Chapter 11
La Cumbre, Valle del Cauca. The Challenge of Implementing Sustainable Territorial Development Initiatives. Critical Factors and Consequences in the Reduction of Inequities in Health

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Introduction

> It is not enough to passively understand social, political, economic, and cultural reality; it is necessary to understand them actively, strengthening theories, methods, approaches, and interactions, at different levels, to intervene and move toward their possible transformation.

Different critical factors complicate the process of sustainable territorial development in a municipality. The structural and strategic factors make difficult the creation and consolidation of the conditions required to carry out sustainable development processes by systematically increasing phenomena of a different nature, including social inequalities and the delay of their greater competitiveness (financial, managerial, and structural capacity) at the departmental level. This situation is rarely associated with consequences regarding the reduction of health inequities, and the social–health inequity perspective does not seem to be very clear.

Existing studies and experiences related to the purpose of generating innovations and increasing productivity and competitiveness emphasize the need to establish dynamic strategies (intersectoral, intercompany cooperation, business–institutional articulation, and public–private partnerships) with enabling sectors (education, health) and mobilizers (university).

The difficulty with the process of sustainable territorial development in a municipality, considered as an essential anchor to a place or territory in which to operate the process, is a situation that inevitably influences the complex processes involved in reducing social and health inequities; this represents an enormous challenge—even for a small municipality, owing to factors such as limited financing and weak

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response capacity to permanent and emerging problems—that requires the interaction of different sectors and organizations at all levels.

The reduction of social and health inequities requires coherence, identification, initiative, and proposals (regarding priorities, interests, regulations, and availability of resources) by agents of change such as the private sector, representatives of the local community,[1] and local government, which should influence the strengthening of institutional and community capacities.

The mentioned axes must correspond to the interests of society, making it part of the decisions, that is, the administration and progress in all orders positively impact the quality of life of the inhabitants of a territory, and the idea of innovative processes in the economy has as part of its content the welfare, not of the few, but the many, with a high democratizing and qualitative impact.

Contextualization

The municipality of La Cumbre, classified as category 6,[2] presents a worrying socioeconomic and environmental reality that, in addition to influencing the health status of its population, slows down its productivity and competitiveness in the region. The document "Socioeconomic Structure of Valle del Cauca: An Analysis of the Labor Market of Cali and Its Metropolitan Area" (2012), classifies La Cumbre, not between fast-growing or slow-growing municipalities, but among those with steady growth. This complex situation calls for forward planning and synergistic processes with the participation of educational institutions, the state's social enterprise, private institutions, social and community organizations (all of which are understood as being health-promoting institutions and local structures that stimulate change processes) focused on doubling efforts within the framework of intersectoral comanagement[3] that enables integral sustainability in the municipality in the long term.

The University of Valle, through the Center for the Development and Evaluation of Technology in Public Health (CEDETES) and the nongovernmental organization (NGO) Foundation for the Development of Public Health (FUNDESALUD), has

[1] Conformed by the inhabitants of the neighborhood sharing common interests and interacting in a physical space, based in the practice of social values such as solidarity, reciprocity, and trust, conforming organizations, private corporations of local development, user leagues, community action boards, and observers' functions, all nonprofit.

[2] Category 6 municipalities in Colombia are those with a population of less than 15,000 inhabitants. Also this category groups the municipalities with lesser volume of Free Destination Current Income. In 2007, 89% of the municipalities in the country were classified as category 6.

[3] In synthesis, intersectoral management is a process of capacity building focused on strengthening a holistic perspective of health, linked to the territorial plans of health, by including in all territory policies the subject of health, based on the strengthening of intersectoral action through the effective implementation of policies and sectoral plans deployed in the framework of a territorial development plan with the explicit aim of reducing health inequities.

carried out several studies in recent decades to identify the aspects that must be taken into account to complement and deepen the analysis of social, economic, and health conditions in the municipality, through the application of participatory mechanisms that contribute to the strengthening and promotion of intersectoral actions articulated to the plans of different sectors in order to respond to the structural, intermediate, and proximal determinants of health inequities and chronic noncommunicable diseases (CNCDs). Similarly, these studies aim to apply health education tools and participatory action research to generate local capacity building processes, in order to identify the problems, resources and opportunities to address them. Through different encounters with various actors of the population, several seemingly disconnected problems were reflected on. One example is the problem of unemployment[4] (owing to scarce labor resources, it has gradually resulted in a high percentage of informal employment), which is closely related to food security, education, and health. This closeness to the different authorities of the municipality confirms that trust is a key factor for any success of social and health programs.

Previous Studies and Experiences: Contributions and Critical Aspects

The studies that will be mentioned in what follows are intended to provide as complete a diagnosis as possible of the health situation in the municipality based on the identification of and access to the available sources of information. These studies were initially oriented based on the need to identify the municipal health conditions, as well as on the analysis of the quality, relevance, and adequacy of the Community Information System in Primary Health Care (SICAPS-CISPHC). Therefore, this exercise of reconstruction of some experiences can be understood as an input to view and strengthen further studies, emphasizing some critical aspects found in connection with the quality of data and absence of information in various sectors other than health and emphasizing methodological limitations.

These experiences, given their particular scope, examined different institutional statistics and community information and surveillance systems, establishing their availability, relevance, data quality, absence, or sufficiency of information from different sectors, thereby facilitating better referencing of the most affected population (its municipal location, intensification of actions to be deployed based on a model of social determinants of health), in turn potentiating the existing capacities for their timely and adequate response, encouraging the active participation of all committed actors.

[4] "In the municipal mayor unemployment reaches a rate of 31.54%. The high growth of the economically active population (EAP) translates into higher unemployment in the face of few job opportunities" (EOT 2000:33). Forty-five percent of our population is economically active (PEA) (between 12 and 25 years), 30% of the entire population have graduated from high school (PDM 2012:23).

1. The study "Design and Implementation of a Community System for Monitoring Risk Factors of Adolescent Behavior, SIVEA," conducted by De Salazar[5] (2004), was a pioneering effort in this municipality for attempting to describe its health conditions and capabilities. Since then, the documentation has included studies developed by FUNDESALUD: *Evaluative research: social policy instrument. Confronting theory and practice for the approach of chronic noncommunicable diseases: evaluation contributions*; and *the Intersectoral Management for the Approach of Inequities in Health from the Municipal Territorial Entity: Capacities, Limitations and Challenges (2015),* led by De Salazar and Pineda (2015).
2. The study "Epidemiological-Sociological Analysis, Municipality of La Cumbre" (2012), Aragón and Luján (2014), jointly carried out by an epidemiologist and a sociologist, attempted within the framework of a mixed study to unify the quantitative and qualitative through a sociological analytical reading of numerical information. Thus, we analyzed the SICAPS, the data on reported morbidity, mortality, and sociodemographic characterization. Thus, a profile of the health situation in the municipality was evidenced from an interdisciplinary perspective based on the collection and analysis of the institutional information provided (variables, frequencies, health indicators, and coverage), complemented by sociological analytical possibilities.

This study concluded that in the case of mortality, the causality in this regard in the municipality of La Cumbre in 2012, reported by SICAPS in the case of chronic diseases, was of 12 deaths in men and 10 in women, without being able to establish specific pathologies, age groups, or the specific geographical area (2014:47). This is an important limitation since it makes it impossible to carry out targeted actions in order to reduce inequities of all kinds.

CNCDs are among the causes of morbidity and mortality in the municipality of La Cumbre, especially among young adults.

Critical Aspects

Quality of data found in information system: The only source of institutional information came from SICAPS (health information, with basically some possibilities of seeing sociodemographic aspects), and at least one other institutional source was needed to verify the data recorded. In this sense, it was not possible to count with the information coming from the education sector, nor with the official source of the mayor's office. Nor was it possible to count with the information of the Ministry of Health and Commissary of the municipality (important regarding adolescents and risk factors).

During the study, a meeting was held to listen to the health promoters and inquire about how they obtained basic information (social and health) from the community.

[5] The mentioned study is one of the cases achieved by De Salazar in this section.

After reviewing the questionnaires prepared for the information system, it was suggested that adjustments be made to enunciate brief, easily understood questions to the addressed population. Likewise, sections that identify aspects of the place: locality, block, housing number.

No similar case studies were found that can be compared with this. It was not possible to establish a methodological triangulation that would connect the quantitative with the qualitative combination of methods and techniques, an approach that would integrate the theoretical foundations of the research and the necessary articulation of the different levels of analysis. "The absence of quantitative information from other sectors, different depth factors, social determinants of health, community participation, employability social ascending, education (low schooling, conditions and/or difficulties to finish secondary studies), individual and associative potential, as well as the visibility of initiatives and institutional development implementations (micro and macro)" (Aragón and Luján 2014:50–51).

3. The study "Perceptions of Risk Factors Associated with NCDs, Social Determinants of Health and Community Participation, Inputs to Generate Intersectoral Actions for Their Reduction and Control in the Municipality of La Cumbre," prepared by Luján (2014), recorded the reflections and perceptions of different groups of social actors and interest, obtained in several municipal meetings in which the development of an exercise was proposed based on three interrelated actions: listening to each other with other actors and sectors, thinking and expressing their perceptions to interact in regards to the social factors affecting their health, and preventing the construction of an integrated local development project, which depends on the parallel progress of their different systems, among them the health priority. To provide clues to identify the areas in which they are perceived, the training processes should be focused on enhancing their knowledge, interests, and revealed expectations, referring to different social and health phenomena, thus constituting not only an important and complementary source of information but active agents for social change. In this sense, the execution of a local development project must be carried out based on joint strategies in which community participation plays a leading role, according to the need to overtake activities of prevention and health promotion.

The collection of information coming from the perceptions of different social actors was carried out through field work, which shows that being in situ does not guarantee absolute reliability, so the procedures of collection and systematization should be refined. Semistructured interview and focal interview techniques were used. Participants included members of social organizations, teachers, and students, among others. The interview participants were randomly selected and took into account their active role in different domains of local development.

The semistructured interview was built as an application tool to investigate different aspects: (1) identification of problematic situations; (2) the relationship established between the prevalence of social determinants and the state of a population's health, by different age groups; (3) possible answers or alternatives for their resolution in the short and medium term; (4) those actors who must participate jointly in the

Table 11.1 Capacities and competencies for the reduction of inequities in health

Identification of problems, factors, and mechanisms (normative, resources of different nature, human and technical) needed for solutions	Improvement of quality of information systems	Strengthening level of interactivity and interinstitutional communication needed to undertake participatory processes oriented toward social change	Evaluation of operations (impact and effectiveness) of different programs implemented	Governance, advocacy, and strengthening of local physical structures

process of these resolutions; (5) strengths and opportunities of the municipality. The interviews were recorded in audio, some in video, and were transcribed (Table 11.1).

This study of perceptions identified some capacities and competencies to be strengthened by the different municipal actors, committed to territorial sustainable development and the enhancement of intersectoral work focused on the reduction of inequities in health:

Critical Aspects

There is a need to form a group of representatives (or those interested in social change) of civil society, who are expected to manifest felt needs and provide other points of view (systematically obtained through a perception study with techniques of collection of information such as semistructured interviews and focal interviews), complementary to possible solutions to problematic situations exposed. It is possible that not all relevant actors would be represented, which requires a prior review of the broadest list of actors in rural and urban areas, from the most visible to the most invisible.

The problems are usually characterized by causes (conjunctural or systematic), manifestations (social and health events), and consequences (health inequities). Problem situations are not independent of the actors who produce, control, and overcome them. In this sense, it is relevant to wonder: (a) Who does the problematic situation directly harm (potentially affected in the short and long terms)? (b) Who does the problematic situation directly benefit (or who will it benefit in the future)? What are the relevant variables of the problematic situation? How do the institutions directly responsible for the execution of interventions allocate and distribute resources that will sustain them?

4. The report "Capacity Building for Local Development in the Municipality of La Cumbre—Valle del Cauca 2015–2018" (2016) identified and recorded the deficiencies and challenges of the municipality through documentary evidence produced by official institutions at different levels. It consulted, complemented, and deepened the analysis of the main problems of the municipality of La Cumbre and its relationship with social inequities based on an exercise of collective identification with representatives of the local community, local government, private sector, and so forth of the municipality, with the goal of strengthening institutional and

community capacities to respond to the social determinants affecting noncommunicable diseases (NCDs) in the municipality of La Cumbre, 2015–2018. A workshop was held with different authorities and agents of change of the municipality, for the purpose of exploring aspects such as existing social inequities, the role played by the municipal government, the private sector, the processes of civic education, the environment, social mobilization, agriculture and agro-industrial sustainable production, and entrepreneurship.

This work required an organization to arrange, classify, and analyze available information, with the objective of producing a document that consolidated the information found in official sources, contracted with the information provided by the inhabitants of the municipality. In this sense, this report presents a "consultative" approach that strengthens the exchange of knowledge with participants or agents of change in the municipality, not necessarily academic, who contributed indirectly to the generation of knowledge. Therefore, this form of coproduction, by means of an "integrative" model, valued the formulation of questions and answers of actors of the municipality. This aspect arose from the need for balance in power relations, which, owing to their historical imbalance, have generated social inequities, expressed in accumulated disadvantages that prevent the participation of individuals in equal conditions and in accordance with their needs.

Proposal: Sustainable Territorial Development and Health

A proposal is made here for an integral transformation outlined through a decalogue of academic, governmental, and community initiatives with regard to social and determinant factors in health, which seek the articulation between the process of sustainable territorial development, the municipal development plan (MDP), and the territorial health plan (THP). which facilitates a process of reduction of social and health inequities, based on an intersectoral system[6] in which an analysis is carried out of unsatisfied basic needs (UBNs) (access to housing, health services, and education and economic capacity), the role played by municipal political, social, and economic forces, and their impact on the population health status. This made it possible to identify the critical aspects and feasibility of strategies aimed at reducing social inequities in health, planned under the stewardship of intersectoral and nonvertical, sectoral, and disciplinary work.

The foregoing description, subject to the rationale that includes the social determinants of health, according to the World Health Organization, as "the circumstances in which people are born, grow, live, work and age, including the health system. These circumstances are the result of the distribution of money, power and

[6] Understanding this system as a management model constituted of different areas, organizations, and actors that, collaboratively and in a structure facilitating a logic of joint action, reduce conceptual and operative complexity, guiding the system's actions with common proposals without reduplicating efforts unnecessarily.

resources at the global, national and local levels, which in turn depend on the policies adopted." However, we underline the idea of not thinking in terms of circumstances, but rather about the conditions (determined by structural, nonconjunctural factors) in which individuals experience life trajectories characterized by accumulated disadvantages that affect their adequate development. ECLAC (2012) mentions the possibility of sustainable development in its different aspects:

> (1) economic, linked to a genuine increase of productivity; (2) social, related to the improvement of people's living conditions and the reduction of inequality; (3) cultural, linked to the strengthening of community identity, the valuation of diversity, and respect for indigenous and Afro-descendant people; (4) policy, linked to democratic participation and the exercise of rights; and (5) environmental, associated with the sustainable use of natural resources and the protection of local and global ecosystem balances (2012:12).

La Cumbre, like many other municipalities of similar characteristics in Colombia, presents difficulties in the implementation of a process of sustainable territorial development. This challenge becomes more complex in municipalities that are not prepared for development that must be managed with scarce resources trying to solve urgent problems related to UBNs, without a strategic plan for sustainable territorial development (articulator of industrial, social, and environmental policies).

Failure to evaluate the costs and consequences of UBNs and social determinants of health (SDHs) in the short and long term fractures the possibility of better expectations in the territory and in the quality of life of its population. It allows for the renewal of ideas of governance, governability (balance between social demands and the ability to provide timely and effective responses), new foresight capabilities, and planning system exercises that overcome short-term thoughts and strengthens the construction and vision of the future.

The different social struggles and advocacy efforts made in favor of equity have not achieved the expected results in the countries of the Latin American region, perhaps because the following has occurred: (a) different vindictive efforts are often mobilized and interact in a circumstantial manner; they are held inarticulately and do not follow structural transformations (they correspond to temporary action, with no governance or sustainability) as governmental response to concrete problems (UBNs, for example), without the resources to act in a permanent way in terms of basic training such as citizen participation and the empowerment of the civilian population; (b) because the expected results correspond to country goals with limited temporary horizons, without continuity or the prospective that lines up all the long-term efforts to advance from the complex decrease toward the end of the problems of social and health inequity; (c) because each government administration seeks to accomplish goals presented within the framework of its management, without a prospective vision that goes beyond temporary reductions.

There is a need to undertake prospective studies in the municipality on which to base the need for a transformation of the territory, articulated to the analysis of the complex economic and social situation, as well as demographic and cultural, generating an integral perspective (multidimensional) that propels the encouragement of

sustainable economic policies based on agricultural development given the vocation of the municipality, therefore benefitting the consolidation of the land and the stimulation of the cooperative system based on agriculture. It is needed to implement a policy of rural development, directed at the increase of production and commercialization of agricultural products and food security, which results in opportunities for the employment of the rural population, significant growth in its income, the credibility and integration of the rural area.

This strategic proposal demands the active participation of social organizations in the planning processes (local instances, strategic goal agreements, participative budget) in order to widen the decision alternatives. A strategic bet of sustainable territorial development requires the regulated autonomy of the local governments. The following are a few main issues to be taken into account in the exercise to understand the contents and possibilities (frameworks for the action) of the territory transformation (Table 11.2).

Table 11.2 Central questions to understand the transformation of territory

The territory: Unit of analysis for action and transformation. Central issues for objective approach.
Understand transformation: Why, who, how, where and when?
What kind of transformation is possible: Political, economic, social, cultural, environmental structure?
How to enable a transformation under a holistic approach that makes possible the conciliation of the previous aspects?
How does this transformation occur and what is its temporal horizon (capacities to be strengthened)?
How is the transformation planned (municipal foresight: technical-political/analysis of future alternatives potentiated by regional agendas of competitiveness, science, technology and innovation)?
Which sectors, agents of change, and organizations participate in this process (what are the mobilizing interests of each and how do they intersect)?
How does the population of a municipality participate in this process (e.g., informational, consultative, participatory level)?
What does the idea of transformation mean for the inhabitants of a municipality? (The territorial action integrates, builds identity, and generates co-responsibility)
How have the factors that prevented this process been systematically established (review of the municipal, departmental development plans and their articulation to the THPs?
How do policies, regulations, and legislation influence this process, from territorial ordering (territorial management, population demands, and welfare), territorial division, territorial planning, or territorial policies?
Does the THP play a role in this process, as an instrument of public policy that allows for incorporating health into all the policies of the territory?

Decalogue of Initiatives (Strategies and Actions) for the Integral Transformation of the Municipality of La Cumbre

The following is a decalogue of academic, governmental, and community initiatives within the framework of an intersectoral system with regard to the identification of facilitating factors that can be considered within the framework of a process of sustainable territorial development with a focus on reducing social and health inequities in the municipality of La Cumbre:

1. General diagnosis of the municipality. This diagnosis, based on documentary review work with regard to the management of the municipality from different types of documentation, can identify the financial-economic resources degree of productivity and competitiveness in the region and population health status. Thus, a systematic review of the following documents is suggested:

   MDPs; schemes of territorial ordering (STOs); THPs; government plans (last three administrations); municipal action plans (e.g., health, government, education, housing); epidemiological bulletins; environmental audit reports; certificates of annual operational planning health investments (AOPHI), 2012–2015; recognition of basic health conditions; report on natural resources and environmental effectiveness (2006–2016); DANE; municipal documentation and information system; comptroller management reports; institutional statistics; analysis of health situation (ASIS) at departmental and municipal levels; UBNs and municipal records Departamento Nacional de Planeación (DNP), among others.
2. Intersectorality. Diverse challenges must be faced to make intersectoral action a reality; the most prominent relate to the complexity of interventions aimed at reducing social inequities and their consequences on health and the general well-being of the population. This complexity is revealed in different aspects, which are analyzed in the framework of intersectoral management (planning and management): consensus among the sectors and organizations involved (tensions due to particular interest based on sectoral responsibilities and logics), identification and targeting of priorities, availability of resources, and negotiation of levels of responsibility and profit for each participant.
3. Analysis of the SDHs and UBNs. The different and interrelated factors, understood as basic needs, have a very close relationship with the health status of the people living in a municipality. In this sense, it is necessary to associate to health access to housing (dimension of housing quality), access to health services (availability of drinking water, sources of water supply in the house, and human waste disposal), in association with the presence and prevalence of acute diarrheal diseases, access to education (illiteracy), and economic capacity (associated with occupation and unemployment). According to Wilkinson and Marmot, these factors have been identified as adequate to construct an index of UBNs and are referred to in the health sector as the influential SDHs: education

(schooling), employment and working conditions (occupational safety), economic income, safe and clean physical environments (healthy environments), health services. Meanwhile, Lip and Rocabado (2005) in a complementary way, mention other determinants:

> The characteristics of the general physical environment, of the workplace and housing, and the places where the population usually travels are important determinants of health. There are important determinants of their health that derive from air pollution—including secondary exposure to tobacco smoke—water and food contamination, level of exposure to infrared rays, oxygen content in the air we breathe, safety in the design of homes, schools, roads, and workplaces (2005:62).

The UBNs are critical factors that are identified based on the revision of the different available documents on the municipality, generated at different levels (departmental, national, and municipal). These factors are understood to correspond to noncompliance in the implementation of public policies, the nonsustainability of strategies and actions that reduce UBNs, and a lack of established goals for housing projects in the MDP with regard to qualitative (improvement) and quantitative aspects (number of homes built).

4. Capacity strengthening: The capacity of an individual can be understood as the probability that he/she will potentiate qualities, or skills, especially intellectual, that facilitate the qualification and development of activities, functions, and performance of a specific task. Capacity strengthening enables the generation and strength of sustainable processes of change in order to qualify even the capacity to analyze, understand, and transform reality.

   The strengthening of capacities at a collective level requires the accompaniment of the organizational order (interinstitutional) that accompanies and makes possible the realization of the different functions of individuals: citizenship, sociability, and association. In municipalities, government support and the provision of the necessary tools for the development of organizations and microentrepreneurs according to the economic base of the municipality should be promoted in a sustained way, through the application of existing public policies.

   According to PAHO (2007:7–8), some types of identified capacities that need to be strengthened are the following: (1) human talent: trained workforce for efficient service delivery through planning; (2) information systems and technological development: data sources based on population information, correlated with institutional databases (including data collection, processing, analysis, interpretation, and use of information). Among the main sources of information the prominent ones are censuses, household surveys, and vital records systems. Technologies, in this case, refer to those used in information systems. These elements benefit information systems generating data that must be appropriately fed and fed back in order to have adequate and timely data quality for decision makers; (3) organization: refers to institutional and management capacity (through a set of rules and regulations), governing the functioning and operation of a public health system; (4) resources: categorized as

financial (fiscal), referring to the acquisition, use, and management of available resources, and physical, which include existing structures equipped with instruments, equipment, and so forth (installed capacity).

5. Sustainability: The sustainability of the intervention processes developed to resolve a *problematic situation* requires prospective planning that integrates aspects such as their need, operational feasibility, implementation, and adequate conditions for the development of its execution, regardless of the influential political factors (government, officials, or policy changes). Long-term sustainability requires a comprehensive balance of powers in order to avoid a situation where some agents are the biggest beneficiaries, in economic terms, to the detriment of other agents.

   Experience shows that it is a fundamental task of government and participating actors to guarantee the adequate distribution of accrued benefits. In the short term, a lack of sustainability fractures citizen oversight on health expenditures and the complementary processes (monitoring, effectiveness, and evaluation) that come with the progress of the same. The process of sustainability of an intervention requires the participation of a group of relevant actors identified by their exposure to a specific problem situation: civil population, government authorities, prosocial organizations, and sectoral officials. The identification and interaction of these actors is indispensable, as is knowing and understanding how different actors perceive a specific problematic situation, who it mostly affects, who will face certain problems, and how and under what conditions they will face them.

   The causes of nonsustainability of social change processes and interventions that have shown their effectiveness and cost effectiveness are associated with programmatic and sectoral policy factors. Many projects are carried out in a conjunctural way, through initiatives of different organizations (NGOs) that encourage interaction between different actors who traditionally act in isolation, making the reduplication of efforts unnecessary. These projects are not usually part of the prior planning of local or departmental development plans.
6. Evaluation and monitoring. This aspect is one of the most important municipal challenges. It requires the ratification of an integral commitment to the issue of health and sustainable territorial development, which requires the strengthening of different capacities: human resource, technical, information management (registration, processing, analysis, and timely use), permanent monitoring of health indicators, documentation and systematization of the implemented strategies, and evaluation of the management of the territory.
7. Mapping of the most vulnerable areas in health. Gradually, the geographical area has been understood as a determinant of health. Therefore, it is very important to identify geographic areas with worse socioeconomic and health indicators (greater vulnerability), which will facilitate the implementation of focused and priority interventions in the territories.

The municipality of La Cumbre, Valle del Cauca, as well as other Colombian territories with similar characteristics, has not developed a mapping that identifies and plans adequate, timely, and prioritized areas with worse health vulnerability indicators for the actions of extramural teams and interventions in health. According to the different studies consulted and elaborated in the last decade, and despite the enormous effort from municipal authorities, the absence of this type of evidence has been verified, clearly showing the rural and urban areas with greater vulnerability in health. Identifying the areas with the worst indicators of vulnerability in health through mapping is relevant to identify in a timely manner the processes (of various kinds) that affect the appearance, prevalence, and progressive deterioration of the health status of the inhabitants of La Cumbre, Valle del Cauca, as well as those processes focused on initiatives that cannot be replaced by structural change that benefit through timely and adequately planned actions and integrative intersectoral development and health promotion as key strategies for the attainment of the highest health status.

Mapping can be considered a technique in the collective elaboration of maps, as well as a conceptual and methodological proposal that allows for constructing an integral knowledge of a territory, as well as the profile, characterization, and perspective in the health of a population. According to Ramasco-Gutiérrez et al. (2016), a health vulnerability map (HVM) is

> a spatial representation of an area inhabited by a population characterized by high UBN and low resource and health asset opportunities. This instrument enables the identification and prioritization of situations and groups toward which to direct interventions (2016:1).

Elaborating a map of vulnerability in health makes it possible to offer the possibility of graphic information, generating an additional visual impact that proposes another type of identification and visualization of existing problems. This process of identification-action can be replicated as valuable experience, understanding it as a demonstrative zone in municipalities with similar characteristics.

The lack of mapping for the identification of areas with greater vulnerability is reflected in general and nonfocused actions, with partial results that could be improved and systematically observed in the development plans of different municipal governments. In this sense, De Salazar and Pineda (2015:18) recently found the following: “In the review of the Municipal Development Plan 2012–2015, it was found that only for one behavioral risk factor (sedentary) were programs, projects and goals established. Other risk factors (overweight, cigarette and psychoactive substance abuse, unhealthy diet, excessive consumption of alcohol, and teen pregnancy) are not considered in the Municipal Development Plan. The Municipal Development Plan refers to problems such as poverty, rural and agricultural undervaluation, and low community participation, but in practice there are no programs, projects, and targets to address them.” For mapping, technological tools can be used, such as Google Earth 7 (software) and

Google MAPS (Web map application server that offers scrollable map images as well as satellite photos of the world).

8. Analysis of social networks (ASN). Social networks can be described as well-defined sets of actors—for example, individuals, groups, organizations, communities, and global societies—linked to one another through a relationship or a set of social relations (Lozares 1996:108). The social capital built up by the different individuals, groups, and organizations should result in the construction of a health capital, with all that the notion implies: information, education, and communication that are adequate and timely for the community of a municipality in general. The analysis of social networks seeks to study the social processes (in this case, the processes that affect or benefit the population health status) from their particular configuration in networks.

   According to Freeman (2004), an ASN has four characteristics that distinguish it from other types of structural analysis: (1) it is motivated by a structural intuition based on the search of bonds that link social actors; (2) it is systematically based on empirical evidence; (3) it uses graphs and morphological analysis as central heuristic tools; (4) it relies on the use of mathematical or computational models for the formalization and generalization of its propositions (Aguirre 2011:12).

   The analysis of social networks can be carried out with the use of programs such as Socnetv and Payek.

9. Development of a sociological study based on a photographic-documentary record. Onsite audiovisual documentation allows individuals to be captured or recorded in their life scenarios: housing, work, recreational, and play spaces in which they socialize and are exposed to risk factors and protective situations. It allows the recognition and resignification of reality in order to rethink habits and determined practices and determinants of health.
10. Identification of the economic production of the municipality based on the development of the intervention lines: agricultural practices, structuring and processing of projects, technical assistance, and access to financial services (credits). The same goes in terms of capacity building (productive units), cofinancing resources, productive improvement, business management, and access to information technologies. Identification of some *local particularities* regarding certain practices, attitudes, and dispositions (peaceful coexistence, low intensity of conflict), by inhabitants and external observers, represents a key occasion to rethink strengthening and the processes oriented toward a social transformation based on strategies of community empowerment. The presence of and constant interaction with the community generates trust. The bonds of trust should be strengthened between academia and the diversity of actors in the municipality through the socialization of the undertaken studies. Once completed, the achieved studies should be shared with the different agents of social change.

Appendix

Table 11.3 Developed studies, instruments, and documents available on the health situation in La Cumbre

Source	Instrument	Available studies	Author/date
CEDETES		Design and implementation of a community surveillance system for behavioral risk factors for adolescent population, SIVEA	Ligia de Salazar (2004)
Hospital Santa Margarita	Community Information System in Primary Health Care (SICAPS)		Hospital Santa Margarita
Hospital Santa Margarita	Community-Based Information System (SIBACOM)		Hospital Santa Margarita
FUNDESALUD-CEDETES		Perceptions of risk factors associated with CNCDs, social determinants of health and community participation; inputs to generate intersectoral actions for health and local development in the municipality of La Cumbre (2013)	Roberto Carlos Luján (2014)
FUNDESALUD-CEDETES		Epidemiological-sociological analysis Municipality of La Cumbre (2012)	Aragón, Natalia and Luján, Roberto (2014)
Hospital Santa Margarita		Alliances and intersectorality: a priority path in APS	Ligia Elvira Viáfara (2013)
FUNDESALUD		Evaluative research: an instrument of social policy; confronting theory and practice for the management of chronic noncommunicable diseases: contributions from the evaluation.	Ligia de Salazar and Berta Luz Pineda (2015)
FUNDESALUD		Intersectoral Management for the Approach of Inequities in Health from the Municipal Territorial Entity: Capacities, Limitations and Challenges (2015). FUNDESALUD. Cali: Colombia.	Ligia De Salazar and Bertha Luz Pineda (2015)
Town hall MUNICIPALLA CUMBRE—VALLE		Synthesis of tensions of PTS La Cumbre 10-year public health plan PDSP 2012–2021	
Town hall MUNICIPALLA CUMBRE—VALLE		Municipal Health Territorial Plan La Cumbre Valle del Cauca	Andrés Osorio Pazmiño (2015)
CEDETES		Capacity Building for Local Development in the Municipality of La Cumbre—Valle del Cauca 2015–2018	2016

Other types of documents identified

Municipal Development Plans (MDPs) of La Cumbre Schemes of Territorial Ordering (EOT); Territorial Health Plans (THP); government plans (last three administrations); municipal action plans (e.g., health, government, education); epidemiological bulletins; POAI certificates; environmental audit report La Cumbre; POA (Annual Operational Planning of Investments in Health 2012–2015), recognition of basic health conditions; report on natural resources and the environment effectiveness (2006–2016); DANE; DNP; Governorate of the Valle del Cauca; municipal documentation and information system; controlling management reports; institutional statistics; EOT documents; analysis of health situation (ASIS) departmental and municipal; unsatisfied basic needs and municipal records DNP, among others

Table 11.4 Actors, actions, spaces, and public health programs, by type of community organization in municipality of La Cumbre

Type	Scenarios of participation	Actions	HP programs	Population
Associations, leagues, alliances, user committees (COMUSAN, hospital user representative, Altosano aqueduct, natural resource users leaders, natural resources committee),	Propositional and Advisory Councils COMPOS City council Territorial Planning Council Training	Campaigns Elaboration of food security projects Forums, accountability meetings Participatory training Sexual and Reproductive Health Policy Evaluation	Oral health, mental health Infectious diseases Chronic diseases Maternal child	Population in general: young, adults, disabled, rural and urban.
community participation committees, cooperatives	Proposals and advisory councils committee on epidemiological surveillance (COVE COMPOS)	Health and disease specific forums Home visits controls canines	Controls Sexual and reproductive health Oral health Mental health Infectious diseases Chronic diseases Maternal child	Population in general: young, adults, disabled, rural and urban.
Watching (ASOJUNTAS)	Watching (ASOJUNTAS) propositional and advisory advice committee on epidemiological surveillance (COVE COMPOS), municipal council	Training campaigns on patients' rights ensure adequate management of health resources, health brigades (vaccination), sexual and reproductive health promotion and prevention	Controls sexual and reproductive health, oral health, mental health, infectious diseases, chronic diseases, maternal, child	Population in general: young, adults, disabled, rural, and urban.
Community action boards (Bitaco)	Community action boards (Bitaco), propositional and advisory councils committee on epidemiological surveillance—COVE municipal council	Management in health (promotion and prevention), health brigades (vaccination), vaccination of dogs and cats	Infectious diseases, chronic diseases	Population of communes of rural and urban area
Local Propositional and Advisory Councils	Epidemiological surveillance committee—COVE	Management in health (promotion and prevention), health brigades (vaccination), vaccination of dogs and cats	Oral health Maternal, child	Population of localities and communes of rural and urban area
Board of health and local social protection, propositional and consultative councils.	Epidemiological surveillance committee—COVE	Home visits for management of healthy environments (housing), calls from community organizations for promotion of healthy living habits	Controls sexual and reproductive health, oral health, mental health, infectious diseases, chronic diseases, maternal, child	Population of localities and communes of rural and urban area

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