

Territorial Planning in Colombia

Angela Andrade

Subdirector of Geography. Instituto Geográfico Agustín Codazzi. Bogotá. Colombia

1. Abstract

The process of territorial planning in Colombia has had a relatively short history, of approximately twenty years. It has been characterized by divergent corporate interpretations and approaches, almost always limited to the preservation of natural resources. Several studies have been carried out in different areas of the country, all of which have contributed in some manner to the formulation of plans for the use of lands located in the immediate vicinity of water basins. However, in most cases, these studies have been merely theoretical efforts.

The type of territorial planning we are referring to has almost always been based on exhaustive diagnoses, usually of a parametric and descriptive character, about the structure of the territory, while the dynamic aspects have seldom been emphasized. On many occasions the evaluations related to alternative uses of the territory have been based on the application of the seven agricultural types identified by the United States Department of Agriculture, and for this reason they have been subject to the restrictions inherent to this classification system. Neither have these studies included the participation of civil society in the processes of research and taking of decisions. Because of this, their real applicability as an instrument for planning has been limited.

Moreover, these approaches toward the issue of territorial planning² have been marked by a lack of the normative and legal developments, which should serve as support for the management of territorial entities, thus reducing the possibilities of legitimizing such management.

Since the publication of the Constitution of 1991, territorial planning has acquired a strength parallel to the process of decentralization. The transference of competencies and national resources to departments and municipalities has opened new perspectives for development, as well as possibilities for the definition of a new territorial structure through the consolidation of new territorial entities: regions, provinces, and indigenous territories. The Constitution has the basis for the definition of territorial planning, as well as for the process through which it must be carried out. It refers to the adequate assignment of normative competencies to the territorial entities, the distribution of competencies among these entities and the Nation, the requirements for the formation of new departments and for the transformation of a region into a territorial entity, and the requirements for the creation of indigenous territorial entities. Additionally, the Constitution establishes a series of guidelines which should direct development. They are, among others, the recognition and protection of the country's ethnic and cultural diversity, the management and sustained use of natural resources, the implementation of forms of democratic

participation, and State intervention in processes directed toward rationalization of the economy. These guidelines have the purpose of ensuring harmonic and equitable development, in such a way that the opportunities, goods and services that the country requires are guaranteed, at the same time that political, economical, social, and environmental strategies which ensure the adequate performance of territorial entities, are carried out.

Based on these precepts, several sectors began the formulation of a series of conceptual formulations that in the end enriched the perspective with which the whole process was to be assumed. These valuable contributions gave the process a democratic and participatory character, successfully channeled through the Commission de Ordenamiento Territorial (Territorial Planning Commission), whose Technical Secretary's Office was performed by the Instituto Geográfico Agustín Codazzi (IGAC). This commission defined the concept of territorial planning as "a series of actions concerted with the purpose of guiding the transformation, occupation, and use of geographic spaces, which seeks their socioeconomic development and takes into account the needs and interests of the population, the potential of the territory that is being considered, and harmony with the environment"³.

After four years of research, IGAC has finished three basic guidelines for territorial planning, at departmental, municipal and urban level.

Nowadays these guidelines are very useful as the new law of territorial planning obligates Municipalities to develop a Territorial Plan during a period of sixteen months.

2. Background

The process of territorial planning in Colombia has had a relatively short history, of approximately twenty years. It has been characterized by divergent corporative interpretations and approaches, almost always limited to the preservation of natural resources¹. Several studies have been carried out in different areas of the country, all of which have contributed in some manner to the formulation of plans for the use of lands located in the immediate vicinity of water basins. However, in most cases, these studies have been merely theoretical efforts.

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This concept later acquired a more integral perspective, directed towards developmental planning, a term which is understood as "a process that includes a series of concerted actions undertaken by the Nation, territorial entities, and the administrative territorial divisions, in order to adjust the Nation's political-administrative divisions according to the precepts of the Constitution, to direct the instruments required in order to govern the territory under its jurisdiction, and to regulate the occupation and use of the land according to the strategy for social, economic, and cultural development, in harmony with the environment"⁴.

Sharing this vision, other elements were incorporated into the process of territorial planning, which give it the characteristics of an instrument for the planning and management of land, and which involve the strategies for action and intervention on the territory, besides political and administrative elements.

Territorial planning is, then, “**The state policy that allows the nation’s appropriate political-administrative organization, and the spatial design of social, economic, environmental, and cultural policies of society, proposing an adequate standard of living for the population and the conservation of the environment**”⁵.

The current government, with the aid and recommendations of the Commission, prepared a new project for the organic law for territorial planning. The basis of this proposal rests on a series of general principles and a set of elements that were not debated in the legislative corporation. The project complements the territorial norms, particularly in the topic related to the provinces, regions, and indigenous territories, as well as the principles for the distribution of competences. It specifically points out that “the goal of territorial planning is to strengthen the unity of the Republic of Colombia through the recognition of the autonomy of its territorial entities, and through the administrative decentralization, participatory democracy, and social pluralism”⁶.

3. The Concept

It is evident from the definition adopted by the IGAC that territorial planning is not only useful for establishing the Nation’s political-administrative organization, but that it also serves to direct development planning from a holistic, prospective, democratic, and participatory perspective. It is *holistic* because it considers territorial problems from a global point of view, and it involves, within a spatial perspective, economic, social, cultural, and environmental aspects that have traditionally been treated only from a sectoral perspective. It is *prospective* because it formulates long-term guidelines and it serves as a guide for regional and local planning. It is *democratic* and *participatory* because it is based on the principle of working in concert with the citizens in the decision-making process.

As an instrument for planning, territorial planning contributes approaches, methods, and procedures to this process, which allow to bring nearer the development policies and the particular problems of a territory. In this sense, a territory is understood as a social space that a population identifies as its own, that is, it ceases to be a mere receptacle for State action to become an element that integrates and structures goals, policies, and public and private actions oriented towards the improvement of social well-being. This approach strengthens decentralization, both because of its coordinative and its integrative capacity.

4. Normative Development

The legal development of territorial planning in Colombia is still incipient. There is no normative gradation according to the territorial levels, and what is more serious, there are contradictions among the laws and decrees that by nature should complement each other. There is no unity of criterion in the norms that rule over the exercise of institutional tasks, and no compatibility of competences.

The difficulty to determine the significance and scope of the process originates in the Constitution itself, “since it did not formulate a taxative enumeration of organic territorial topics, which are therefore dispersed in the articulation of the Constitution, and, in some cases, not in an explicit manner”⁷.

It is important to point out that the IGAC was the first national public entity that incorporated into its mission the support for processes related to the management of territorial entities, focusing on the conceptual and methodological development⁸.

At the moment, territorial entities have some legal instruments that enable them to act. Among these we can mention Law No. 136 of 1994, which dictated the norms for the modernization of the organization and functioning of municipalities, the general principles for the exercise of competences, the participation in the Nation's current income, the categorization of municipalities, and the citizens' participation and its relation to the development of the municipality. It also confirms a basic function of the fundamental entity of the State's political-administrative division, which is precisely that of organizing the development of its territory, to promote civil participation, to plan economic, social, and environmental development, and to watch over the management of natural resources and of the environment.

The Organic Law of the Development Plan (Law No. 152 of July 15, 1994) establishes the general principles of planning: autonomy, disposition of competences, coordination, priority of social public expenditure and the harmonic development of regions, and the authorities and instances of the National Planning System. It also determines the proceedings for the formulation, approval, execution, and evaluation of the development plan, both of the Nation and of territorial entities. This law is the only normative development that at the moment explains the need and obligations of territorial entities, particularly municipalities, in matters related to the formulation and execution of their respective land-use plans⁹.

Within the process, the environmental dimension is integrated with the territorial one in three areas: conceptual and methodological, normative, and instrumental. In the second of these aspects, the country shows a significant advance in the development of an environmental policy and in the organization of the National Environmental System. A proof of this was the expedition of Law No. 99 of 1993, by which the Environment Ministry was created. The articulation of land-use planning is brought into conformity by some of the functions of the Ministry, among which the following can be mentioned:

- To formulate the environmental policy and establish the rules and criteria of environmental management for the use of the territory.
- To regulate the general conditions for the use of natural resources.
- To prepare, with the aid of the Departamento Nacional de Planeación (National Planning Department- DNP), the plans, programs, and projects related to the topic of environmental management of the territory, which must be incorporated into the strategic part of the National Development Plan.
- To issue and update the zoning statute for the adequate use of the territory for its appropriate management, and the national regulations about the use of the land.
- Additionally, to establish that the municipalities and districts must dictate, within the limits determined by the Law, the rules and superior dispositions, the norms for the municipalities' land management, and the regulations related to the use of the land.
- To assign the regional autonomous corporations (CAR) the coordination of departments, municipalities, and other entities of the National Environmental System, for the formulation of plans, programs, and projects for environmental development, and protection of the environment and renewable natural resources.

- Subject to the principles of regional harmony, normative gradation, and subsidiary rigor, to coordinate the exercise of functions in environmental matters that correspond to territorial entities (departments, municipalities, districts, and indigenous territories, as well as regions and provinces that by Law are considered as territorial entities), and large urban centers.

On the other hand this same Law, in its 65th article, stresses the role of municipalities and districts that have a special constitutional rule in environmental matters, and gives them power to dictate, within the limits determined by the Law, the rules, superior dispositions, norms for the municipality's land-use planning and the regulations pertaining the use of the land. This concept is compatible with Laws No. 136 and 152 of 1994, which evidences and reinforces the municipality's responsibility as an agent in the land-use planning process.

The departments must also count with the instruments that will allow them to supply guidelines, orientations, technical support, and aid to the municipalities. This guiding framework, in accordance with what is determined in the organic law project of land-use planning, must be accomplished through the formulation and execution of land management plans. Such a framework will become, both for the departments and the municipalities, the main instrument for managing territorial development, and a guide for the taking of decisions in processes related to the use and occupation of territory.

Other fundamental normative instruments for the process of land-use planning are:

- Law No. 9 of 1989 on urban reform, which points out the criteria for the location of activities in urban areas. It also regulates the way in which this space must be occupied, as well as the use for which it can be destined. It also supplies the mechanisms for the formulation of plans and rules pertaining the use of the land at the municipal level. This law has been recently reformed (Law 387 of 1997). It defines competences and regulations for land use planning at national, departmental and municipal level. Municipalities have to present during a period of sixteen months a land use plan, and the departments have to co-ordinate these plans and the develop an specific plan for the department itself.
- The Departmental Regime Code (Decree No. 1222 of 1986), which supplies the basis for planning and the exercise of departmental functions, and for the coordination of national functions.
- The organic law project for land-use planning compiles in an able manner the basic aspects of the land management process. Among them we can mention the distribution of competences among the Nation and territorial entities, as well as the fundamental principles for their exercise. In what relates to land management as a planning instrument, the law project establishes the "competences in matters of land-use planning". This project includes topics that no doubt represent a breakthrough for Colombia. In summary, the project is made up of:
 - General dispositions: the content of the law, the goals of land-use planning, the autonomy of territorial entities, and the determination of territorial, administrative, and planning entities.
 - The principles that rule the exercise of competences, as well as the normative and administrative competences in matters related to the lending of services and land-use planning.
 - The mechanisms needed to reconcile conflicts about competences.

- The nature, definition, constitution, functions, and relations of territorial entities (not including those matters already regulated in the case of municipalities and departments, and developing the matters related to new territorial, administrative, and planning entities).

As mentioned above, the topic of the project that refers the most to the understanding of land management as a planning instrument, is that which establishes the competences in matters related to land-use planning. These competences determine the global scope of a national land-use planning policy, and the general goals of the land management plans in the case of departments and municipalities.

In this context the *Nation's responsibility* is to formulate the general land management policy in matters of national interest, providing guidelines and directions for the departments and municipalities. This policy includes:

- protection of national park areas and other ecosystems of strategic interest
- identification and location of large infrastructure projects
- zoning and the determination of the general types of land use depending on their fitness, their biophysical, sociocultural, and economic potential and limitations, as well as their productive capacity (in accordance with the guidelines for national environmental policy and what has been established by Law No. 99 of 1993)
- limitations and prohibitions of land use in areas assigned for security and defense
- zoning and determination of management strategies for areas that are threatened by natural phenomena and the policy for human occupation of vulnerable areas
- guidelines and policy for urban development, the supply and distribution of public services and social infrastructure in an equitable manner in the regions
- protection of areas of historical and cultural importance, as well as other topics related to land-use planning at a national level.

The *department's responsibility* is to: formulate, carry out, and evaluate its respective land management plan, in accordance with national territorial policies, and considering the measures taken or foreseen in the municipalities of their jurisdiction. The latter is to be done with the purpose of ensuring the department's integral, equitable, and participatory development, the functionality and spatial efficiency of these activities, the territorial projection of sectoral policies, the progressive improvement of the living standards of the population, the construction of competitive advantages, and the integration of productive sectors within national and international economic dynamics.

Another one of the department's tasks is the distribution and idoneous regulation of activities and land uses of the territory it covers, both urban (city system) and rural, by means of the design and application of guidelines and directions for the location of roads, communications, and basic social and assistential services. It must also provide adequate space for environmental infrastructure, prevention and assistance in the case of natural disasters, social equipment, and ensure industrial and agricultural development. The plan must establish the parameters for the use and occupation of land according to its environmental, socioeconomic, and cultural potential and limitations, in harmony with the goals of sectional development and according to the interests of the community. This will help to reduce the inequalities in municipal development, integrate and guide sectoral

departmental plans, municipal plans, and those of metropolitan areas and indigenous territories, according to regional and national guidelines and strategies.

The *municipality* must formulate, execute, and evaluate its respective land use plan, in harmony with national policies and departmental plans, with the purpose of planning and guiding the actions that must direct and regulate land use and occupation, both urban and rural, on a short, medium, and long terms, and identifying the land's potential, its limitations, and environmental, socioeconomic, and cultural conflicts.

The municipal plan must create a strategy for the optimization in the use of land. Through sectoral plans, it will explore a series of alternatives for the functional integration of the sectors of the territory. The purpose of this will be to foresee and design urban growth and development in a manner that is in harmony with rural development, to propose and implement alternatives for land distribution for investment projects in the development plan (with the purpose of promoting the accomplishment of real and effective equity), and to identify the spaces, activities, and strengths that could promote and open and integrated process of competitiveness and productivity. The plan must also include the identification of zones under natural threat and vulnerable settlements, the areas reserved for protection and conservation of the environmental patrimony, the types of agricultural, cattle, and industrial uses, as well as those reserved for physical and social infrastructure.

Territorial regulation requires precise methodological elements that must help to overcome the deficiencies in institutional coordination, assigning clear roles and fields of actions to the different agents. Because of this, it is extremely important to create legal instruments that define the formulation, approval, execution, and evaluation of land use plans, both for the departments and municipalities. At the moment there are five such legal instruments.

5. The Goals of Territorial Planning

Territorial planning goals are among the priorities established by the Political Constitution:

- To induce the Nation's political-administrative reorganization within a unitary regime, as a basis for the accomplishment of autonomy for the territorial entities, decentralization, and strengthening of democratic participation (Article 1, Political Constitution).
- To contribute to the protection of the Nation's ethnic and cultural diversity (Article 7, Political Constitution).
- To supply strategies to stimulate an equitable territorial development, which will result in a better spatial and structural distribution of social well-being (Articles 65 and 334, Political Constitution).
- To promote administrative and institutional coordination, as a basis for a solidary and coherent planning, both vertical and horizontal (Article 288, Political Constitution). This diminishes unnecessary efforts and duplication of functions, at the same time that it optimizes the flow of information in such a way that each territorial level will consider in its actions the measures taken or foreseen at higher and lower levels.
- To promote the organized distribution and location of activities and uses of the land, in harmony with the environment (Articles 79 and 80, Political Constitution, and Law No. 99 of 1993).

At the moment, most of the research undertaken by the IGAC is devoted to the fulfilment of this last goal. The emphasis is placed on methodological development, which gives support to territorial entities. This goal is based on the following aspects:

- The guiding and planned regulation of the processes of land use and occupation (plans for the use of the earth and soil). The definition of alternative uses is based on the concept of “optimal use of the land” (agricultural, forest, cattle, urban, industrial, etc.) which is established through the diagnose and analysis of present use, and the evaluation of the potential of the land, and the social and natural limitations that constrain its use. The optimal or preferred use that is suggested for the territorial units must be ecologically sustained, viable from a social and cultural point of view, and politically acceptable.
- The consultation with representatives of the population is of extreme importance, since it allows a better view of territorial problems and of the future goals, and it also allows to confront the alternatives with the inhabitants’ expectations.
- The political will is expressed in the degree of acceptance of the different alternatives for the use of the land by the different instances of power (public and private), which allows to understand their political viability.

6. Fundamental Territorial Planning Strategies

Territorial planning involves three basic strategies: planning the use of the land, the accomplishment of spatial equilibrium in projects with social and economic investments, and the optimal functional and administrative organization of the territory.

Planning the use of the land is a process by which the optimal uses are selected, considering the biophysical, technological, social, economic, and political reality in a particular region or area. The main goal is to influence, control, or direct changes in land use, in such a way that it is used in a more beneficial way, while the quality of the environment is maintained, and the conservation of natural resources is promoted.

Territorial planning is aimed at indicating and proposing sustained alternatives for the use of the environment, by identifying plans, programs, and projects in their spatial and temporal context.

Land use includes a series of activities undertaken by humans in a specific area, under certain technological, social, economic, and cultural conditions. It includes agricultural, cattle, industrial, forest, conservationist, urban, and recreational activities, among others.

According to the level of approximation of the studies, land use can be contextualized at different territorial levels: the department, the municipality, the farm, etc. Moreover, land users may be peasants or unions, such as sectoral production unions, entities in charge of the administration of natural parks, or the administration.

The spatial equilibrium in projects that involve social and economic investment is based on analysis, evaluation, and spatial modeling of the socio-economic problems of the territory, in order to detect those critical areas that require priority attention from the State.

The optimal functional and administrative organization of the territory is founded on the search for a structure of spatial relationships (expressed through functional links of the city-country, urban-regional, etc., types). They accomplish an equilibrium between the population's possibility of access to the benefits and services, market, employment, etc., which in turn favor territorial governability and competitiveness.

7. The Land Use Plan

7.1 Definition

The land use plan is the instrument by which departments and municipalities must plan the use of their territory and guide settling processes.

Because of its integral, participatory, democratic, and prospective character, the plan must articulate space both in the sectoral levels, through the territorial projection of environmental, social, cultural, and economic policies, as well as through aspects related to the use and settlement of land. The plan must be accompanied by a precise diagnosis of the main conflicts and problems generated by the use and settlement of the territory, its opportunities and aptitudes, and a series of alternatives, either for the solution of these difficulties, or for the optimal use of its possibilities.

The plan, as a rationalizing instrument for the taking of decisions in processes related to the use and settlement of the territory, proposes a strategy for the environmental, economic, social, and cultural development. This proposal is expressed in a series of activities and uses to be located and formulated by the territorial entity, in relation to others of its same level, and according to the coordination principle, the guidelines from upper territorial levels, and the actions foreseen or taken by lower levels.

The plan must also contain a concerted proposal for the organized distribution of activities in the territory, taking into account its potential, limits, and conflicts, as well as its improved functional organization and the possibility of assigning multiple uses to it.

7.2 Goals Of The Plan

The goals of the plan will be formulated according to the policies and strategic goals formulated by the development plan, establishing the problems, opportunities, and goals for each territorial entity. The main goals are:

- The formulation of a policy for the municipality or department for the use and occupation of the territory, according to the strategic goals of the development plan, and integrating the different sectoral plans.
- The formulation of a concerted proposal for the distribution and regulation of land uses, and the functional location of activities and infrastructure, in such a way that the utilization of the potential, and the mitigation of conflict and impact on the environment, are ensured.
- The proposal and implementation of the necessary measures for the solution of conflicts relative to the use of the territory, which determine the degree of consolidation of development (urban and rural).

- To establish a normative framework for the control and regulation of the actions and uses foreseen in the plan, and also to determine the management mechanisms that will allow the administration (from the department and municipality) to periodically adjust the goals and actions that have been programmed.

7.3 Priority topics for the plan

- Mechanisms and strategies that will ensure the participation of civil society in the formulation, execution, and evaluation of the land use plan.
- Equitable and efficient distribution of development opportunities, which will favor a larger access to public services managed by the State, as well as to housing, health, education, etc.
- The proposal of several alternatives for land use, based on an evaluation and making them compatible with social interests and expectations, supported by technical criteria, and criteria of political viability.
- The establishment of an information system that will allow to permanently update and monitor the land use plan.

7.4 Area of applicability

The plan will be applied to the whole municipal context. However, there will be a practical differentiation that will provide the necessary elements for the identification of its emphasis and contents. This operative distinction refers to the determination of urban and suburban areas, which, essentially correspond to the city and its immediate periphery. The land use plan of a main city must be perfectly consistent with that of its municipality which, in turn, must complement and be compatible with the departmental plan.

7.5 Validity

The land use plan must foresee actions for the short, medium, and long term. In the first case, it will act toward the solution of the most acute difficulties which require immediate attention, such as the identification and evaluation of natural threats. On the medium term, it will foresee the obtention of benefits from the utilization of detected opportunities. On the long term, it will design an image-goal for the desired development based on the prospection of alternative options that will allow to sustain conditions and levels of life that are adequate for the population. In general, the recommended periods of validity are ten or fifteen years for the long-term, during which they will receive feedback from cyclic prospectations of five to ten years (medium term), and finally, from short term actions of three to five years.

7.6 Legal context

The legal context refers to the series of norms and legislative formulations that support the land use plan. An in-depth analysis of them is not necessary here, although it is relevant to mention the most important points related to the plan. Among them we can mention Laws No. 152 of 1994, No. 99 of 1994, No. 09 of 1989, and No. 136 of 1994, which provide the judicial support for the plans designed by departments and municipalities.

Therefore, it is pertinent to undertake a review of the departmental ordinances and municipal agreements that refer to the issue of land use planning.

7.7 Methodological synthesis

The land use plan is a planning instrument of technical, political, and administrative character. It is made up of four phases that are developed in an iterative manner: *diagnose*, *evaluation*, *prospection*, and *implementation*. It is important to point out that the three last stages correspond to a technical moment in the process.

7.8 Territorial diagnose

It is the identification and evaluation of conflicts and potentials of the different components and dimensions of the territory (from the point of view of biophysics, land use, existing productive and extractive systems, socioeconomic conditions, functional organization of space, etc.). The territorial diagnose will be guided by the policies, plans, and programs formulated by the territorial entity, as well as by the norms and, in general, the judicial context that supports the plan (Law No. 09 of 1989, Law No. 99 of 1993, and Law No. 152 of 1994, among others).

The diagnose contains a spatial synthesis and a hierarchy of the conflicts and viable development opportunities in the territory, which require the community's participation. This phase seeks to accomplish an integral understanding of the territory's processes and structures (biophysical, social, economic, cultural, and administrative), as well as the causes and effects of the actions recorded in it.

In general terms, the diagnose is directed to the understanding of urban reality, and to identifying the strengths, weaknesses, opportunities, and threats caused by the territorial development of cities. This phase also allows for the analysis, synthesis, evaluation, and in most cases, spatialization of the main factors of change, that is, those agents of territorial development that, given their structural importance, have an effect on the construction of the alternatives.

In this sense, the diagnose contributes to the explanation of territorial structures and their dynamics, starting from a situational analysis which contemplates a synthesis of the problems and options of spatial development.

In the diagnose, the analyses and syntheses directed toward the identification and determination of the features of key territorial components, are carried out in a cyclic and iterative manner. These elements manifest themselves in the biophysical, social, economic, cultural, functional, institutional, and political conditions of the city.

The results of the diagnose will guide the prospective phase and will aid in the design of strategies and policies for the planning and regulation of land use. It will also permit to make the activities in the territory compatible, allow for the development of sustained processes of urban growth and expansion, the implementation of measures for environmental management, the provision of the necessary public services, the location of investment, the utilization and construction of competitive advantages, etc.

Within this phase, the analysis and synthesis of territorial structures, in a time-space dimension, helps to explain and value the present situation through the use of territorial models and their tendencies of change (social, economic, and political, as well as

environmental, functional, cultural, and institutional). The results of the diagnose are expressed in a series of territorial synthetic and spatial models.

It is convenient to point out that the diagnose is determined by civil participation, which is decisive for the identification and appraisal of problems, as well as for the determination of alternatives that will help solve them.

From a methodological point of view, this phase helps to determine the plan's emphasis, validity, and area of application. It also allows to define, in a preliminary way, the series of agents involved.

In the diagnose, the recognition and integration of development goals designed for both the municipality and department, become particularly relevant. The plan will begin to become socially viable with a survey of the expectations and aspirations of the population, but, most important of all, this will help to identify the interests, and the complementary, and divergent positions of the diverse groups of agents. For this reason the primordial task is to determine the series of actors or protagonists of the land use plan.

Another basic element of this stage is the examination of the legal context, and, in general, the legal norms that provide support to the plan. This stage also requires the preliminary recognition of the existing problems that affect territorial development, as well as an appraisal of the existing information in order to detect its coverage, scale, updating, formats, conditions under which it was developed, etc.

7.9 Alternative proposal and evaluation

Based on the synthetic results of the diagnose, and with the support of cartographic techniques of remote sensor images, geographic information systems, field work, the consultation with the agents, and conflict analysis, the potentials and restrictions for the use of the territory, all of which will be conveniently categorized and hierarchized, a proposal will be formulated, preferably in a concerted way, for the alternative uses of the land and the direction of urban settling processes, after determining the reception capability of the available space. The process of making compatible the territory's potentials and restrictions with the social expectations, institutional viability, development goals, and present and future needs of the city that are derived from these aspirations, will be carried out during this phase of the process.

During the evaluation it is possible to obtain the perceptions of agents with regard to territorial development, validating in this way the technical interpretations and making the different approaches compatible.

This phase has a special significance for the methodological process, since it may make viable, or on the contrary restrict, the development of different alternatives. Viability can be evaluated based on criteria of sociocultural acceptance, competitiveness, environmental sustainability, and political, administrative, and institutional viability.

The uses and activities to be evaluated will be those that result from the analysis of social expectations and development goals (we obviously refer to those that have been identified for the solution of conflicts that were detected in the diagnose or for the utilization of potentials).

The proposal and evaluation of alternatives are two iterative stages, that is, they provide each other with feedback in order to converge in options that can be adjusted with a certain flexibility. Evaluation is a multidisciplinary and multisectoral exercise that considers the advantages and disadvantages of each alternative, for which purpose it must include a series of criteria for evaluation, and methods for ponderation and taking of decisions.

7.10 Territorial prospective

Perhaps the most complex phase in the land use planning process is the prospective one. It is a stage in the plan which requires changes that affect the creative capacity, equanimidad, consensus, and particularly, it requires a sound technical knowledge about the results, both of the diagnose and of the evaluation.

The present period is characterized by a large variety of changes that affect all the spatial and temporary dimensions of a territory. Not only do these changes alter the economies, but also the environment, society, and culture. In fact, the knowledge about the structural evolution of a society proves to be decisive, which is something that cannot be accomplished through the application of partial, sectoral, and determinist methods for the prediction of future behavior. Thus arises the prospective phase, based on research about possible futures, and conceived as a stage previous to the formulation of strategies or policies which require immediate action due to their medium and long-term approach ¹⁰.

The complexity and integrality that is inherent to the land use planning process requires a methodology powerful enough for the global analysis of the socioeconomic, cultural, environmental, and political context, as well as of its future evolutions. This will allow the corresponding instances to carry out a better and more responsible kind of management.

The limited classical methods to predict the future (based exclusively on past data and incapable of integrating qualitative parameters or parameters that are difficult to quantify) are radically different from the prospective alternative, since the latter is an idoneous instrument to project a future situation based on the modification of the present one. Thus, the prospective phase implies a reflection about actions, and it constitutes a key element for the understanding and explanation of change.

In Colombia the processes related to the use and occupation of the territory have been characterized by great dynamics and uncertainty. At the present moment, these characteristics respond mostly to external factors or changes related to the open market in the context of a global economy. Traditional models for the utilization of resources, sociocultural patterns of organization and the types of development promoted by the different governments have also obviously exerted a notable influence. This context of *risk for the rupture of tendencies* requires the design of a future strategy to be undertaken by planning instruments, for which purpose the prospective phase must present a proposal of the most factible options, and with a larger effort, the most desired, or alternative options.

The land use plan provides the administration with the tools that enable it to make decisions related to the future development of the territory, and, simultaneously, it facilitates its actions on priorities and problems, in such a way that they may be overcome and that the potentials of the territory become known and utilized.

The prospective phase rests on the observation of future behavior of the identified alternatives. For this purpose it has the support of design and concertation of an image-goal which materializes in a series of possibilities for the use and settlement of the territory according to social expectations, functionally efficient, environmentally sustained, and according to the development policies and strategies defined beforehand by the development plan.

The image-goal must be understood as a compatible and concerted objective of territorial development, sustained by intervention or modification of undesired tendencies, and the exploration of new alternatives. The proposal of alternatives must be flexible and allow for progressive adjustments to the image-goal.

The result of this phase is a series of alternatives that manifest themselves in future territorial models which, after a process of consensus, bringing into compatibility, and viability analysis, are expressed as land use categories.

7.11 Implementation of the plan

The implementation of the plan is for the most part an operative phase, although it includes a basic political moment. In it the programs, projects, and actions which are necessary for the accomplishment of concrete goals formulated in the plan, are designed, all the management mechanisms that have been designed and agreed upon are activated, the municipal council plan is approved, and the programs and projects that were previously designed are carried out. Last of all and in a permanent way, the land use plan is controlled and monitored.

The implementation phase has three consecutive stages: instrumentation, which involves expressing the image-goal in executable, that is, operational, terms. For this purpose, and according to the officially established methodologies, programs and projects are formulated in order to achieve the goals of the land use plan. These plans and projects must be accompanied by a strategic proposal that presents the goals, products, and effects, as well as the required investments, based on budgets, chronograms, and management mechanisms.

During this phase, institutional responsibilities must be defined for the issues of information production, processes to be carried out, infrastructure equipment, resource availability, and required time, among others.

The results of this phase are determinant for the approval of the land use plan, which will be done by the municipal council. At this point diverse political sectors that know the contents and progress of the land use plan will participate, since their participation has been foreseen since the diagnose phase. The political viability of the plan must be guaranteed throughout the process. The approval is a step toward the expedition of a set of local norms that will provide the land use plan with a legal support.

Finally, and with the leadership of the local administration, the land use plan is carried out. That is, it is executed by means of the materialization of the image-goal, according to the programs and projects approved according to the priorities, expenses and type of action (public or private). It is also necessary to plan a sequence of operations.

In the development and materialization of the plan, control and monitoring mechanisms must be activated in order to make the information available and to program the corrective measures that the programs, and even the image-goal itself, require. It is a matter of adjusting measures in order to obtain precise results. The monitoring will be done according to the positive and negative effects generated by the implementation, as it is carried out. This will allow introducing the necessary adjustments to the plan, through a feedback process.

8. Pilot Projects In Territorial Planning

After the expedition of the New Constitution in 1991, the Government created a Constitutional Commission of Territorial Planning for a period of three years and gave the technical secretary to the National Geographic Institute (IGAC), specifically to the department of Geography. Additionally, in 1992 the mission of the National geographical Institute was redefined, giving special attention to Territorial Planning and Development.

8.1 Mission

In accordance to the political Constitution, IGAC must produce and update the official map of the country. Furthermore, as a governmental Institution, it must develop the policies and carry out the plans of the national government with regards to cartography, agrology, cadastre and geography through the production, analysis and publication of cadastral and georeferenced environmental information. The wide range of information produced constitutes one of the most important factors that support the processes of planning and territorial organization.

8.2 Vision

As a dynamic entity in constant transformation, the National Geographic Institute must be a Colombian enterprise, which is self-sufficient; produces services and high quality geographical information; belongs to the technological vanguard; is internationally competitive, and is dedicated to the promotion of integral territorial development.

Additionally, several functions were specifically assigned to the Institute, from them it is important to mention the research and development of methodologies of territorial planning applied to both urban and rural areas, applicable to the territorial entities of the country.

According to this new institutional vision, the area of Geography has identified as one of its priorities the production of basic material to support planning processes for departments, municipalities and cities. A research line oriented to develop guidelines for territorial planning at different levels was defined. These guidelines should include a set of conceptual and methodological issues, the general procedure for territorial planning at each specific level, information requirements and technical methods to collect basic information, and other strategic principles which could be important to the territorial entities of the country in the preparation of territorial plans.

Three pilot projects were developed: for the departmental level, the Department of Cordoba was selected; for municipalities, Tausa in Cundinamarca, and at city level, the City of Ibagué, the capital of the Department of Tolima.

After four years of research, the Institute has finished the basic guidelines for these three levels and the diagnostic phase of each pilot project.

Nowadays these guidelines are very useful as the new law of territorial planning obligates municipalities to develop a Territorial Plan during a period of sixteen months.

8.3 Territorial Planning At the Urban Level

The main result of this project is a Guideline for the preparation of Territorial Urban Plans for cities with more than 100.000 inhabitants. The Guideline includes basic theoretical principles, legal aspects and methodological criteria that support the plan. It includes also is area of application, objectives, phases, validity, phases, relationship with the city development plan, mechanisms of participation of civil society and social organizations, among others. The guideline lays special emphasis on the information needed for the formulation of the plan and the general procedures to produce it and systematize it.

In order to develop the guidelines, the city of Ibagué was selected among fifteen cities in the country. An agreement was made with the municipality and by now, the plan is about to be approved by the city council. The participation of the municipality was extremely important to adjust the main theoretical principles to the specific conditions of the city. These results will be published by the end of the year.

This pilot project has produced important results both, in the diagnostic and in the prospective phase. A set of different land use scenarios are presented making special use of geographical information systems.

Many seminars and workshops are implemented in order to divulge the results and to assist many cities in the preparation of their plans.

8.4 Territorial planning at municipal level

This project is oriented to give technical assistance to more than one thousand municipalities in the country, in which rural land use is the main priority. A publication of the guidelines is finished.

The main aspects considered in these guidelines are the definition and implementation of methodologies for land zoning and the analysis and synthesis of the biophysical, technical, economical, social and cultural environment. Alternatives for integrated land evaluation and a basis for prospective analysis are developed, with special emphasis on the participation of the civil society, institutional development and financing.

Two pilot projects were developed, with the support of the GTZ, one in the municipality of Alvarado, Department of Tolima, and the other in Tausa, Department of Cundinamarca.

Intensive use of Geographical Information Systems supported specially the prospective phase.

Seminars and Workshops are being developed with the participation of regional planning offices, in order to guide and assist municipalities in the preparation of their plans.

8.5 Territorial Planning at Departmental Level

The Department and regional level have fewer laws and regulations related with territorial planning than municipalities and urban areas. This research had the purpose to produce technical guidelines in order to develop new concepts and ideas for territorial planning at a more general level. These guidelines integrate and co-ordinate plans developed by municipalities.

The Department plays an important role in integrating national policies with regional and local ones.

According to the new legislation (July 1997), the Department will have to produce guidelines and strategies for local development, related with national policies. In this way, the pilot project developed by IGAC, at Department level, acquires more and more importance.

The pilot project is developed for the Department of Cordoba, in the northern part of the country, through an agreement with regional authorities.

The guideline developed for the Department of Cordoba is made up of a set of integrated modules, and with special emphasis on land use planning at the regional level.

9. References

Water basin management, forestal planning, water resource planning, etc.

Boletín de la Comisión de Ordenamiento Territorial (Bulletin of the Land-use Planning Commission) No. 3, 1992, page 3.

Andrade, Angela. Boletín de la Comisión de Ordenamiento Territorial (Bulletin of the Land-use Planning Commission) No. 23, 1994, pages 3-4.

Boletín de la Comisión de Ordenamiento Territorial (Bulletin of the Land-use Planning Commission) No. 26, page 7.

Decree No. 2113 of 1992 textually states that “the Instituto Geográfico Agustín Codazzi (IGAC) has the purpose of obeying the constitutional mandate relative to the formulation and updating of the Republic’s official map. To develop the policies and execute the plans of the National Government in matters of cartography, agrology, census, and geography, through the production, analysis, and publication of geo-referenced census and environmental information, with the purpose of supporting the territorial planning processes. This goal is made up of several functions, among which it is important to stress that which is relative to research promotion and the development of land use planning methodologies and environmental planning, applicable to the country’s territorial entities”.

Article No. 41: Plans of action for territorial entities. Based on the general departmental or municipal plans approved by the corresponding council or assembly, each administrative office and department, in coordination with the planning office, will prepare their corresponding plan of action and will submit it for the approval of the respective departmental, district, or municipal council. In the case of sectors that are financed with national transferences, especially those of education and health, these plans must be in accordance with the legal norms established for such transferences. Municipalities will have, besides the development plans regulated by the present law, a land-use plan formulated according to the special dispositions on the subject. The National Government and the departments will provide the guidelines and technical support for the formulation of land-use plans.

Ibid.

Andrade, Angela. “Marco teórico y metodológico para la planificación del uso de la tierra con énfasis en aspectos forestales” (“Theoretical Framework for Land-use Planning, with an Emphasis on Forestal Aspects”). In *Revista SIG-PAFC* No. 3, 1994.

According to Domingo Gómez Orea, the territorial reception capacity is the degree of fitness that a territorial unit has in order to receive an activity, taking into account its locational requirements and the impact that its location may have on the environment.

Updating in prospective: In *Memorias del Seminario-Taller en Prospectiva*. Santafé de Bogotá, November 1995.