



# THE IMPLEMENTATION OF THE AGRORED COMPONENT IN BOGOTÁ: A PERCEPTION OF RURAL IMPLICATIONS

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## ABSTRACT

This research aims to resolve the doubts raised by the identification of the perception of the actors of the rural area of the locality of Usme in Bogotá, who have historically lived in this territory before the adoption of the AgroRed component and its involvement as an agent of change that contributes to rural development in the locality, based on the analysis of the strategies so far developed by the food security policy and the master plan for food supply and food security, supported by the theory of sustainable development with a descriptive methodological approach of interrelation of primary and secondary sources focused on the case study with information triangulation techniques to structure a plan of recommendations that includes the actions to be deployed to achieve a strategy to strengthen rural development in the locality.

**Keywords:** local development, rurality, food security, social perception, mental model, development dimensions.

## 1. INTRODUCTION

Colombia has historically had a rural tradition [1], centered on the exploitation of renewable natural resources (two centuries before coffee was the first line of the economy); from the middle of the last century to the present, rural development has concentrated on the exploitation of non-renewable natural resources (oil and coal), which today occupy the first line of contribution to the gross domestic product; these latter resources also originate in the rural areas of the country. [1] [2]

Rural development has been tinged by agricultural development and agricultural production, which has concentrated the efforts of the governing entity in this area, the Ministry of Agriculture and Rural Development, which is the mission of the Ministry of Agriculture and Rural Development.

In turn, rural areas have been characterized by agricultural development and agricultural production, which has been the focus of the efforts of the Ministry of Agriculture and Rural Development, the governing entity in this area, whose mission is the formulation and execution of policies that lead the inhabitants of rural areas to reach the levels of well-being and quality of life that the concept of development invokes, which to date has been partially achieved in the national territory.

Similarly, if we analyze its opposite, the urban, we will have a distractor of rural development that, through the agglomeration of population, has concentrated development in industrialization and access to services, which has not been in harmony with the source of resources where the country's main income and providers of environmental goods and services originate.

Likewise, within this context, it is essential to rely on the goals of the international community, of which our country is a part, where it has set through the millennium indicators, concrete goals regarding the reduction of food insecurity of the population; in this sense, the Capital District in the last three administrations, and under the precepts of land management and sustainability of resources has sought mechanisms that

allow access, availability and quality of food for urban and rural inhabitants living in the areas of influence of Bogotá D.C.

Since it is necessary to retake the need to take actions in harmony between rural and urban areas, and taking into account that the rural sector is where a large percentage of the food consumed in urban areas is produced, this approach has been approached from the vision of incorporating the management of the supply chain around food supply; an action that has been achieved through the establishment by the district government through the Master Plan for Food Supply (PMASAB), which to date has had significant achievements such as: the formulation of a public policy on food security, the development of a management model in the territory and the establishment of a cross-cutting program in the central administration.

The AgroRedes are based on neighborly relations and cooperation typical of the peasant culture, and the public function is aimed at improving the capacities of producers, through the establishment of relevant training programs, as well as business, marketing and financial strengthening to enable them to insert themselves in the Master Plan, so that they can compete in conditions of equity and differentiation of their products through support to add value to processed foods and ensure their safety.

It is therefore necessary to ask whether the processes, methodologies and actions developed in the territory by the different institutions and by the actors themselves are considered as factors that can bring about changes in the way food is supplied to Bogotá and the Region and whether they contribute to the rural development of the Usme District.

## 2. BACKGROUND

Adequate food is a minimum requirement for the dignified exercise of the right to life. Based on this principle, the food and nutritional security policy through its implementation instrument, the Master Plan for Food Supply and Food Security of Bogotá proposed to ensure



access to adequate food for the entire population of the Capital District. [3].

The Territorial Ordinance Plan (P.O. T) with the adoption of Decree 469 of 2003 and Decree 190 of 2004, conceives the formulation of fourteen (14) master plans as structuring instruments of development and establishes the objectives, policies and long-term strategies for its application, these include the Master Plan for Food Supply of Bogotá, which was initially entrusted to the program Bogotá without Hunger and the Executive Unit of Public Services for its implementation; currently in charge of its execution is the District Secretariat of Economic Development, according to the administrative reform that took effect in 2006. [4]

This plan was structured to elaborate a supply proposal and not only a supply equipment plan. This clarification is essential because, although the plan includes the equipment component, it has a broader scope in terms of analyzing the complete links of production, transformation, commercialization, distribution and consumption, including the functional and social vulnerabilities of supply both in its current conditions and in its projections in the temporary scenarios mediated by the plan's proposals to improve this supply chain, from local strengthening in search of generating a generalized change that is represented in collective efficiencies not only at the district level but also at the regional level.

The objective and the common problem that unites them are to achieve an adequate food supply, obtaining food in greater quantity, quality and at fair prices. This does not ignore the fact that there are other common objectives that mobilize these organizations to form management networks. Around these economies of scale and savings, other components and potentialities of the networks can be generated, such as the strengthening of the organizations, construction of social fabric, greater incidence in decision-making spaces, development of other social services; components of Rural Development that are necessary to analyze to determine if the actions proposed by the policy and its instruments, provide the necessary elements for the actors present in the territory to achieve better living conditions and optimize the levels of wellbeing achieved so far.

The intervention carried out so far by the District University in the territory of Usme, has allowed the characterization of the supply and demand of agricultural products, but in addition to this it has identified and characterized the actors for their incorporation to the construction of networks, the intervention contributed in the conformation of supply networks, and processes of consolidation of networks have been established, likewise the feasibility was determined for the establishment of an Integrated Center of Agricultural Production in this locality and the transfer of the functions of this to the nearest logistic platform.

This intervention has allowed the beginning of the network consolidation actions that achieved the conformation of the necessary social fabric to support its operation and, in the operational area, the mechanisms for

the collection and construction of the information required for the logistic operation of the system.

As a result of this accompaniment, four food supply networks were formed in the villages of Curubital, Uval, Los Soches and El Destino.

Decree 315 of 2006 of the Office of the Mayor of Bogotá: based on the supporting documents and studies, it adopts the Master Plan for Food Supply and Food Security for Bogotá D.C., (PMAASAB) [3], making clear the objectives, concepts and functionalities of each component (NutriRedes, AgroRedes and Nodes).

The purpose of the decree is to supply and guarantee the sufficient and stable availability of quality food with nutritional criteria at the local level and access to it in a timely and permanent manner for all people,

District Decree 508 of 2007 complements Decree 315 of 2006 regarding the adoption of the Public Policy on Food and Nutritional Security for Bogota 2007-2015, emphasizing the right to food and the correlative right to water, its strategies and planning instruments.

Decree 040 of February 25, 2008, modifies and complements Decree 315 of 2006 in accordance with the Government Program of the 2008-2012 administration regarding the assignment of responsibilities that were on behalf of the Executive Unit of Public Services (UESP) and that corresponds to the Secretariat of Economic Development, in accordance with Agreement No. 257 of 2006 of the Council of Bogota D.C.

In addition, Decree 315 of 2006 is supplemented to determine the functions and operating regulations of the PMASAB [3] Board of Directors and the modification regarding the definition and scope of the concepts of AgroRed and NutriRed, as follows: "AgroRed: It makes relation to a territory of food provision in which, from the framework provided by the Master Plan for Food Supply and Food Security, it intervenes and deploys in a planned manner, plans, programs and projects that result in the construction of collective efficiencies for a better insertion of the actors of the provision in the food market of the city, in alliance and cooperation with regional public authorities and institutional and territorial actors of food production and supply".

The Territorial Management Model emerges as the practical and operational strategy for the implementation of the Bogota Food Supply Plan and the way in which to intervene in territorial processes in a planned manner in alliance and cooperation with large, small and medium-sized actors in specific territories, which are known as AgroRedes for rural areas and NutriRedes for urban areas. The proposal and fundamental objective of these AgroRedes and NutriRedes is the generation of collective efficiencies in the supply chain from production to consumption that allows its members to achieve substantial improvements in socio-business organization, transportation, quality, packaging, prices, supply opportunity and generation of economies of scale that guarantee competitiveness and sustainability, managing clearly defined processes and promoting territorial integration, through the implementation of methodological strategies proposed for intervention in the



territory within defined processes focused on the principle of equity, this model is defined by four stages as follows: preparation; management of alliances; management of alliances and cooperation with large and small and medium-sized actors, in specific territories, in specific territories: preparation; management of alliances and agreements; operation (mediated and unmediated) and monitoring and evaluation.

The locality of Usme has a total extension of 22, 439 hectares, of which 3,116 hectares (14%) are classified as urban and expansion land and 19,323 hectares are classified as rural land, equivalent to 86% of the total of the locality, counting the eastern hills located within the rural area, within these, 9, 601 hectares are located in protected areas (43%), and 9, 721 hectares in production areas (43%). (See Figure-1.) [5].

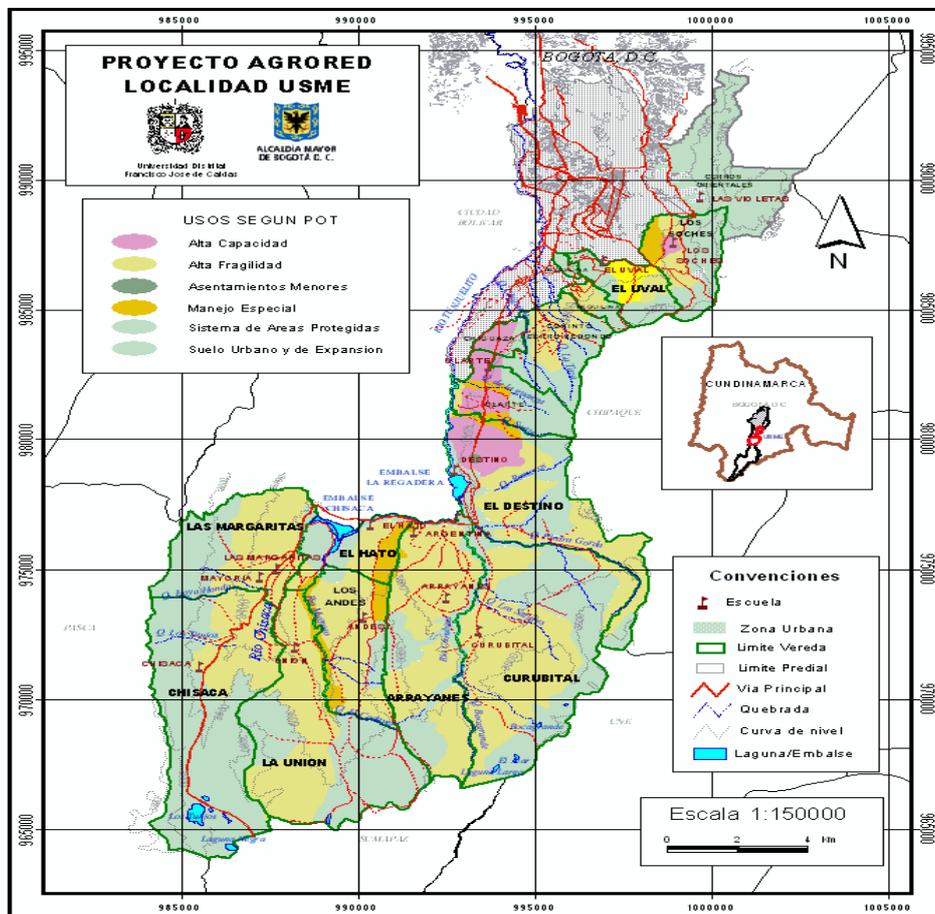


Figure-1. Land uses according to POT.

The town of Usme has a high environmental and ecological wealth, represented in an extensive water system that belongs to the upper basin of the Tunjuelo River, whose tributaries include fifteen streams in the urban area and 22 streams in the rural area, as well as the

Bocagrande, El Alar and Laguna larga lagoons, and the Chisacá and La Regadera reservoirs, which are very important for the city's water supply. In terms of soils, Usme has three series: Monserrate Series, Colluvial Complexes and Bojacá Series, as shown in Table-1.

**Table-1.** Environmental Problems Usme.

SOIL	Deterioration, erosion, loss of fertility
	Illegal mining in urban and rural areas.
	Burning.
	Use of firewood as fuel.
	Deforestation.
	Planting of foreign species.
	Settlement in high-risk areas.
	Presence of crops in forest reserve areas (Cerros Orientales).
	Indiscriminate use of agrochemicals.
	There are areas with potato and vegetable crops and cattle grazing in the Curubital and Olarte moors.
	Inappropriate agricultural practices that threaten soil sustainability.
WATER	Contamination, decrease in water flow, invasion of water courses.
	Dumping of wastewater.
	Sedimentation of watercourses due to soil erosion and aggregates from mining operations.
	Invasion of river and stream banks such as Yomasa, Olivares, Chuniza, and Santa Librada due to the presence of housing, commerce, and/or homeless people.
	Disposal of solid waste in the Curubital riverbed, produced by the High Mountain Battalion, located in the Vereda El Destino.
AIR	Deterioration of quality
	Emissions from gravel pits and extractive industries (gullies, brick kilns, etc.).
	Particulate matter contamination due to the poor condition of some local roads.
	High Mountain Battalion polygon practices, in the rural area, Vereda El Destino, Argentina and Arrayanes

### 3. THEORETICAL FRAMEWORK

The concern of the different societies has been focused on achieving their development, based on the initial concept of development proposed by Adam Smith at the end of the XVI century (in his work *The Wealth of Nations*), taking into account that several approaches have been generated on "development", three that have had a high incidence in the country will be specified.

Taking one of the many definitions of development, "development" will be understood for the following research as the condition of life of a society in which the authentic needs of groups and/or individuals are satisfied through the rational and sustained use of resources and natural systems. This concept integrates economic, technological, conservation and ecological utilization, as well as social and political elements. Different theories have been developed around the concept, with different approaches according to their concrete applicability. Among the most relevant approaches are: Development with equity; Human development and Sustainable development and rural development (Endogenous and Participatory) [4] [5] [6].

However, there are other approaches that different multilateral social organizations have worked on

to generate different approaches to development [7], which are necessary to understand the scope of the concept but are only referenced, as they do not have a direct influence on the area of study, such as: rights-based development; local economic development approach; food security approach; local good governance approach; gender equity approach and territorial approach. [8] [9]

### 4. METHODOLOGY

This research considers a descriptive study based on the interrelation of primary and secondary sources, focused on the case study of the implementation actions of the Public Food Security Policy and its operational instrument, the Master Plan for Food Supply in Bogota.

The case study is a social science research strategy applied to a single complex contemporary phenomenon that is more specific than general in nature and at the same time represents a broader problematic situation; the research will seek to cover in depth both the phenomenon and its real context and rely on multiple sources of evidence and may have the purpose of explaining, describing, exploring, evaluating or diagnosing [11], which indicates that the selected approach fits an



adequate interpretation of the facts to be explored and diagnosed in the territory of Usme.

The work was directed by the methodological approach of the case studies, taking into account the need to make a special emphasis on the incorporation of the perceptions and points of view of the actors involved in the implementation of the policy, the actors will be considered, those people and institutions that have given account of the actions at meso and micro regional level in the rural area of Usme in the process of implementing the model of construction of AgroRedes.

As described above, it was necessary to develop methods, techniques, instruments and tools that would allow and facilitate the collection of information, its analysis and triangulation in order to obtain the current vision of the Policy and the Master Plan in the territory. [10] [11]

## 5. RESULTS AND DISCUSSIONS

Through the analysis of the district development plans, we seek to determine the framework of action against which the interventions in the territory were developed, the elaboration of the technical support documents, and the design of the different intervention strategies.

Bogota, as a central axis of articulation and centralization of actions and activities of great influence in

the economic, cultural, social and economic dynamics, must be very clear about the focus of each of the public policies at the time of strategic planning, including not only the city, but also contemplating the great influence of the region from the prospective vision of development. [5] Thus, it is essential to be clear about the purposes of development plans, understood by the District Planning Secretariat as the public policy document that describes the objectives, strategies, programs, projects and goals that commit the state to the citizens, particularly each of the territorial entities that comprise it, and which specify the actions to be taken in each government period, as well as the respective associated resources to ensure that they are fulfilled.

Through the analysis of the district development plans, the aim is to determine the framework of action against which the interventions in the territory were developed, [6] the preparation of the technical support documents, and the design of the different intervention strategies. Among which are the development plans of which it was possible to identify the components for the information that constitutes guarantees of reliability in the handling and support of processes to the identified users, such as organizations of producers, processors and traders that use the system to take the products to the markets and/or receive inputs and products from suppliers [10]. As shown in Figure-2.

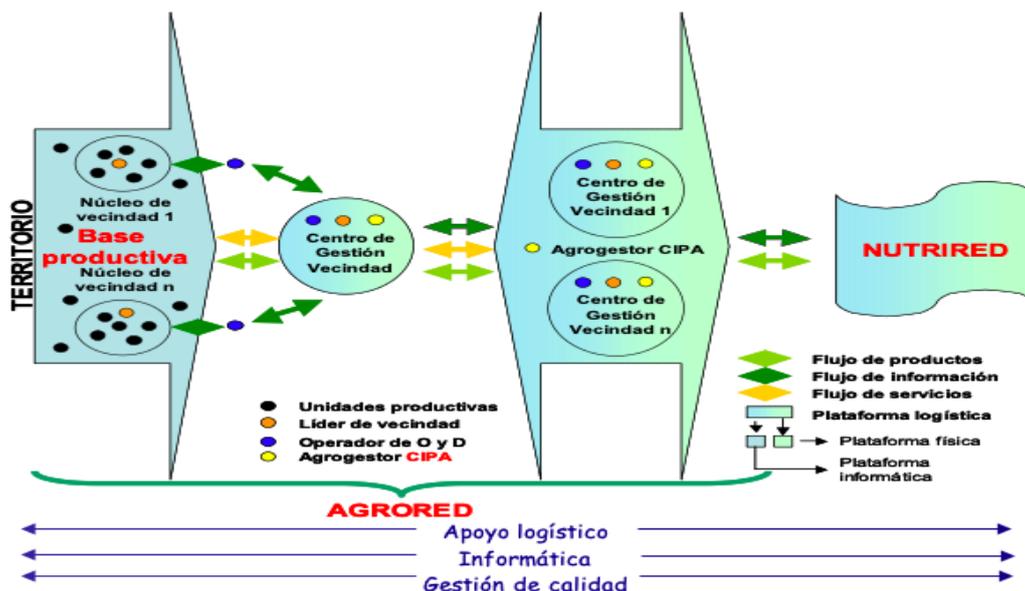


Figure-2. Scheme for AgroRed integration.

Even when it comes to this activity, agricultural production with quality is constituted in the proper management of processes and practices, in such a way as to ensure a "quality" food production, understood as the guarantee provided to the consumer that the food will not cause damage when prepared and/or consumed according to its intended use, in order to achieve customer satisfaction, based on presentation, price and quality, thus becoming competitive products in the market.

Based on these practices, the articulation of the actors begins with a strategy of identification and training of neighborhood leaders, a project that should incorporate actions developed by the community itself, empowering and strengthening efforts such as those developed in Los Soches, where the process advanced in the formation of the Agro park has identified people with qualities of convening and credibility in the locality.



Likewise, the social process of the formation of the Veredal Aqueduct of El Destino and the construction of the Casa Campesina in the Chisacá neighborhood, are the basis of social processes which have people with the capacity to positively influence, both internally and externally in the organization process of the neighborhood nuclei, with a strong culture, where the producers adhere to common values and work together as coherent teams to achieve common goals, highlighting that social networks are the cell or the fundamental nucleus for the functioning of AgroRed.

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The integrated social organization through existing productive units in a territory is the fundamental strategy for the formation of neighborhood nuclei, for the fulfillment of this strategy, it is indispensable to count on the interest expressed by the organizations and producers present in the rural area of the locality; in such a way, processes of conceptualization on the rural network were established through meetings in which the actors and local experiences present in the territory were identified, these with the purpose that the community leads to appropriate proposals for changes in the cultural practices of the productive activities.

Therefore, this method is relevant at the time of training information multipliers, with whom they work towards common goals in the search for the management and consolidation of information for the management and conformation of neighborhood management centers (CGV), articulated to a neighborhood leader and/or a supply and demand operator. The latter is in charge of integration management to facilitate the supply of services at the neighborhood or sub-region level, in order to structure supply and demand based on information management.

The factors involved in the components of rural development, taking into account the level of progress of

the schedule set forth in District Decree 315 of 2006, were identified as variables that affect the components of rural development, and which are framed as central axes of the implementation of the master plan:

Improvement in the quality of life, Tendency to cultural change. Degree of access to the Master Plan services (network management; information management; financial management; logistics and infrastructure services management; quality assurance management and nutritional levels; training management); the level of commitment of those involved in the implementation of the Master Plan and, finally, the progress in the implementation process.

The results were triangulated against the aspects of main interest (improvement in the quality of life, tendency to cultural change, degree of access to the master plan services, level of commitment of those involved in the implementation of the master plan and progress in the implementation process).

This provides a broad vision of the aspects to be analyzed, which is complemented from different perspectives of the actors who have been involved in the Master Plan implementation process; and specifically the pilot developed in Usme, which correspond to: Supply actors (producers in the rural area of Usme); Technical team responsible for the execution of the component and Responsible for the formulation and implementation of the Food Security policy and the Food Supply Master Plan [12] [13].

Acquiring in this way the confidence to have a clear picture from the different approaches and gathering what was raised by the 3 actors involved in the perception analysis, it is evident a disagreement in the answers given, thus the producers stated that the actions developed to date have contributed to the improvement of family nutrition taking into account the availability and access, this is presumed to be answers in the diversity of crops that has induced which makes available a greater number of food to producers, similarly actions developed by other government institutions have contributed to the improvement of the nutritional diet of the families. [14]

Taking into account the results of the application of the semi-structured interviews to the groups under study and the triangulation of the information collected, the application of the Vester matrix [8] was carried out as shown in Figure-3, taking into account that it is an instrument that seeks to measure the causality of the variables and or factors that intervene directly or indirectly in the development of the locality [11], based on the perception of the actors involved in the implementation of the AgroRed component and the degree of progress that it represents in each aspect.

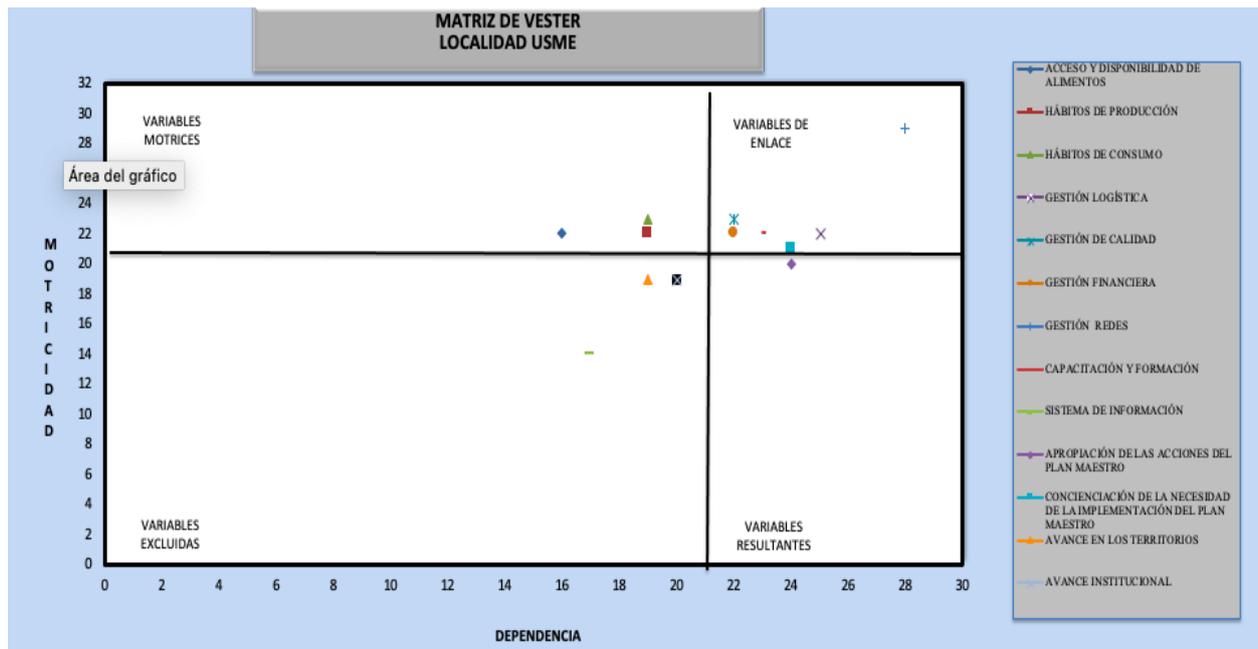


Figure-3. Vester matrix for the district of Usme.

## 6. CONCLUSIONS

The formulation of public policy has pursued the search for the welfare and improvement of the conditions of the population, through enormous efforts by governments. Food security has been in the framework of public policy concern worldwide in our country, in the constitutional charter is considered as a fundamental right but had not been traced with a clear policy structured with programs, projects and goals that allow the operationalization of the policy and is supported by regulatory legal instruments that allow its operation.

It is uncommon that once the policy is instrumentalized, evaluative and follow-up processes are carried out to account for the effectiveness and efficiency intended with the policies and the instruments derived from it; the sensations that the beneficiaries of the policy feel, see and are affected by can be perceived through adequate instruments and give a framework not only altruistic of its scope but also of its implementation.

This research proposes a methodology that combines different methods that from the qualitative research allows to register those feelings of the actors involved in the public policy of food security of the capital district, finding as valuable results for those who are responsible for the implementation and operationalization of the policy as well as for the actors who benefit from it, concluding that the applied methodology provides elements of judgment of great interest for the Capital District.

Similarly, from an integrated analysis of the beneficiaries, the policy formulator evidences the ruptures in the information channels by the three groups under study, the search for immediate results and not in accordance with what is formulated in the policy in a race against the presentation of goals or tangible results without taking into account that the operation of the policy is

based on a cultural change which is only reflected in the imaginary of the inhabitants and in the long term.

Although the different dimensions of development have been involved both in the formulation and its instrumentation and operationalization, it is clear and according to the results found that they do not have a harmonious dynamic, but on the contrary, unbalanced as shown by the analysis of the Vester Matrix and in which it is necessary to take improvement measures to balance these differences, mainly between the socio-cultural, environmental and economic aspects, which is where the tangible actions that have been taken to the territory have been most concentrated. [8]

Local development, and in turn rural development, will only be achieved when in the minds of the inhabitants small transformations are made that give way to great changes according to the realities of the territory, for the case at hand we sought to identify those agents of change that have enhanced the different components of development and which were analyzed through five factors: improvement in the quality of life, tendency to cultural change, degree of access to the Master Plan services, level of commitment of those involved in its implementation and progress in the implementation process; which register mostly antagonistic perceptions by the three study groups with which the research was carried out.

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