







“Prospective and territorial development in island areas: empirical evidence from Bocachica-Colombia”

AUTHORS	Jorge Del Rio Cortina  https://orcid.org/0000-0001-6127-8450 Carlos Rodríguez Arias  https://orcid.org/0000-0003-1567-9805  http://www.researcherid.com/rid/E-4853-2015 Naomi López Espitia  https://orcid.org/0000-0002-8262-0195 Diego Cardona Arbeláez  https://orcid.org/0000-0002-9123-0156
ARTICLE INFO	Jorge Del Rio Cortina, Carlos Rodríguez Arias, Naomi López Espitia and Diego Cardona Arbeláez (2019). Prospective and territorial development in island areas: empirical evidence from Bocachica-Colombia. <i>Problems and Perspectives in Management</i> , 17(4), 176-189. doi: 10.21511/ppm.17(4).2019.15
DOI	http://dx.doi.org/10.21511/ppm.17(4).2019.15
RELEASED ON	Thursday, 05 December 2019
RECEIVED ON	Tuesday, 09 July 2019
ACCEPTED ON	Tuesday, 19 November 2019
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

33



NUMBER OF FIGURES

5



NUMBER OF TABLES

7

© The author(s) 2025. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Received on: 9th of July, 2019

Accepted on: 19th of November, 2019

© Jorge Del Rio Cortina, Carlos Rodríguez Arias, Naomi López Espitia, Diego Cardona Arbeláez, 2019

Jorge Del Rio Cortina, Ph.D. (c),
Professor of International Finance
and Business Program, Faculty of
Economics and Business, Bolívar
University of Technology, Colombia.

Carlos Rodríguez Arias,
MsC, Professor of Faculty of
Administration, Marine Infantry
Training School, Colombia.

Naomi López Espitia, MBA, Professor
of Faculty of Administration,
University of Sinu, Colombia.

Diego Cardona Arbeláez, Ph.D. (c),
Professor of Faculty of Economics,
Administrative and Accounting,
leader of the research group
GISEMA, Universidad Libre,
Colombia.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution,
and reproduction in any medium,
provided the original work is properly
cited.

Jorge Del Rio Cortina (Colombia), Carlos Rodríguez Arias (Colombia), Naomi López Espitia (Colombia), Diego Cardona Arbeláez (Colombia)

PROSPECTIVE AND TERRITORIAL DEVELOPMENT IN ISLAND AREAS: EMPIRICAL EVIDENCE FROM BOCACHICA-COLOMBIA

Abstract

The objective of this article is the construction of future stages in the framework of territorial development for the Island of Bocachica in Colombia through collective construction among state community and participating researchers that was intended to provide the territory inputs for reflection on the future of the Island, from its historical vocation and economic development of the island. Three methods were used: structural analysis, analysis of actors, and construction of stages. The first allowed to identify the key factors in the political, economic, social, and environmental dimensions, highlighting those key variables that dynamize the transformations in the system; secondly, the analysis of actors, which contributed to determining the relations between the key actors of the territory and their degree of power, as well as their convergences and divergences with respect to the key variables identified in the structural analysis. Finally, the construction of stages made it possible to identify three future scenarios with high probability of occurrence. The most important findings of the research show that, if the trend continues in the Island with respect to its territorial development, it is more likely that the economic and social problems it currently presents will continue.

Keywords

prospective, territorial development, foresight, insular territory, probability of occurrence, dimension

JEL Classification

Q32, R11, R13

INTRODUCTION

The need to know the future has become a very important matter in the last few years, since the power to reduce uncertainty is something vital for individuals who may take advantage of this knowledge to anticipate possible opportunities or disadvantages that may arise in the future. It is this way that futurology becomes a tool, which allows to create certainty concerning possible futures (Mojica, 2006). Among these, there are some with a greater chance of happening and they are the probable futures, because they join the uncertainty and the probabilistic studies, which give them the characteristic of going beyond what is possible (De Jouvenel, 1967).

In this context, the opportunity of performing a prospective exercise in island area from Bocachica in the year 2025 will allow obtaining the knowledge of the future scenarios brought forth by the future for this village within Cartagena. The importance of this exercises consists in how to create a change in the current conditions in Bocachica, since it presents economic, social, and environmental problems (Aléan, Rodríguez, Acosta, & Madero, 2013). The prospective exercise is expected to direct efforts towards those factors which will produce changes in these dimensions.

In summary, this article is a prospective exercise referring to the Bocachica's township to the year 2025, which will provide approximations to the different future scenarios of this one, identifying the different probable scenarios if the current conditions are maintained, if they improve or if they worsen, considering the dynamizing factors of the territory and its actors.

For the above, a first phase will be approached, which will provide the key variables that dynamize the system. For this purpose, an analysis of the environment will be carried out. Once the environment has been analyzed, participatory workshops will be held with the different actors in order to identify the key success factors aimed at constructing a vision of the future of the territory; then, a second phase, which will include the analysis of the actors, in this phase, the actors and their relevance will be stated. For this purpose, a mapping will be carried out according to secondary documents and information provided by the community in order to know its objectives, as well as its influence with respect to the other actors of the system. Finally, a third phase presents the possible scenarios highlighting the trend scenario (i.e., if things continue in the same way during the period analyzed) and the scenario bet (i.e., the future of the island according to the prioritization of key variables).

1. THEORETICAL FRAMEWORK

1.1. Territorial development and social economy

Nowadays, the development of the social economy have been the focus and a fundamental element both of states, of Non-government entities and national and international entities, regardless of what sector they perform in. On the one hand, territorial development is based on the idea that communities have been formed historically and geographically under social relations and interactions of different groups, and that these relations and interactions influence the identity of the territorial entities, and, therefore, influence the needs they present, by making them different from those other communities.

Blumer (1986) agrees with Massey (1986) in that human beings develop their attitudes towards things according to the meaning that things are given; meaning that they are social beings, which create collectivities according to their relations and interactions with others. Because of this, the territory may be understood as the framework of all kinds of interests of a territorial community, which allows it to be understood as an agent of development, considering the interests of the process of growth and change in a territorial community (Barquero, 2007). Having said that, if the same territory is an agent of territorial develop-

ment, other actors of equal importance must not be left aside, such as enterprises, which through their Corporate Social Responsibility (RSE, for its acronym in Spanish) provide a certain dynamism from a socio-economic point of view giving the employment solutions and knowledge to interpret the development processes. In the same manner, the administrations of the territorial entities are agents of intervention for competitiveness, collective learning, and for the processes of territorial development (Caravaca & González, 2009), which are often related to the plans of territorial development and require strong economic investment.

Even though some enterprises, through their RSE programs, and the territorial administrative entities are important and necessary for territorial development, social economy has been growing as a new way of generating or motivating the development within the communities. And whatever the circumstances, it aims to fill the voids that other enterprises and administrative entities cannot fill (Toscano Sánchez, 2000), since the aim of social economy is to promote social wellbeing; the true seed of social economy consists on solidarity while seeking a more egalitarian distribution of wealth. Territorial development and social economy constitute the transcendental factors for both the rural and the urban environments. And this eagerness to reactivate and accelerate economy, the exploiting of resources in this area, the relation between the entrepreneurs and the territory, the fixing of the population, are the elements of convergence between the "local" and the "social,"

with “comforting” effects over a territory, considering the problems and opportunities attached to public support. In this scenario, the role of enterprises and figures such as Associations of Work Agents and Local Development, and Local Action Committees (JAL, for its acronym in Spanish) and/or Community Action Committees (JAC, for its acronym in Spanish) and Community Councils is crucial as a representative form on a micro-territorial scale (Just Carrión, Gómez García, & Fernández Arufe, 2011).

In many cases, development is related with economic growth; however, for Sen (2000), the concept goes beyond growth and rent per capita for a territory, since this is only one element through which people may strengthen their abilities. Sen (2000) argues that development is achieved by using the abilities of people and the culture that a territory possesses; development is manifested in an express relation with the freedom of the human being. Freedom for the human being is to have the opportunity of performing the activities they desire with the abilities and knowledge they possess. From this perspective, the development of territories is closely related to the freedom that human beings possess, meaning that the development of the territories is related to human development, as long as the abilities of the population are used; this vision of development is also accepted by the United Nations Development Programme (2001), where human development is considered as a process that seeks to increase the possibilities of population by increasing their abilities to lead full and healthy lives, to be well informed, to have decent standard of living and to participate actively in the life of the community. The UNDP (2001) considers that this is true development, carried out by and for the people.

Although Sen (2000) has worked and is recognized for his contributions to the development of a different perspective, other authors have also contributed to the theory of territorial development, for example, Moral and Jurado (2006) who in their work present the entities of social economy as a whole as agents of development, analyze the repercussions that the change in development policies have generated on the social economy, and studies the distinctive characteristics of these entities, which configure them as

promoters of it. Boisier (2004) presents some aspects of decentralization in Latin America. First, he presents the ambiguity in the concept of decentralization; then he presents centralism in Latin America as a phenomenon of the trajectory closely related to culture; third, he focuses on the dynamics of decentralization nowadays; and finally, he focuses on the need to modernize the social management of territory, all this revolving around territorial development. Saquet (2013), in his research work, presents the historical, critical, and relation conceptions of territory and territoriality as one of the main possibilities for the consistent comprehension of the processes of territorial development and talks about an idea made to stimulate the discussion and the participative construction of management projects and territorial development considering the multiple facets of reality, meaning, the social and natural multidimensionality that nominalizes the territory. Caravaca, González, and Silva (2005) underline the importance of three types of determinants for territorial development: innovation, creativity, and exploitation of the resources possessed by each territory, focusing the attention on the consideration of the influence of these three determinants on the structuring of smart territories. Delgadilo (2006) concludes that the strategies and actions to make rural life relevant in Latin American countries must focus their attention on an effort to combine a development approach from the vision of territory as a subject of study – political and institutional – which promotes the construction of a new proactive institutionalism that benefits the country and the population which inhabits it.

The conceptualization of the territorial development evolves and transforms as society does, and as countries, regions, and cities find themselves in need of solving new problems, and as innovations and knowledge spread through the economic and social organizations (Barquero, 2007). For the development of a territory, different actors must be taken into account, such as the administrative entities of the territories and enterprises, but, without doubt, the population, their culture, and the interactions that they generate around it are the most important pieces for that, and which must not be left out when planning the development of the territory.

1.2. Futurology for territorial development

Many of mankind's concerns have come in relation with the uncertainty generated by the future, and they have led human beings to ask themselves about the things that may happen and how they can anticipate the events to face them and provide favorable results. The future attracts and intrigues everyone. People always want to know the future and know how to manipulate it, in order to change it. This is one of the reasons why the prophetic arts, premonitions, and many of the beliefs in magic, witchcraft, and a great variety of rites have arisen (Miklos & Tello, 1991). This is how, in the 50s, around the production area for defense in the United States, futurology is born. "Futurology, whichever it is, constitutes an anticipation to guide the present actions in light of possible and desirable futures. To prepare before expected changes does not prevent reaction to cause the desired changes" (Godet, Durance, & Prospektiker, 2007, p. 6).

Development supposes the challenges (Costamagna, 2009), and one of the main challenges is the integration of the economic, the political, and the social aspects, which requires planning, meaning a general plan must be resorted to, one which allows to achieve the objectives that lead to the development of a territory (Sandoval, 2014). And when speaking of territorial development, the process may turn much more complex due to the magnitudes it entails, and the planning and futurology have come to be vitally important and a guide to choose the best path towards development. At the present time, three schools of work may be identified: The French School, essentially based in the propositions of Godet (1994), working under the premise that "Anticipation serves no purpose if not to clarify action" (Godet, Monti, Meunier, & Roubelat, 2000, p. 6); the Anglo-Saxon School, based in the propositions of Jerome Glenn and Theodore Gordon in their book: *Current Situation of the Future* Helmer (1967) who developed the DELPHI method, and the Latin American School, based on the MEYEP method developed by Balbi (2014) who, just like the other authors, tries to help know or understand the future a priori. The contributions of futurology have worked in the planning of scenarios, which have as final goal the planning for territorial development. Various works have used planning by scenarios, since this has become

nowadays a methodological approximation towards predicting and constructing the future through the identification of key trends and actors, with the purpose of improving the decision-making process and reducing the risk (Vergara, Fontalvo, & Maza, 2010), concerning of territorial zoning and public policies (Salas-Bourgoin, 2013). Governments have given importance to this instrument and nowadays it is seen as a tool, which allows to guide countries and regions in the field of desired sustainable development (Cárdenas, 2014), and, particularly, the Government of Colombia understands the importance of this kind of exercises, so that it already contemplates the need to formulate a National Prospective Plan of Territorial Development, in which some departments of the country are connected. These exercises have a significant interest to the extent that they allow the establishment of possible scenarios while, at the same time, adopting the strategies to anticipate the development of a territory in a changing world. This instrument, powerful for the construction of territorial scenarios and development strategies, was used in Europe as part of a search for greater autonomy by sub-national territories, which had as its objective to create the regional capacity to guide its own development and to create the abilities to design its own future (Espinosa Cuerto, 2006).

2. AIMS

The present paper is a prospective exercise referring to the village of Bocachica up to the year 2025, which will provide the approaches to different future scenarios in this village, by identifying different probable scenarios if the current conditions are maintained, if they improve or if they worsen, considering the dynamic elements of the territory and their actors.

3. METHODOLOGY

For the development of this research, the hypothesis of the French School of planning by scenarios was considered. In the mentioned hypothesis, the main exponent is Michael Godet who proposes a methodology in the construction of scenarios called "Method of Scenarios," which constructs the representations of the possible futures, as well as the paths to arrive to their achievement.

This prospective work, in accordance with the method of Godet, consisted of three phases: structural analysis, analysis of strategy and actors and SMIC prob-expert method. In the first phase, as is suggested by the Method of Scenarios, the key variables which dynamize the system were identified. For this, an analysis of the environment using secondary information in databases and academic documents was performed, which allowed obtaining a rough sketch of the panorama of Bocachica supported mainly by the research of Aléan, Rodríguez, Acosta, and Madero (2013) and Arteaga and Insuasty (2011). Additionally, visits were made to the territory, in which it was possible to ascertain the current situation of the village of Bocachica; in these visits, a walk was taken around the whole territory and the focal points of development and poverty were identified. Once the environment is analyzed, it will be validated with participative workshops for the community on the key variables taken on the first moment, in order to obtain feedback on what has been prepared so that a better vision of the territory may be obtained. These workshops were the basis for the definition of the proposed objectives to be achieved by 2025. The second phase consists of the analysis of the actors, in this phase, it was important to identify the actors and their relevance. For this, mapping of actors was made according to the secondary documents and the information provided by the community in order to know their objectives and influence concerning the other actors in the system. The third phase consists of the SMIC prob-expert method, which is translated in probabilistic crossed impacts, which determine simple probabilities and probabilities conditioned by the scenarios. The objective was to emphasize which scenarios are more probable, by identifying the tendency scenario (i.e., if things stay the same during the analyzed period) and the desired scenario (i.e., the future of the village according to the prioritization of the key variables).

4. RESULTS

4.1. Structural analysis

The structural analysis was carried out with the PESTAL tool, which allows analyze the current situation of the territory. The objective is to generate the key factors, which affect the environment and which may have direct influence on the evolution

of the territory. These factors are analyzed from five (5) dimensions: political, economic, sociodemographic, technologic, environmental, and legal (Chapman, 2004; Pedros & Gutierrez, 2012). The results of the PESTAL analysis are presented as variables according to the dimensions, described in Tables 1-6.

Table 1. Political dimension

Source: Elaborated by the authors.

Variables	Definition
Political transparency	Clear management without the chance for doubt over the political decisions of Bocachica
Policies of the district government for the development of Bocachica	Guidelines of public policies proposed by the Town Hall of Cartagena, which directly affect Bocachica

Table 2. Economic dimension

Source: Elaborated by the authors.

Variables	Definition
Innovation in services	It is the improvement and/or creation of the services offered by the residents of Bocachica
Touristic aspect	Degree of tourist influx to Bocachica
Fishing activity	Dedication to fishing of the natives of Bocachica
Hotel development	Level of hotel inclusion in Bocachica
Cultural undertaking	All those projects of the residents of Bocachica which include the appropriation of symbolic and intangible values of the community
Social innovation	It is the new services or products which satisfy social needs

Table 3. Sociodemographic dimension

Source: Elaborated by the authors.

Variables	Definition
School years	Average number of years of study that a person of Bocachica has
Quality of public utilities	Optimal supply of the public utilities which satisfies their users
Coverage of public utilities	Total number of inhabitants that the public utilities possess among the total number of inhabitants of the village
Work quality	Talks about the work conditions of the residents of Bocachica
Cultural identity	Set of values, traditions, symbols and beliefs that characterize the community of Bocachica
Poverty level	Degree in which the basic utilities of the residents of Bocachica are not covered

Table 3 (cont.). Sociodemographic dimension

Variables	Definition
Coverage of education	Total number of children which study in the educative institutions of Bocachica among the total number of children
Quality of education	Supply of education which guarantees its optimal quality
Beliefs	Set of ancestral knowledge which is passed from one generation to the next
Coverage of health services	Total number of inhabitants who have access to health services among the total number of inhabitants of Bocachica
Quality of health services	Supply of health services that guarantee the optimal quality of the service
Living conditions	Characteristics concerning the access to minimum utilities: water, electricity, basic sanitation and sewage
Literacy	Inhabitants who possess reading and writing abilities
Family violence	Cases of violence that happen within the families of Bocachica
Alcoholism	Talks about the consumption of alcoholic beverages by the inhabitants
Teenage pregnancies	Talks about the cases of pregnancies for women between the ages 10 and 19
Security	Perception of trust felt by the inhabitants and tourists of Bocachica
Use of a second language	Competence in reading, speaking, understanding, and listening of a second language
Generational shift	Talks about the development of the future generations, which will be settled in Bocachica, maintaining the cultural identity

Table 4. Technological dimension

Source: Elaborated by the authors.

Variables	Definition
Coverage of cell phone services	Total number of inhabitants who have access to cell phone services among the total number of inhabitants of Bocachica
Technological innovation	It is the new services or products which satisfy needs from a technological point of view
Quality of cell phone services	Supply of cell phone services which guarantee the optimal quality of their service
Quality of internet services	Supply of the internet services which guarantee the optimal quality of their service
Coverage of internet services	Total number of inhabitants who have access to internet services among the total number of inhabitants of Bocachica

Table 5. Environmental dimension

Source: Elaborated by the authors.

Variables	Definition
Road to Barú	Talks about the construction of the road Playetas-Barú
Road infrastructure in the village	Conditions of the roads of Bocachica
Sea level	Height of the water bodies, which surround Bocachica
Coastal erosion	Talks about the continuous loss of sediment (terrain) in the coasts of Bocachica
Management of waste and environmental contamination	The way in which the environmental contamination is managed considering the management of wastes produced in Bocachica

Table 6. Legal dimension

Source: Elaborated by the authors.

Variables	Definition
Regulations on the conservation of Bocachica	Dispositions and regulations referring to the sustainability of Bocachica
Certification in touristic quality	It refers to the distinctions awarded by the superintendency of industry and commerce

4.2. MIC MAC analysis

With the identification of the variables by employing the PESTAL tool, 39 relevant variables were found for the territory. These variables are analyzed through a matrix of direct impacts, which represents the relation between two variables (Gaviria, Aljure, & Castro, 2015; Mitma, Pinzás, & Contreras, 2009). The relation is determined by the influence by one variable over another. So, the influence is classified for the matrix in:

- 0: It has no influence
- 1: Weak influence
- 2: Mid-strength influence
- 3: Strong influence
- P: Potential influence

For the stability of the matrix, it is necessary to increase the power for its stability; in this case, the number of iterations, which gave stability to the matrix, was 6. In order to establish which variables have a greater dependency and mobility, meaning the key variables, the matrix of indirect impacts shows the variables in a Cartesian Plane, where the Y axis is determined by the influence and the

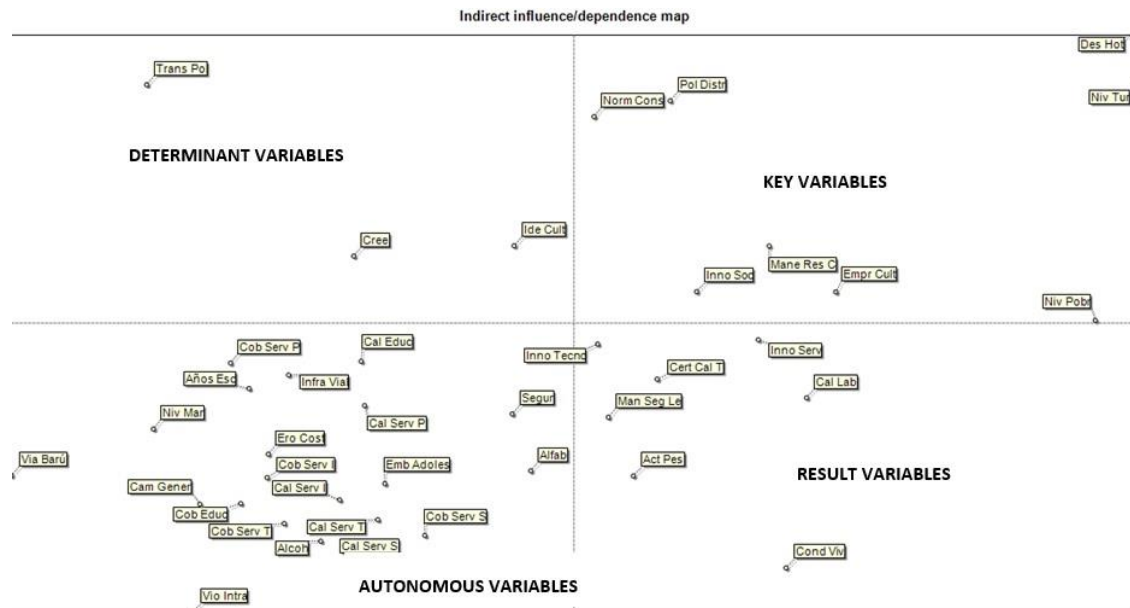


Figure 1. Matrix of indirect influence – variables

X axis is determined by dependency. The location of the variables will determine their nature. This way, we can classify the variables as follows: determinant variables, key variables, autonomous variables and result variables. Each variable performs a role in the territory. The results are presented in Figure 1.

4.3. Key variables

The key variables are those which present high influence and high dependency; they are found in Quadrant 1 in the Cartesian Plane. These are the variables, which energize all the system, since acting on one of them generates an effect on the others.

For Bocachica, the resulting key variables were the following:

- hotel development;
- touristic level;
- poverty level;
- management of waste and environmental contamination;
- cultural undertaking;
- social innovation;
- regulations on conservation of the village;
- policies of the district government.

It is worth noting that the recommendation for the selection of key variables, even when they are in

Quadrant 1 of the Cartesian Plane, is to select six (6), therefore, the variables with the greatest dependency and influence will be selected. These variables are hotel development; touristic level; poverty level; management of waste and environmental contamination; cultural undertaking and social innovation.

4.4. MACTOR analysis

The analysis of actors was performed with the MACTOR tool; It identifies the position of actors among them, and so, it identifies dominant actors, connecting actors, autonomous actors, submissive actors. The relations between the forces are calculated through the matrix of direct influences and the matrix of indirect influences. The calculations are based on the following conditions:

- 0: No influence
- 1: Actor A_i may question, in a limited manner, the processes or Actor A_j
- 2: Actor A_i may question the projects of Actor A_j
- 3: Actor A_i may question the missions of Actor A_j
- 4: Actor A_i may question the existence of Actor A_j

Figure 2 shows the results of the MACTOR analysis, as well as the MIC MAC analysis; the Cartesian Plane is represented by two vectors: the X axis represents the dependency, while the Y axis represents the influence. This way, the classification of the actors of Bocachica is evidenced as follows:

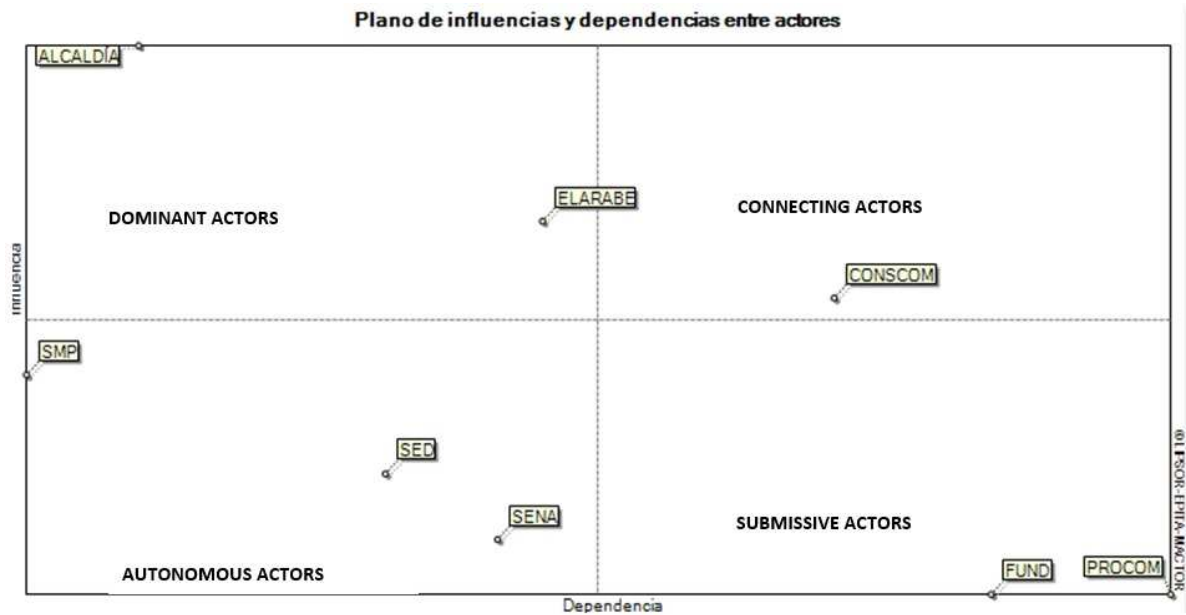


Figure 2. Matrix of indirect influence – actors

Dominant actors

Town Hall
 “The Arab” José Vicente Caro

Connecting actors

Community Council

Autonomous actors

Society of Public Improvement
 Secretary of District Education

Servicio Nacional de Aprendizaje (Colombian Public Institution focused on the development of programs of Professional Formation)

Submissive actors

Foundations
 Pro-Community Council

4.5. SMIC prob-expert analysis

According to the results above, obtained through the SMIC prob-expert analysis, it is possible to identify the scenarios, which may happen in the village of Bocachica. For this, three scenarios were taken: those with the greatest preponderance for the development of the village of Bocachica and on

Table 7. Hypothesis for the formulation of scenarios

Source: Elaborated by the authors.

Variable	Event	Horizon	Hypothesis for the future	Current situation
Social innovation	e1	2025	Stimulating social innovation through a constant program for the creation of socially innovating projects	There is no evidence of programs that allow formation in matters of innovation
Management of environmental waste	e2		Stimulating the distribution of waste in their respective trash cans through a program of semestral training on the management of environmental waste. Setting 300 trash cans in the different posts or corners of the village	There is no evidence of any kind of trash bin to classify garbage in the village
Cultural undertaking	e3		Stimulating cultural undertaking through a constant program for the creation of cultural projects, which highlights the village both inside and outside of it	There is potential for cultural undertakings but it must be exploited
Hotel development	e4		Increase in the amount of hotels in the village (two hotels)	Currently, there are youth hotels of sorts, some have good structures. However, they are not well consolidated
Poverty level	e5		Gas and water coverage of 100%	There is no water and gas coverage in the village; it is 0%
Touristic level	e6		Increasing the tourist quota, to achieve 30% of the total of tourists that visit Cartagena	The village is not exploiting its reservation areas, nor its potential for their development

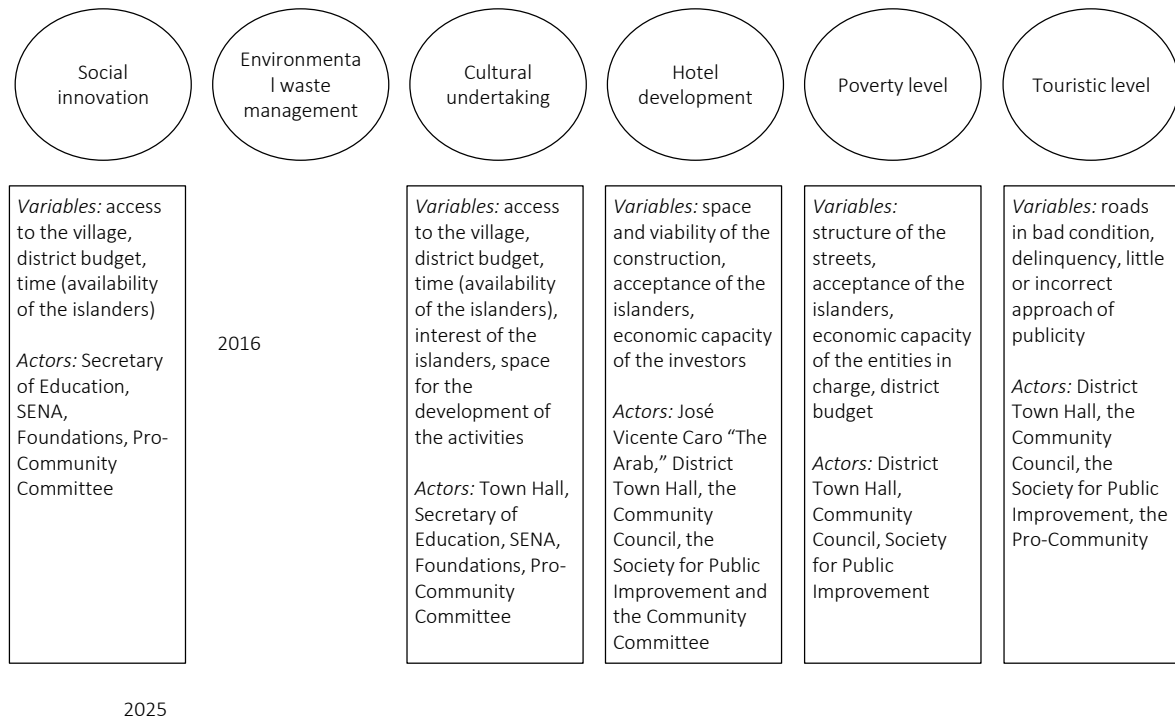


Figure 3. Tendency scenario: 0 0 0 0 0 0. Probability of occurrence of 40.30%>>

which the village and/or the District of Cartagena must focus to generate the progress: the tendency scenario, the desired scenario and an alternative scenario, which is the one that must be set as a target in case it is not possible to achieve the desired scenario.

4.6. Probability of disaster

Between 2016 and 2025, the village of Bocachica was not able to achieve its objective of improving the quality of life for its inhabitants and strengthening the development in this region. For the period mentioned above, it was not possible to achieve the maximization of social innovation or the stimulation of it through a constant program for the creation of socially innovative projects; the access to the village was complicated by the strong swell, which prevented the trainings to be carried out in a timely manner, interfering with the times established for the trainings (with those few who were interested). The interest of the islanders did not help with the consolidation of these processes; they excused themselves by saying that their activities always overlapped with the activities proposed by the short program organized for the consolidation of the social innovation in the village. The unavailability of the islanders reduced the interest of the Secretary of

Education to continue the process, which, among other things, had little budget for the development of the activities; the budget destined for this kind of activities was not enough for the consolidation of a permanent program, which allowed for the strengthening of social innovation in the village, which is why there was no strict continuity and, therefore, the loss of motivation of those few who were interested in training through the program.

Other determinant factors for this was that it was also impossible to carry out the necessary trainings to develop a program for the management of the environmental resources or for cultural undertaking; the Board of the Community Council did not carry out the necessary procedures before the competent entities, such as the SENA, the Secretary of District Education and/or different foundations, which allowed the development of the course. The inconformity of the inhabitants with the owners and investors of the new hotel facilities of the village prevented the development and conclusion of the hotel projects that were being carried out. Among other things, the gas and water infrastructure of the village, which began to be processed, ended up unfinished and was also a determinant for the projects not to reach a happy conclusion.

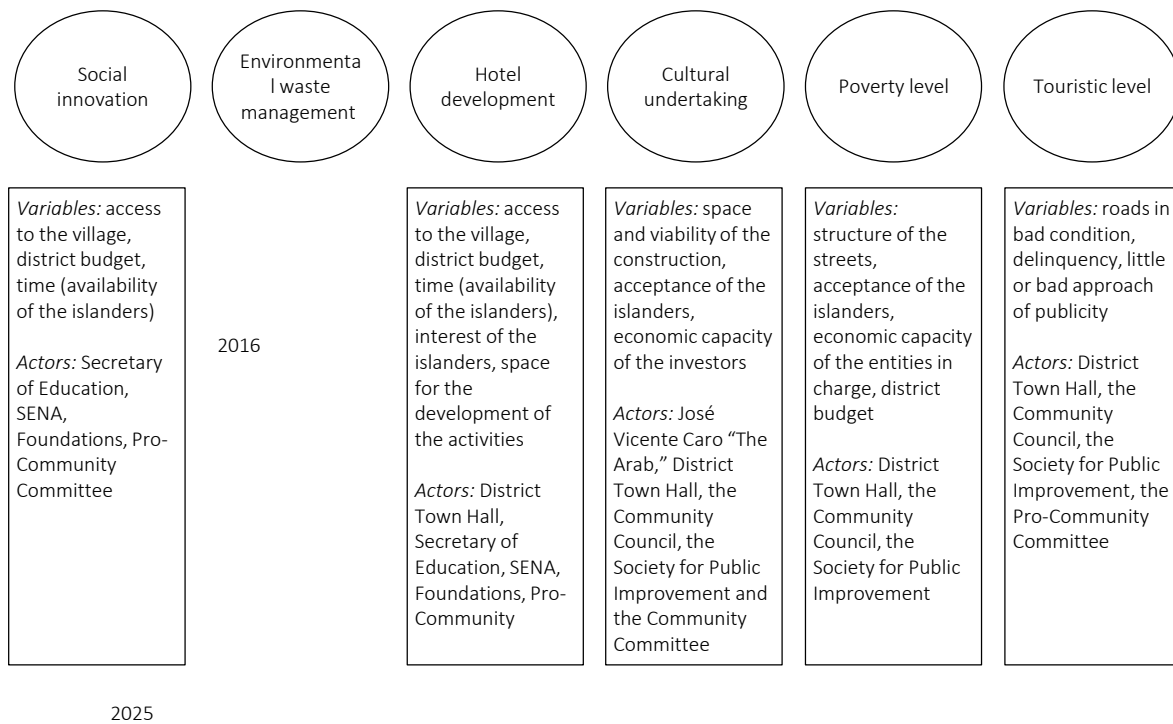


Figure 4. Desired scenario: 1 1 1 1 1 1. Probability of Occurrence of 11.30%>> The dreamed Bocachica

Likewise, the low efficiency of the district bodies and the few public policies focused on the development of the village prevented it from currently having home water and gas utilities. In a general manner, the panorama for Bocachica was not the best, given the different inconsistencies presented along the efforts for having a better territory, different factors affected the development of the village and sadly, today it cannot be said that Bocachica achieved the goals it had set.

Bocachica is a village characterized by being a territorial entity in constant growth and development, thanks to the efforts made in the consolidation of programs, which benefit the community and contribute to the objective of decreasing the poverty and improving the quality of life through projects, which promoted the development.

Achieving this was a hard and non-stop work, and the evidence of this is the start-up of the environmental and social innovation programs, "Cuida tu territorio" ("Take care of your territory") and "Innovacial," developed with the Town Hall and with entities such as SENA and a few foundations focused on each topic. The environmental program allowed to raise awareness in the inhabitants of the village who saw in the cleaning of the

village and in the care for the environment a possibility to attract more tourists, and, by the way, it was this along with the programs of the District Town Hall and the opening of the islanders to new hotels and the investment of groups of interests who saw an opportunity in the historical and environmental potential of Bocachica for attracting new tourists and for keeping regular tourists.

The program of cultural strengthening and strengthening of the cultural undertakings, supported by the Ley Naranja, aims to develop, promote, stimulate and protect creative industries, which allowed the consolidation of projects of cultural undertaking, and not only that, but also their expansion and opening thanks to the shows they performed in the new hotels who hired them to perform at parties and some events organized in these hotels. Without any doubt, this contributed to the increase of the income received by the islanders, and therefore, to the improvement of their quality of life. The decrease in the level of poverty was affected not only by the increase in family income, but also by the development of public policies in favor of the village and the plans of the government, which contemplated the installing of the networks to provide the basic utilities throughout the territory (which was achieved on

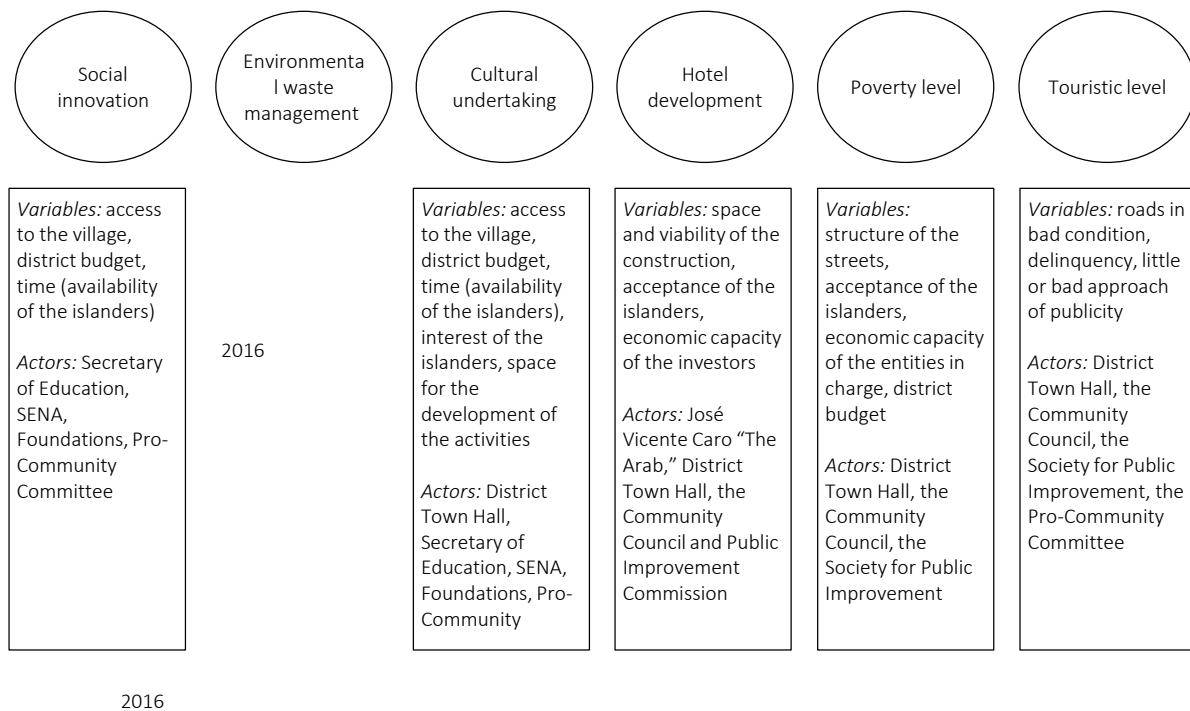


Figure 5. Alternative scenario: 1 0 1 1 1 1. Probability of occurrence of 5.60% >>

100% and work is still being done to improve the service). Additionally, public lighting alternatives were considered, such as solar posters, and transportation in the village was made easier.

4.7. Trying to do better

Between the year 2016 and 2025, Bocachica was not able to achieve its objective, despite all the efforts, which meant the support of the District Town Hall and of entities such as foundations, which are present in this territory. For the mentioned period, it was possible to strengthen some programs, such as the program of cultural undertaking and social innovation for the development of the village.

Unfortunately, the pertinent procedures were not carried out for placing the trash cans and for establishing the environmental program, and without doubt, this did not allow for a positive impact on the environmental situation of the village, which nowadays is not the best. However, although the points mentioned above were negative, there are things worth noting, which made Bocachica advance in some aspects. The start-up of the programs of cultural strengthening and the program of social innovation "Cuida tu Territorio" ("Take

care of your territory") and "Innovacial," developed with the Town Hall and with entities such as the SENA and some foundations focused on each topic. Additionally, investments were made and the conditions were correct for the construction of "luxury" hotels in the territory.

The program of cultural strengthening and strengthening of cultural undertakings, supported by the Ley Naranja, which aims to develop, promote, incentivate and protect creative industries allowed for the consolidation of projects of cultural undertaking, and not only that, but also their expansion and opening thanks to the shows they performed in the new hotels who hired them to perform at parties and some events organized in these hotels. Without any doubt, this contributed to the improvement of the income received by the islanders, and therefore, to the improvement of their quality of life. The decrease in the level of poverty was affected not only by the increase in family income, but also by the development of public policies in favor of the village and the plans of the government, which contemplated the installing of the networks to provide the basic utilities throughout the territory (which was achieved on 100% and work is still being done to improve the service).

In general, the perspective for Bocachica was not entirely good, but given the efforts made by territorial entities and by the Community Council, there were favorable conditions, which allowed the territory to grow on the topic of development. It must be noted that there is still much room for growth.

5. DISCUSSION

The relevant actors on the island development path must work on the common objectives in order to construct the ideal stage of territorial development, that is, to prioritize the tourist and hotel development in an inclusive way, contemplating the

community as the central axis for its. In this sense, it is important to create synergies that allow for the consolidation of progress for the community, which means that state authorities, educational establishments, and the community itself should complement each other in order to ensure the deployment of the island's economic potential. It is precisely at this perspective that another discussion appears regarding the way in which these latent economic capacities should be exploited, and it is, based on the comparative advantages that the island has, the duty of its actors to convert them into competitive advantages, which means that the management of the productive factors is key at the moment of promoting future stages in which territorial development is the premise of this.

CONCLUSION

The development consists of a complex process, a challenge, which requires the involvement of different important actors for the improvement of a territory. Futurology is consolidated as a method, which allows to propose and construct future scenarios that work as a guide for the development of public policies or plans of territorial development, and although in Bocachica, the perspective is not the best, since the tendency scenario shows that this village requires a strong commitment both from the population which inhabits the territory and from the administrative territorial entities. This research is projected as an exercise, which allows to diminish risks in the decision-making process to promote the development in Bocachica.

The development of the village depends, among other things, on the investment made on the quality of life (specially on decreasing the indicators of poverty) of the people, for which one must take into account the social innovation, the training in the management of environmental waste, the projects of cultural undertaking and the hotel development, including the strengthening of the opportunities for touristic growth, as an important contribution to the quota of sustainable human development and economic growth in the territory. The presence of entities such as the Town Hall is imminent, but the presence of the Secretary of Education is also a necessity, and that of the entities that serve as facilitators of workshops and education programs, as well as the presence of non-government organizations and of external funding for the development and consolidation of hotel and touristic projects that not only attract more tourists, but also provide the opportunity to generate bigger income for the natives or inhabitants of the territory.

ACKNOWLEDGEMENTS

The researchers are grateful for the institutional support of the Universidad Tecnológica de Bolívar in Cartagena de Indias, as well as the participation of teachers, residents of the island, members of the National Police who ensured the safety of the researchers, merchants and social leaders. Especially to the prospective experts Iker Ibarra Iñiqui and Darío Sierra, who collaborated to a great extent in this work.

REFERENCES

1. Aléan, P., A., Rodríguez, G., M., Acosta, M., R., & Madero, J. M. (2013). Integración territorial y acceso a servicios públicos: Construir puentes hacia el desarrollo local. In *Pobreza rural y desarrollo humano* (pp. 145-181). Cartagena, Colombia: Universidad Tecnológica de Bolívar.
2. Arteaga, R., & Insuasty, P. (2011). *Escuela taller Bocachica*. Universidad Católica Popular del Risaralda.
3. Balbi, E. R. (2014). *Construyendo el futuro: Método de MEYEP de prospectiva estratégica* (Manual del Método Oficial de Prospectiva de la Red EyE (Escenarios y Estrategia) en América Latina No. 4). Buenos Aires. Retrieved from https://archivo.cepal.org/pdfs/GuiaProspectiva/Balbi2014_Nvo-MEYEP_COMPLETO_final.pdf
4. Barquero, A. V. (2007). Desarrollo endógeno. Teorías y políticas de desarrollo territorial. *Investigaciones Regionales*, 11, 183-210. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=2500824>
5. Blumer, H. (1986). *Symbolic Interactionism: Perspective and Method*. University of California Press. Retrieved from <https://www.ucpress.edu/book/9780520056763/symbolic-interactionism>
6. Boisier, S. (2004). Desarrollo territorial y descentralización: El desarrollo en el lugar y en las manos de la gente. *Revista EURE*, 30(90), 27-40. <http://doi.org/10.4067/S0250-71612004009000003>
7. Caravaca, I., & González, G. (2009). Las redes de colaboración como base del desarrollo territorial. *Scripta Nova. Revista electrónica de geografía y ciencias sociales*, 13(289), 281-309. Retrieved from <https://idus.us.es/xmlui/handle/11441/43406>
8. Caravaca, I., González, G., & Silva, R. (2005). Innovación, redes, recursos patrimoniales y desarrollo territorial. *Revista EURE*, 31(94), 5-24. <http://doi.org/10.4067/S0250-71612005009400001>
9. Cárdenas, M. (2014). *Prospectiva. Clave del desarrollo sustentable* (RUTAFUTURO, Ed.). Santiago de Chile.
10. Chapman, A. (2004). *Análisis DOFA y Análisis PEST*. Retrieved from https://degerencia.com/articulo/analisis_dofa_y_analisis_pest/
11. Costamagna, P. (2009). Algunos desafíos para el Desarrollo Territorial en Argentina. *Tiempo de Gestión*, 5(8), 37-46. Retrieved from <https://www.semantic-scholar.org/paper/Algunos-desaf%C3%ADos-para-el-desarrollo-territorial-en-Costamagna/4129cd3a7883a69f11c137e2271dce4abc2247b9>
12. De Jouvenel, B. (1967). *The art of conjecture* (T. Publishers, Ed.). Publishers, Transaction.
13. Delgadillo, J. (2006). Dimensiones territoriales del desarrollo rural en América Latina. *Problemas Del Desarrollo. Revista Latinoamericana de Economía*, 37(144), 97-120. Retrieved from http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0301-70362006000100005
14. Espinosa Cuerto, J. O. (2006). La prospectiva territorial: Un camino para la construcción social de territorios de futuro. In *Siglo del Hombre Editores* (Ed.), *Región, espacio y territorio en Colombia* (pp. 301-337). Bogotá: Universidad Nacional de Colombia.
15. Gaviria, B., Aljure, E., & Castro, J. (2015). *Análisis prospectivo del ecosistema organizacional del mercado de Bazurto de Cartagena*. Universidad Tecnológica de Bolívar. Retrieved from <https://hdl.handle.net/20.500.12585/1373>
16. Godet, M. (1994). *From anticipation to action: A handbook of strategic prospective*. UNESCO. Retrieved from <https://www.amazon.com/Anticipation-Action-Strategic-Prospective-Future-oriented/dp/9231028324>
17. Godet, M., Durance, P., & Prospektiker (2007). *Prospectiva Estratégica : problemas y métodos* (Cuadernos del LIPSOR No. 20). Retrieved from <https://ru.scribd.com/document/326163989/Godet-M-y-Durance-P-2007-Prospectiva-Estrategica-Problemas-y-Metodos>
18. Godet, M., Monti, R., Meunier, F., & Roubelat, F. (2000). La caja de herramientas de la prospectiva estratégica. *Cuadernos de LIP*, 5. Retrieved from <https://es.slideshare.net/EderAbreu/la-caja-de-herramientas-de-la-prospectiva-estrategica-33064955>
19. Helmer, O. (1967). *Analysis of the Future: The Delphi Method*. Rand. Retrieved from <https://www.rand.org/pubs/papers/P3558.html>
20. Just Carrión, J. J., Gómez García, J. M., & Fernández Arufe, J. E. (2011). Economía social y desarrollo local/rural. Un análisis de sus sinergias. *Estudios de Economía Aplicada*, 29(1), 189-222. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=3656083>
21. Massey, D. (1986). Spatial Divisions of Labor: Social Structures and the Geography of Production. *Contemporary Sociology*, 15(3), 352-353. <http://doi.org/10.2307/2069995>
22. Miklos, T., & Tello, M. E. (1991). *Planeación prospectiva: una estrategia para el diseño del futuro*. Limusa. Retrieved from [https://www.biblio.uade.edu.ar/client/es_ES/biblioteca/search/detail-nonmodal/ent:\\$002f\\$002fSD_ILS\\$002f0\\$002fSD_ILS:248947/ada?qu=PLANIFICACION&ic=tru e&ps=300](https://www.biblio.uade.edu.ar/client/es_ES/biblioteca/search/detail-nonmodal/ent:$002f$002fSD_ILS$002f0$002fSD_ILS:248947/ada?qu=PLANIFICACION&ic=tru e&ps=300)
23. Mitma, J., Pinzás, A., & Contreras, C. (2009). Prospectiva estratégica al sector textil del distrito de San Juan de Lurigancho. *Producción Y Gestión*, 12(2), 40-49. <https://doi.org/10.15381/idata.v12i2.6118>
24. Mojica, F. J. (2006). Concepto y aplicación de la prospectiva estratégica. *Revista Med*, 14(1), 122-131. Retrieved from <https://pdfs.semanticscholar.org/7800/89364832dbe197878bec1fb40e973d4cabb4.pdf>

25. Moral, M. A., & Jurado, B. E. (2006). Desarrollo territorial y economía social. *CIRIEC-España, Revista de Economía Pública, Social Y Cooperativa*, 55, 125-140. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=2057375>
26. Pedros, D., & Gutierrez, A. (2012). *Análisis del entorno*. Madrid, España: Ediciones Díaz de Santos.
27. Salas-Bourgoin, M. A. (2013). *Prospectiva territorial. Aproximación a una base conceptual y metodológica*. Mérida, Venezuela: Universidad de los Andes. Retrieved from https://books.google.com.ua/books/about/Prospectiva_territorial.html?id=2960DAEACAAJ&redir_esc=y
28. Sandoval, C. (2014). Métodos y aplicaciones de la planificación regional y local en América Latina. *Desarrollo Territorial*, 17. Retrieved from <https://www.cepal.org/es/publicaciones/36967-metodos-aplicaciones-la-planificacion-regional-local-america-latina>
29. Saquet, M. A. (2013). El desarrollo en una perspectiva territorial multidimensional. *Movimientos Sociais E Dinâmicas Espaciais*, 2(1), 111-123. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=5842560>
30. Sen, A. (2000). *Desarrollo y libertad*. Desarrollo como Libertad. Retrieved from https://www.palermo.edu/Archivos_content/2015/derecho/pobreza_multidimensional/bibliografia/Session1_doc1.pdf
31. Toscano Sánchez, F. (2000). Desarrollo Local y Economía Social. In E. Pérez Ramírez, B. & Carrillo Benito (Ed.), *Desarrollo local: manual de uso*. ESIC.
32. UNDP. (2001). *Política corporativa del PNUD para los informes de Desarrollo Humano (NHDRs)*. Retrieved from <http://www.dhl.hegoa.ehu.es/ficheros/0000/0042/PoliticaCorporativaInfoNacionales.pdf>
33. Vergara, J. C., Fontalvo, T. J., & Maza, F. (2010). La planeación por escenarios: Revisión de conceptos y propuestas metodológicas. *Prospect*, 8(2), 21-29. Retrieved from https://www.academia.edu/34526642/La_planeaci%C3%B3n_por_escenarios_Revisi%C3%B3n_de_conceptos_y_propuestas_metodol%C3%B3gicas_Scenario_Planning_Review_of_concepts_and_methodological_proposals