COMMERCIAL AND SERVICE AREAS
	D3	TERRITORIAL RESTRUCTURING BY TYPOLOGIES
	D4	ADAPTATION/MAINTENANCE OF SPACES THROUGH PRIVATE INITIATIVE
TOURISTIC STRATEGIES	E1	INSERT ICONS IN DEGRADED CENTRAL AREAS
	E2	STIMULATING MARKETING OF EXISTING CULTURAL ELEMENTS IN THE CITY
	E3	GASTRONOMIC AND CULTURAL FAIRS MOBILIZE THE LOCAL COMMUNITY
	E4	SUPPORT FOR BASIC INFRASTRUCTURE SERVICES
	E5	IDENTIFYING AND PRESERVING HISTORIC SPACES
	E6	DEVELOP NEW ARCHITECTURE THAT COMPLEMENTS EXISTING HISTORICAL BUILDINGS
	E7	PROMOTE HISTORICAL CIRCUITS
	E8	EMPHASIZE THE PRESENCE OF ECOTOURISM IN THE REGION
	E9	REGULATE SPECIFIC PLANS FOR THE POTENTIAL OF HISTORICAL CENTERS
	E10	PARTICIPATORY MANAGEMENT IN THE DEVELOPMENT OF HISTORICAL CENTERS
	E11	REGULATE INVOLVEMENT IN PUBLIC-PRIVATE PARTNERSHIPS
	E12	ESTABLISH PARTNERSHIPS WITH THE LOCAL COMMUNITY THROUGH MUTUAL INITIATIVES

Table 2: Economic, governmental, urban, social, and tourism strategies employed in the Magdalena River in Girardot. Source: Lab-Strategy; FAUMack; Girardot.



Next, the functionalities of the master plan variables were established by implementing the following strategies:

- a. Economic:** 7 (seven) variables that generate the establishment of recovery of areas through an economic cycle.
- b. Governmental:** 3 (three) variables that establish the direction for the legal framework and public policies.
- c. Urban:** 6 (six) articulating variables for generating the urban fabric.
- d. Social:** 4 (four) variables to cause territorial equity and the socio-geographic revaluation of the city.
- e. Tourist:** 12 (twelve) variables allow articulating the other strategies' functionality to generate new possibilities for innovation, urban identity, and a sustainable economic cycle.

The strategies are presented as structured systems that operate in the reality of the city of Girardot, components that interrelate with the common objectives, being able to be individuals, companies, and institutions that act with activities in a territory, demanding resources, infrastructure, and services (Fernández Güell, 2016).

The synthesis of the investigated territorial scenarios presents the following characteristics that should be considered in implementing strategies against the demands of the development plan:

- a. Degraded functionality** between the historic market area and the port.
- b. Identification of existing storage areas** in structuring the fluvial edge.
- c. Zone of fluvial mobility of passengers.**
- d. Areas of structural functionality** between rail and road infrastructure.
- e. Perimeter zone bordering the development plan.**
- f. Areas for expansion, redevelopment, and establishment of a potential development node** (Table 3).

TABLE 3 | RELATION CHART OF THE ANALYSIS OF THE GIRARDOT AREA AND THE MARGIN OF THE MAGDALENA RIVER, WITH THE APPLICATION OF STRATEGIES

GOVERNANCE INSTRUMENTS	PUBLIC MANAGEMENT	INTERVENCIÓN	STRATEGIES
PEMP SPECIAL MANAGEMENT & PROTECTION PLAN	SOCIAL, CULTURAL AND HERITAGE VALUE WITHIN THE DOWNTOWN AREA	PEMP INFLUENCE AREA MARKET PLAZA HERITAGE BUILDINGS HERITAGE LEVEL 1	A1 A2 C1 D4 E1 E9
	URBAN REDEVELOPMENT PROCESS OF THE DOWNTOWN AREA		B1 C2 E2 E6
	INFLUENCE AREA - URBAN ELEMENTS, MAGDALENA RIVER, PLAZA DE LA CONSTITUCIÓN, OLD RIVER PORT SYSTEM, URBAN RELATION WITH THE MALECON (BOARDWALK)		A3 B3 C4 D3 E1 E7
	IMPACT ON THE SOCIAL FABRIC OF THE CITY		A4 A7 E3 E10 E12
	IMPROVEMENT OF THE PUBLIC AND BUILT ENVIRONMENT SURROUNDING THE PLAZA		A5 A7 C3 E4 E7
	SOCIAL TOURISM		A6 A7 C6 E2 E3 E8
	PUBLIC-PRIVATE PARTNERSHIPS		B2 D1 E9 E11
	PLAZA - CITY ARRANGEMENT		C5 E2
	BIC (CULTURAL HERITAGE SITES) - ECONOMIC, SOCIAL, AND CULTURAL INTERACTIONS		D2 E5
	POT TERRITORIAL ARRANGEMENT PLANNING		MALECON (BOARDWALK) ARRANGEMENT
TERRITORIAL ARRANGEMENT		IMPACT AREAS: FLOOD ZONES	C4 E4

Table 3: Relationship table of the analysis of the Girardot cutout and the edge of the Magdalena River, with the application of strategies. Source: Lab-Strategy; FAUMack; Girardot.

As this matrix is applied to a territory (Gausa, 2009), vertical/horizontal/diagonal, it can become, in any case, a new and possible “urban network,” clear, complex and open to simultaneous processes of programmatic re-definition and re-validation, making it possible to reinvent degraded spaces, encouraging the emergence of attractive service poles in existing areas that will finally guide public actions focused on the recovery of local identities and generate new mechanisms for a more orderly occupation.

As part of the methodology and after identifying the needs of the territory visible in the fieldwork, strategies were proposed for each of the objectives delimited in the table of relationships. These elements allow giving functionality to the planned urban interventions, supported by government instruments, where the integration in the process establishes the economic strategies as the functional structure of the process firstly and secondly, the tourism strategies, which will allow the expansion and territorial reconfiguration as stated in the hypothesis of the work.





Figure 4: Strategies Map 1: Mapping of economic, governmental, and urban strategies in the study boundary. Here we present the insertion of the strategies specifically designed in the most fragile sectors of the territory, enabling the expansion of economic activities, with the contribution of governmental and targeted actions to generate the improvement of the urban fabric with the promotion of new public spaces. Source: Lab Strategy; FAUMack; Girardot, 2023.

Next, urban strategies are outlined as instruments for physical transformation, establishing new infrastructures to generate articulation between the Magdalena River and the urban center and allowing the establishment of an articulated fluvial border to develop a sustainable development model for the new urban functionalities, including new public spaces, morphologies and recovery for the local port. In this context, it becomes necessary that the actions, as a whole, are recovered in the territories, as stated by Fernández Güell (2006), establishing long-term transformations in the processes of re-conversion of the existing structure in a potential zone of change, defined as a democratic process in the search for equitable urban spaces.

The planning of a territory is directed, then, to actions that make proposals possible, indicate resources, and carry out the transformations in series, making possible integrated transformation networks (Figure 5).

A final element of the proposal will be innovation, focused on proposing tourism strategies that allow the establishment of an articulated network in the territory, generating a new sustainable occupation of activities and employment on the river's edge, which will enhance the integrated network in the Magdalena River to recover its port, its wharf, and its natural landscape, focused on tourism that aims to expand the capacity of services, employment

and articulation between the three areas investigated and meet the regulations of public development instruments.

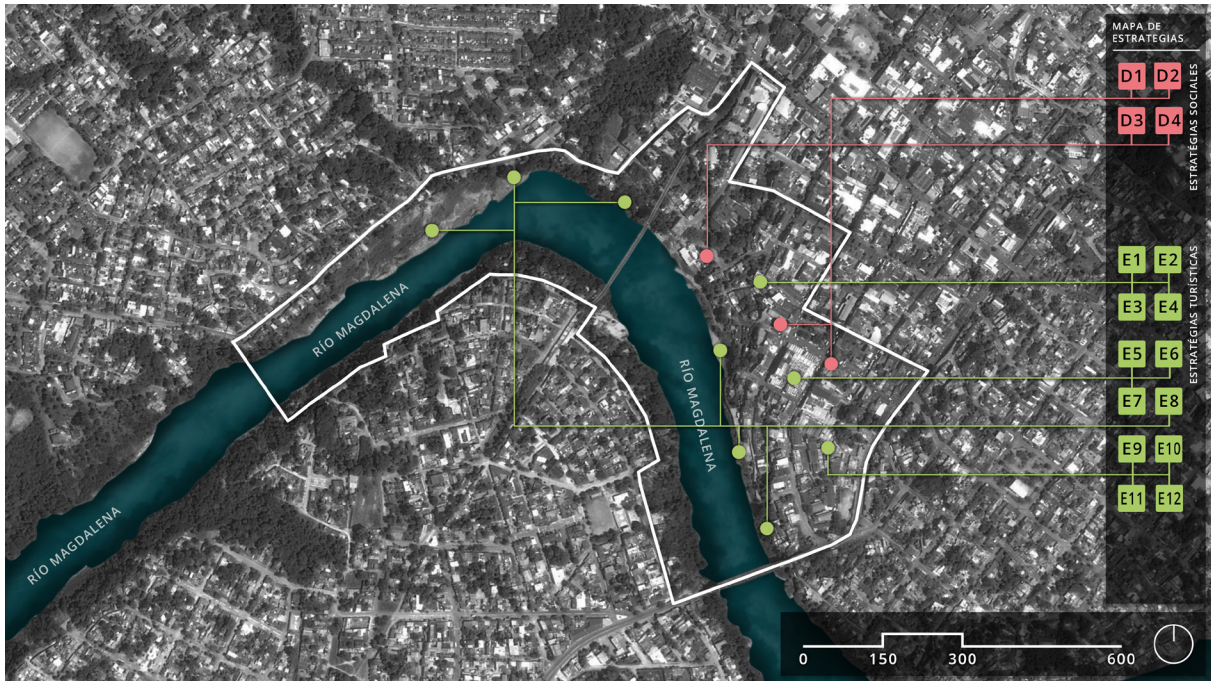


Figure 5: Strategies Map 2: Mapping of social and tourism strategies in the study boundary. Source: The articulation of territorial improvement is a direct result of the expansion of activities and social improvements to promote and expand tourism development, through the articulation of new activities, generating sustainable urban spaces for the economic and landscape recovery of the study area. Source: Lab Strategy; FAUMack; Girardot

CONCLUSIONS

The articulation of the territorial evaluation and analysis indicates the need for the development of strategies that will only be possible with the directed adoption of public-private policies that arise from the functionality of governmental strategy, to create articulated dynamics in an integrated network between services, public spaces and the improvement of the local territorial landscape.

This research proposes the development of new participative and interdisciplinary strategies supported by the existing public management instruments, which will allow the articulation of a favorable scenario hand in hand with the projects of the historical center and heritage proposed in the PEMP (Special Management and Protection Plan), and the POT (Land Management Plan), in the search for new spaces in the city to implement interventions in what we have called the zone of influence, and with them promote the construction of norms and agreements that consolidate Girardot as a fundamental link in the structure of economic, political, social and tourist services in the center of the country.



These aspects of the hypothesis presented to establish a direction for the restructuring of the architectural heritage of the market area as an element for the development of a new image of the city and to provide an attraction for new economies; this will be possible through the structuring of a network that integrates the image of the city and the landscape as a structuring element of new urban proposals through the development of new infrastructure.

The city and the landscape must be articulated in relation to the historical and morphological characteristics of the Magdalena River border by establishing urban dynamics of redesign, oriented and sustainable occupation, generation of urbanity, pedestrian development axes, and services associated with local productivity.

To propose scenarios as strategies will be the structural key to structuring new sustainable policies of historical memory and built heritage for the city of Girardot, seeking to promote a model of public policy articulated between local plans and a methodological process that can be replicated in other regions of the upper and middle Magdalena in Colombia.

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REFERENCES

ANDERSEN, A. *Guide to public sector strategic planning*. Chicago: Arthur Andersen & Co., 1984.

FAYAD ÁLVAREZ, A. *Girardot: historias de un puerto y un tren – ciudad, economía y migración: 1905-1960*. 2009. 196 f. Thesis (Master's degree) – History. Universidad de Los Andes, (2009) – Universidad de Los Andes, Bogotá, D.C., 2009.

FERNÁNDEZ GÜELL, J. M. *Planificación estratégica de ciudades: nuevos instrumentos y procesos*. Barcelona: Editorial Reverté, 2006.

GAUSA, M. *Multi-Barcelona hiper-Catalunya: estrategias para una nueva geo-urbanidad*. Barcelona: Actar, 2009.



HUDAK, J.; Sorkin, L. D.; FERRIS, B. N. Strategies for cities and countries: a strategic planning guide, 1984. P. 58. IN FERNÁNDEZ GÜELL, J. M. *Planificación estratégica de ciudades: nuevos instrumentos y procesos*. Barcelona: Editorial Reverté, 2006.

LEY NACIONAL DE PATRIMONIO (Ley n. 1.437, de 2011. Disponible en: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=41249>. Acceso el: oct. 2023.

MCLOUGHLIN, B. Urban and regional planning: a systems approach, 1969. In: FERNÁNDEZ GÜELL, J. M. *Planificación estratégica de ciudades: nuevos instrumentos y procesos*. Barcelona: Editorial Reverté, 2006.

MINCULTURA (Ministerio de Cultura). Plan Especial de Manejo y Protección. Propuesta Integral. Documento Técnico de Soporte. Colombia, 2019. t. 2. Available at: <https://www.mincultura.gov.co/prensa/noticias/Documents/Patrimonio/PLAN%20ESTRATEGICO%20SECTORIAL%202019-2022%20-%20Cierre%202019.pdf>. Access on: Sep. 2023.

MINCULTURA (Ministerio de Cultura). Resolución n. 1743, del 15 de septiembre de 2020. Por la cual se aprueba el Plan Especial de Manejo y Protección de la Plaza de Mercado de Girardot (Cundinamarca) declarada por el Decreto 1932 de 1993 como Monumento Nacional Hoy Bien de Interés Cultural del ámbito Nacional. *Diario Oficial n. 51.632*, Colombia, 30 Mar. 2021. Available at: https://normograma.mincultura.gov.co/mincultura/compilacion/docs/resolucion_mincultura_1743_2020.htm. Access on: Sep. 2023.

MINTRANSPORTE/DNP (Ministerio de Transporte/Departamento Nacional de Planeación). *Plan Maestro Fluvial de Colombia*. Colombia: Arcadis, 2015.

MUSEO Nacional de Colombia. *Río Magdalena: navegando por una nación*. 2. ed. Colombia: Museo Nacional de Colombia/Instituto Colombiano de Antropología e Historia, 2010. 110 p.

ORTIZ GONZALEZ, M. F. *Lineamientos para el desarrollo territorial urbano de las ciudades puerto fluvial sobre el Río Magdalena: aplicación puerto salgar*. 2012. 124 f. Thesis (Master's degree) – Regional and Urban Planning – Facultad de Arquitectura y Diseño, Pontificia Universidad Javeriana, Bogotá, D.C., 2012. <https://doi.org/10.11144/Javeriana.10554.15645>

PLAN ESPECIAL DE MANEJO Y PROTECCIÓN DE LA PLAZA DE MERCADO DE GIRARDOT (Cundinamarca) de la Ciudad de Girardot en Colombia (Resolución 1.743, del 15 de septiembre de 2020). Disponible en: <https://mincultura.gov.co/ministerio/transparencia-y-acceso-a-informacionpublica/publicidad%20de%20proyectos%20de%20especificos%20de%20regulacion/Documents/Resoluciones/2020/1743.pdf>. Acceso el: oct. 2023.



RESTREPO ÁNGEL, J. *Causas Naturales y Humanas de la Erosión en la Cuenca del Río Magdalena*. Medellín, Colombia: Editorial EAFIT, 2015.

RESTREPO ÁNGEL, J. *Los sedimentos del río Magdalena: reflejo de la crisis ambiental*. Medellín, Colombia: Editorial EAFIT, 2005.

RODRÍGUEZ BECERRA, M. (ed.). *¿Para dónde va el Río Magdalena? Riesgos sociales, ambientales, y económicos del proyecto de navegabilidad*. Colombia: Friedrich-Ebert-Stiftung/Foro Nacional Ambiental, 2015. Available at: <https://library.fes.de/pdf-files/bueros/kolumbien/12042.pdf>. Access on: Sep. 2023.

VILARDY, S. *Dinámicas complejas del Río Magdalena: Necesidad de un marco integral de gestión de la resiliencia ante el cambio climático*. In: RODRÍGUEZ BECERRA, M. (ed.). *¿Para dónde va el Río Magdalena? Riesgos sociales, ambientales, y económicos del proyecto de navegabilidad*. Colombia: Friedrich-Ebert-Stiftung/Foro Nacional Ambiental, 2015. p. 133-142. Available at: <https://library.fes.de/pdf-files/bueros/kolumbien/12042.pdf>. Access on: Sep. 2023.

