

HARMONIC TOURISM, FACTOR OF SUSTAINABLE DEVELOPMENT IN THE CITY OF TOLUCA, MEXICO

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Abstract

In this article a proposal of territorial planning is presented from harmonic tourism as the factor that boosts sustainable development in the city of Toluca and the region of the Valley with the same name. In this proposal elements of "New Urbanism, Sustainability and Harmonic Tourism" are incorporated. Tourism is considered as the axis of the integral planning proposal from the programmatic framework of national development and values the propositions generated in the local sphere; it integrates economic sectors and social actors. The proposal highlights environmental services and natural resources that limit or favor human activities. Hence, tourism becomes an element that fosters local and regional economy.

In this work the need to provide elements to rethink and build theoretical-methodological alternatives on development, sustainability and tourism is exposed; there is a brief environmental diagnosis of the urban zones in general, and of the Valley of Toluca and its metropolitan zone in particular; some reflections on sustainability, harmonic tourism and local development are presented, then, the fundamentals to build a planning proposal for sustainable local development from harmonic tourism in the City of Toluca are exposed and finally the conclusions are stated.

Keywords: sustainable development, harmonic tourism, urban planning, participant integrative planning..

1. Introduction

The problems faced by contemporary society, in particular the environmental issue, surpass the disciplinary limits of traditional science; as Prigogine states "it is time we surrendered the evidence that

at any level, nature does not come to an agreement with that classic [paradigm]" or conventional paradigm (1997: 48), and neither does society which, undoubtedly, is ever changing. Contemporary culture faces the expansion of computing systems, industrialization, urbanization and socialization of communicational networks that shape new and complex horizons, which are reflected on the ideological syncretism characteristic of postmodernism. Linked to this, the environmental problem "states the need to internalize an emergent environmental knowledge as a whole of the set of disciplines, both natural and social sciences, in order to build knowledge able to comprehend the multi-causality and the relations of interdependence of the natural and social order" (Leff, 1994:17) where the participation of citizens has a fundamental role. Added to this need of rethinking theoretical and methodological stances are authors such as Healey (1997), Allmendinger (2002) and Abukhater (2009) in the field of planning; while Hiernaux (2003), Hunter (2003), Farrell and Twining-Ward, (2004), Panosso (2005), Serrano-Barquin (2008) in the field of tourism, summon to construct new theoretical frameworks and incorporate the sustainability of tourism.

On the other side, tourist activity has become a strategic factor to boost the economy of regions and countries, even as an instrument to help eradicate poverty in marginalized communities (WTO, 2002); it is worth mentioning that even under the effects of economic crisis, in 2008 there were 924 million international tourists, with an annual growth rate above 2% (WTO, 2009); whereas in 2007 it was close to 7% (WTO, 2008), being one of the economic activities with positive growth. In 2008, Mexico received 22 million 637 thousand foreign tourists, 1 million more than those registered in 2007 (SECTUR, 2008); domestic tourism represented 80% of this activity in the country. However, this growth has been insufficient to generate environmental benefits (social and natural) that create better conditions of life for the local population (Barkin, 2001; Gallegos and López, 2004). Because of this harmonic tourism and participant integrative planning are proposed as the instruments that allow reaching Urban Sustainable Development, at the time that urban and rural infrastructure and equipment required for local and regional development are induced.

Unlike, Mexico and Latin America, where there is not balance between urban offer and its demographic demand, many cities in Eastern Europe have expanded their areas of urbanization circa 20%, while their populations have only increased 6% (Zamparutti and Gillespie, 2000), conversely, the Metropolitan Zone of Mexico City grew more than 95% in 30 years, changing from 9 million inhabitants in 1970 to 17 million in 2000 (García González, 2004). The success of urban development in Europe comes from, among other factors, the diminution of growth rates, besides the advances in science and technology (World Bank, 1993). In Mexico and Latin America the problems of urban planning are mainly due to demographic explosion and continual migration from the countryside to the city that not only increase

the demand of urban soil but also that of basic services such as: water, sewerage, transport and electricity. The urbanization prevailing in the XX century in developed countries was characterized, among other aspects, by the establishing of very homogeneous suburban areas of low density, linked to the use of automobile and the construction of important road infrastructure (Sands, 2009). Nonetheless, in recent years changes in the forms of urbanization are observable, in countries such as Sweden one observes what some authors call Counter-Urbanization (Islam, 2009) and in Canada, New Urban Developments (Sands, 2009).

In Mexico, the challenges implied by the current situation of natural and social deterioration go beyond trying to order the historical tendencies that have characterized the growth of urban zones and their surroundings, it is indispensable to modify said tendencies and reorient them on the theoretical-methodological grounds of environmental planning and sustainability that incorporate sustainable practices, which are summarized in some basic principles of Sustainable Urbanism, such as:

- Pedestrianization of the cities
- Urban connectivity and sustainable transport
- Diversity in the use of soil
- Diversity in housing and trade
- Quality in architecture and urban design
- Traditional structure of human settlements
- Increment in urban density
- Intelligent transport
- Urban-architectonic sustainability
- Quality of life of the inhabitant

As for urbanism, architectonic design becomes so relevant that designers, real estate promoters and researchers are forced to develop and reinvent tools, methods and techniques to achieve good designs and good planning of buildings and cities, as well as the analysis of economic cost and environmental impact which said products cause, in this case buildings, during their whole *cycle of life*, this is to say, the period the product lasts, from its conception and design until its production, use, maintenance, and conclusion of its useful life. Consequently, we must protect the environment from the growth and development of the cities by means of prevention rather than correction; in order to prevent the

problems of environmental impact, sustainable design provides solutions even before building edifices, i.e., from their conception or pre-design, so that they become a tool to control natural, material, financial and human resources that are necessary for the “tasks” of the architectural, tourism, construction and urbanism industries, and therefore achieving a reduction of the impact on the environment and saving all manner of resources at local, regional and global level (Hernández, 2008).

2. Environmental diagnosis of urban zones

Environmental issues have their origin in the style of urban development that characterizes most of the countries nowadays; it is a widely accepted fact (Goldsmith, 1992), cities generate noxious effects on the environment (UNFPA, 2007). Besides the ecologic unbalances of regions such as tropical rainforests and the extinction of plant and animal species, or water and air pollution (greenhouse effect and climatic change), it is convenient to recognize that issues as the city-dwellers' stress, respiratory diseases or dermatoses, marginalization and deterioration in the quality of life of the population, among other, are also environmental problems and that, some of the most serious, are generated in the cities, as they are the origin and manifestation of the environmental problems of the modern world.

The environmental system is defined according to the General Law of Ecological Balance and Protection of the Environment (*Ley General de Equilibrio Ecológico y Protección al Ambiente, LGEEPA*) as all that which surrounds us either natural or artificial and that is composed at the same time of 4 specific subsystems, namely: biotic aspects, abiotic aspects, landscape and urban-socio-cultural environment (SEMARNAT, 2007). The biotic aspects correspond to the flora and fauna of the place; the abiotic ones to weather, soil and other physical features of the place; landscape is the agglutinating medium of the biotic and abiotic aspects; and finally, the socio-cultural environment is everything constructed by man, which is usually artificial and is found in a rural or urban environment. This general diagnosis has been based upon this definition by LGEEPA, and it is summarized below.

Urban population is concentrated on a surface under 6% of the total of the continents. More than 50% of the world's population lives in urban zones (Ferreiro, 1991; Satterthwaite, 2005, in Islam, 2009) and in Latin America, more than 75%, some of the most important metropolitan zones of the world are located in this continent (Goldsmith, 1992). In developed countries, the cities' growth rate decreases in an important manner, while in less developed countries this figure increases. According to United Nations Population Fund (UNFPA, 2007) in 2008 the figure reached 3,300 million people and in the year 2030 this figure will be circa 5,000 million if these growth rhythms continue, it is estimated that 80% of the people will live in cities in developing countries (Rodríguez, 1991). Large and small cities are

characterized by excessive consumption and squandering, all of them subsist on the rural zones that surround them, even on the furthest ones; from those places energy, foods, raw materials and water are obtained, and in return they give prodigious amounts of solid, liquid and gaseous waste.

In the large cities of underdeveloped countries, the acute contradictions that there occur can be observed: on the one side, technologic advances and innovations and high levels of life of certain sectors of the population, and on the other, misery, pauperism, desperation, stacking and vandalism coexist, which combined generate a quite decadent and inhuman environment. In every city there are poverty zones that are not the best for the adequate development of human being. Forests and fields are substituted by immense concrete plates, highways, high-rise estates and equipment that do not take into account the culture and geographic conditions of each place, mainly weather, and the housing style of developed countries has been imposed, as it is considered an indicator of modernization and development in this globalized world (Goldsmith, 1992).

Hence, material such as glass, steel and concrete are used in designs proper to cities with cold and temperate climates, accompanied by the use of central heating and ventilation that increase the cost and consumption of energy, which generates large volumes of pollutants. As a consequence, local materials and designs adapted to the weather conditions that would enable the most of ventilation and the least of temperature and humidity, and therefore the comfort of their inhabitants, are laid to waste.

As for the affects on the regional and worldwide environment generated in the cities and their industrial centers, it can be mentioned:

- Atmospheric pollution, acid rain, greenhouse effect, ozone layer depletion.
- Pollution of currents and bodies of water, as well as soil because of the generation of humongous volumes of solid waste.
- Overexploitation of soil, water, forests and other natural resources to provide them with food, elements and raw materials for their existence.
- Deterioration of the quality of life of the population, both urban and rural, as diseases of diverse nature and graveness are caused, as well as the psychological consequences from the change of life of the communities.
- Loss of ethical and cultural values.
- Increase in the number of automobiles and deterioration of transport in the locality, which makes it inefficient.

- Massive increase in housing development, which carries problems of urban infrastructure and equipment.
- Deterioration of endemic vegetation and significant modification of micro-climates.
- General deterioration of the city landscape and its whereabouts.
- Scarcity of natural resources, principally raw materials for regional development of construction and edification.
- Pollution and reduction of underground and superficial bodies of water.

Environmental diagnosis of the Valley of Toluca

The city of Toluca is located in the valley by the same name. The valley is located in the central part of the State of Mexico, and of the Mexican Republic (see figure 1: localization sketch of the Valley of Toluca), its extreme coordinates vary between 19° and 19° 30' north latitude and 99° 16' and 99° 55' west longitude. It is part of the Neo-volcanic axis and is composed by a number of structures and rocks from volcanic-tectonic processes, which originated the Xinantécatl volcano (Nevado de Toluca), with a height of 4,680 m.a.s.l. (Serrano-Barquín, 2002). This volcano was formed by successive eruptions with deposited layers of igneous materials, the high plateau is composed by lacustrine sedimentary materials and has a median altitude of 2600 m.a.s.l. The weather varies from cold to semi-cold in mountainous regions, and temperate in the plain, with vegetation of highly exploitable temperate forest (Serrano-Barquín, 1999).

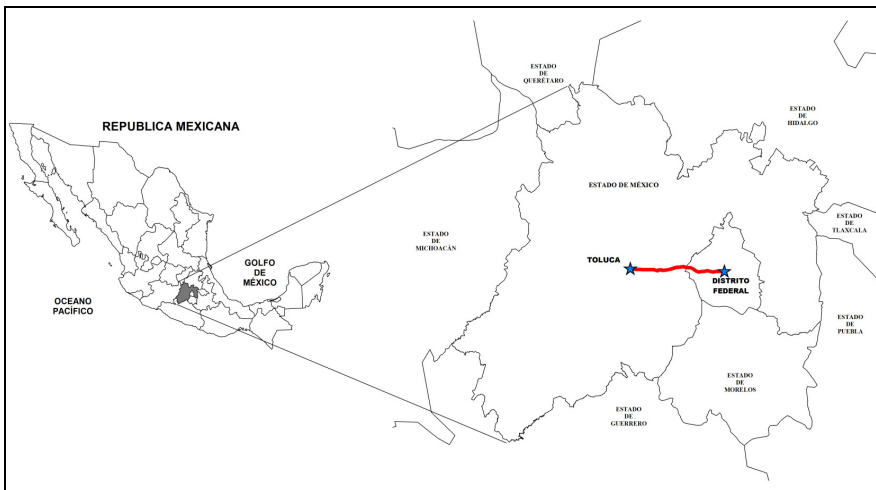


FIGURE 1 - SKETCH OF THE LOCATION OF THE VALLEY OF TOLUCA.
Source: own elaboration

In the Valley of Toluca ethnic groups, such as Matlazincas, Otomí and Mazahua peoples, established as from pre-Columbian epochs taking advantage of the richness of natural resources; nowadays, in this valley the second urban concentration of the State of Mexico is to be found (the most populated entity of the country with 14 million people), the first concentration is the metropolitan zone of Mexico City (nearly 20 million people). Toluca and five of their surrounding municipalities had in 2008 a population of 1 million 350 thousand 484 inhabitants (COESPO, 2008) (see figure 2: sketch of the location of the city of Toluca).

The process of industrialization, promoted in the 1940's decade in the country and in the 1950-1960's decades in the State of Mexico and the Valley of Toluca, is the main factor that has induced the transformations in the sort of activities, uses of soil and other resources of the valley which altogether have caused their deterioration. This industrialization was accompanied with an urbanization process result from migration toward these industrial zones, so it has an accelerated demographic process, change of activities and greater demand of raw materials, food, energy, soil and water; conversely, prodigious volumes of waste (solids, liquids and gases) are generated.

The population of the valley of Toluca grew almost four times, changing from 442,928 in 1930 to 1'741,043 in 2000 (INEGI, 2001), with growth rates above those of the country. However, its distribution in the territory represents a problem, since circa 60% of the population is concentrated on less than 10% of the region's surface, which the Metropolitan Zone of the city of Toluca (MZCT) comprises; whereas more than 400 localities are disperse in the rest of the region with an insufficient coverage of urban services.

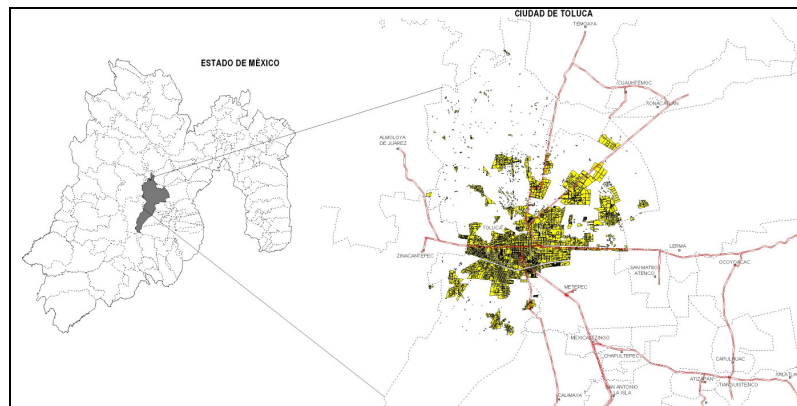


FIGURE 2 - LOCATION SKETCH OF THE CITY OF TOLUCA
 Source: own elaboration

The structure of workforce also changed from 1950 to 2000 (last available data), the population engaged in primary activities decreases from around 60% to less than 7%; whilst the secondary and tertiary sectors reached 36.5% and 56.5%, respectively, in 2000 (INEGI, 2001). This situation is heavily stressed in municipalities such as Toluca where the distribution of the workforce is 2.3% in primary activities, 32.46% in secondary and 65.24% in tertiary. It is considered critical because of the unbalance of the activities, both in the contribution they make to GDP and the conditions in which they are carried out; primary activities are based on seasonal and subsistence agriculture, low productivity and it is scanty technologized; tertiary activities incorporate an excessive governmental sector and another informal commercial sector, which in economic terms are not productive.

The use of soil is utterly altered: forestal zones decrease, in recent decades more than 10,000 hectares of forests have disappeared and the areas of high wooded density are reduced in a similar proportion; agricultural zones have given way to human settlements, urbanization (circa 11,000 ha), whereas the area formerly occupied by the lakes of Lerma have been incorporated to agricultural activities (out of the 10,705 ha registered in 1943 only 3,000 are flooded in rainy season and with residual water); the inadequate use of soil in relation to the agricultural use is a consequence of this, more than 40,000 ha are to be found in terrains unsuitable for agriculture (because of the slope and sort of soil) and that previously said terrains had forestry use (Serrano-Barquín, 2008).

Virtually the soil in all of the municipalities has a certain degree of acidity; more than 75% of the surface has different degrees of erosion, the greatest percentage is represented by moderate erosion with 38%. From available information it has been proved that in the riverbanks of Lerma River and Alzate Dam there are concentrations of heavy metals above the values considered in the norms.

Water as a resource has serious problems of overexploitation and pollution. In the first case, it is reckoned that there is a yearly deficit between 56 and 89 million cubic liters, a situation that has caused the disappearance of springs such as those of Almoloya del Río, Alta Empresa and Ameyalco and the desiccation of the founts of Lerma River. The phreatic level has decreased dramatically, the greatest registered decreases were superior to 20m in the 1970's decade, a period that coincides with the largest volumes of extraction (14 m³/s) (Esteller and Díaz, 2000); thus, originating problems such as cracks and land-sliding; the drilling of wells ever deeper (increasing their cost) and the disappearance of humid lands; by 2001, there was a water deficit of 142 million m³/year (GTZ, 2001).

Lerma River and other currents and water bodies have worked as drainage channels for the population, so pollution is very high, it surpasses the limits set for "water suitable for recreational use, conservation

of flora and fauna and industrial uses". As a result, the aquatic ecosystems have disappeared (vegetation, fish, birds and mammals) altering the population's lifestyle.

Urban growth has been chaotic; there is not a system of roads and planned public transport, so the problems of traffic and pollution are on the rise. Many a route are overlapped and long rows of buses, almost empty, are seen competing for passengers at high speed; or on the contrary, waiting idly for passengers, obstructing the flow of traffic, stopping in the least appropriate places, a situation also observable among taxi drivers (Ramírez, 2004).

By 2004, there were 26 public-transport companies in the Metropolitan Zone of Toluca (Ramírez, 2004), with 269 routes where 2,202 buses and 1,200 minibuses operated; yet it is estimated that there are twice as many units, which are called "piratas" (unlicensed) with cloned driving plates (i.e. duplicated), therefore there is a total of 6,804 units covering a million and a half kilometers a day; if these figures are added to the number of particular and service vehicles, we can have an idea of the traffic conflicts there are everyday, for the capacity of the roads has been surpassed. The most heavily used roads in the city are: Paseo Tollocan, Paseo Colón, Isidro Fabela, Independencia, Pino Suárez, Las Torres, Alfredo del Mazo, Benito Juárez, Morelos, Quintana Roo, Hidalgo, Venustiano Carranza, I. Rayón, W. Labra Lerdo and Salvador Díaz Mirón, thereby the most polluted ones.

Separately, the communities that have been taken up by the urban sprawl do not have provisions of services, generating problems of water and energy supply and communication, besides those of social nature. They lose their identity and habitability.

In spite of this situation of deterioration, there are areas of impressive landscape beauty and cultural places in the Valley of Toluca that attract a considerable number of national visitors, more than 3.5 million in 2007 (SECTUR-GEM, 2008). Among them worth mentioning are the national, State and municipal parks, such as El Insurgente Miguel Hidalgo, where one finds La Marquesa, El Nevado de Toluca or Xinantécatl (see figure 3), Zacango Zoo, Sierra Morelos Park, Tecula; water bodies such as Lagunas de Zempoala and Chignahuapan. There are also archeological sites such as Teotenango and Calixtlahuaca and great richness in Colonial and Porfiriato (Period of the dictatorship of Porfirio Díaz) architecture. In the first case one can mention religious architecture (churches and convents) as well as civil, mainly haciendas; in the second case, houses turned into museums and cultural places (see figures 4, 5 and 6).



FIGURE 3 - "EL NEVADO DE TOLUCA", WATERCOLOR BY HÉCTOR SERRANO



FIGURE 4 - "THE PORTALES SEEN FROM THE MORELOS THEATER", WATERCOLOR BY HÉCTOR SERRANO



FIGURE 5 - "EL COSMOVITAL", WATERCOLOR BY HÉCTOR SERRANO



FIGURE 6 - "LA PLAZA DE ARMAS" (TOWN SQUARE), WATERCOLOR BY HÉCTOR SERRANO

3. Reflections on sustainability, harmonic tourism and local development

It is convenient to pinpoint that Sustainable Development is a proposal for development accepted by almost all of the governments and social sectors, hence the need to consider it as the structuring axis of the strategies, policies and actions for development in general. A fundamental conceptual aspect of this proposal is to conceive the Environment as a COMPLEX SYSTEM composed of nature and society, in constant interaction and interdependence (García, 2006); in this sense, sustainable development

cannot be attained if isolated work is carried out. The reality is one and the environmental issue has to do with natural, political, social and cultural processes, this is, environmental. It is indispensable to reconsider the interdisciplinary or trans-disciplinary approach that must guide environmental planning. The concept of Sustainable Development (Ebert, n.d.) is very general and gives the opportunity to interpret it in different ways; it is indeed this condition what makes its adaptation to different cultures and their natural conditions feasible, so as to avoid the destruction of the environment and increase the quality of life of the population.

Other objectives are:

- Reduce the negative impact of the productive activities on the environment
- Restore degraded ecosystems
- Gradually substitute the most aggressive activities for the environment
- Modify the extravagant and consumerist lifestyle
- Improve the conditions of life of the population, specially the marginalized groups
- Conserve biodiversity

On the other side, in local development, the community has the power to decide and directly influence on the set of productive activities and services in the locality. The employment generated by the activities is, preferably, for the same community and the projects start from collective initiatives based on the economic, social and natural potential of the region. The projects must be framed in the surrounding conditions, the national and globalization context.

In 1995 the Charter for Sustainable Tourism was held, where 18 conditions that must be fulfilled to achieve sustainability in tourist activity were established; both the natural and cultural spaces are included; they demand the participation of local communities in the entire process of the planning of the project and these must be economically viable.

Hence, the concept of sustainable tourism appears, which OMT (1999) defines as:

That which satisfies the needs of the current tourist and the destination regions, at the time that it protects and guarantees the activity in the future; it is conceived as a form of management of all the resources so that the economic, social and aesthetical needs might be satisfied at the same time that cultural integrity, essential ecologic processes, biologic diversity and systems that support life are preserved (p. 18).

Nonetheless, this definition and its application are basically focused on tourists and tourist activity, as it stands out that tourism “satisfies the needs of the current tourist and the destination regions, at the time that it protects and guarantees the activity in the future” (OMT, 1999: 18); but as we see, it does not make the convenience of satisfying the needs of the local population and the rest of activities it carries out explicit.

Because of this, Harmonic Tourism is proposed as the activity that boosts local and urban development, it has as an objective to improve the quality of life from the rational-intuitive use of the natural and cultural resources, favoring the conservation of the ecosystems and their basic biological processes to generate social and economic benefits for the population and the visitor’s satisfaction; at the same time it allows combining primary and secondary activities, as well as those oriented to services and trade. This complementariness becomes an advantage to be exploited, for it is possible to link the different activities of the population and answer the need for employment in order to reach higher incomes and therefore, increase the quality of life of the population, a common objective with local sustainable development. The concept of harmonic tourism might and must be applied to all of the forms of tourism; it is indispensable to reconsider the schema of ethical values and principles that regulate current society and, consequently, redefine the style of development that characterizes the contemporary society, to propose a model base upon an environmental ethics which revalues nature and mankind itself; respect for nature and human being is the fundamental principle of this new model. It is like in music, more than the metric and rhythm that are ruled by scientific knowledge, harmony must obey sentiments, experiences, sensations, yet its result is gradable, accepted and recognized by the most, this is what should be sought: harmony between activities, between utilization and protection, science and experience. This concept must start from a holistic perspective and be based upon the recognition of the nature-society complex system (environmental system) (Serrano-Barquín, 2008).

According to Hall (2000), in order to be able to access sustainable tourism in any city, we must carry out a restructuring at urban and environmental level which is based on a sort of international tourism combined with domestic tourism, where all of the social actors are involved (WTO, 2005). Given the current conditions of economic and sanitary crisis, the proposal is focused on domestic tourism.

4. Proposal of planning for sustainable urban development and harmonic tourism

The cities do not have to be condemned to be an immense concentration with no identity, full of contradictions and parasites of their surroundings, they may and must be transformed into a space composed by a mosaic of integrated communities, with better conditions of habitability, communication and cultural identity, where the tourist activity can be developed focused on the benefit of the tourist,

however, fundamentally on the benefit of the very inhabitants of said communities, where harmony between visitors and hosts is promoted, and between new technologies and traditional technologies, between natural and socio-cultural environments as well.

Thus far, the elaboration of the urban development plans were supported on the functionalist model, which aimed to homogenize and propose the same formats for all the realities; this model has been proved wrong, it is enough to look at any of our cities. Human settlements are more than just the physical space where the population and its activities are concentrated.

To achieve sustainable urban development the city must be environmentally planned, to do so their regional surrounding and other regions it has relations with must be taken into account (Serrano-Barquín, 2003). This is why integrative participative planning is proposed, which emphasizes the necessity to *integrate* the different sectors of the economic activity into a plan of sustainable development, where diverse (federal, state, municipal and local) dependencies and spheres of the government partake; that from a model of environmental ordering of the territory the sectorial programs which complement each other, not opposed to the principles of sustainability or other sectors, are proposed, in a parallel manner it is based upon the *participation* of the multiple actors of the community under study and the neighboring communities, all this considered within the regional context.

Among the main characteristics presented by participant integrative participation as a flexible and efficient instrument to make decisions, in addition to the aforementioned ones as principles of Sustainable Urbanism, one finds:

- The new environmental management that proposes an efficient and sustainable management of the available resources for regional development
- Consider the entire reality, including natural, social, economic and political aspects in an integral manner, not sectorial.
- Take into account the international and national spheres, yet emphasizing the local and regional conditions.
- Establish objectives and goals in the long term, in addition to short and intermediate terms.
- Promote social participation
- Select and retake appropriate technology in function of the environmental characteristics of each place, including natural, social and cultural aspects.

Therefore the fundamental premises are:

- Overcome sectorial approach when analyzing urban problems through interdisciplinary and inter-sectorial work, particularly between the Secretariats of Urban Development, of Water, Public Works and Infrastructure for Development, Economic Development (industrial, agricultural, mining, artisanal fomentation), Environment and Tourism; as well as their peers in the municipal and federal spheres.
- Make compatible and complement the plan of urban development with the Program of Ecologic Ordering of the Territory of the State of Mexico, and related programs, especially Tourism, in order to make the policies, actions and criteria of soil use and other resources congruent.
- Overcome the municipal perspective that allows visualizing urban development in the metropolitan, regional and national spheres to promote with the corresponding federal and state instances decentralization policies that reorient migratory movements.
- Greater autonomy for local governments and propitiate social participation.
- Boost local-regional development to improve rural population's level of life, as this would favor the retention of the populations in their communities and decrease emigration toward urban centers.
- Emphasize the generation and diffusion of environmental ethic values
- Respect the cultural identity of every community
- Consider, effectively, the geographic conditions of the region that limit or favor urban development: geological substrate, topography, weather, edaphic conditions, soil use, vegetation, water availability
- Consider the city as a integrant part of the region to achieve ecological balance and self-sufficiency

As specific proposals for the sustainable urban planning the city of Toluca considering the tourist perspective, besides the general framework already pointed out, the following is added:

- Establish a Council of Inter-disciplinary Participation, in charge of developing the plan of urban development of Toluca, in permanent communication with the rest of municipalities and the corresponding federal and state instances, within the framework of a Metropolitan Plan of Development.

- Identify the image of the Urban Image of each barrio or community that compose the city, which allows identifying them from the rest and generate the tourist resource susceptible to be taken as advantage.
- Rescue Verdigel River and turn it into a pedestrian and commercial zone in the center of the city as a tourist attraction. This means to separate the sewer system and uncover the river, let it flow out of pipes for everyone to see, restore it and guarantee a minimal permanent stream with water-gathering works in the hydrologic basin it belongs to.
- Elaborate integral programs of infrastructure (supply of water, sewer system, rain-water collection, energy and roads) and intelligent public transport.
- Restructure public transport system from the negotiation with the diverse companies and visualize interconnected routes that do away with the indiscriminate flow of buses along the main roads of the city, while new means of collective transport, in which the current companies can partake, are incorporated.
- Incorporate mixed uses of soil in the city in order to generate integral zones with all the services or suburban centers and decrease the commuting of population.
- Establish agro-ecological zones that favor the restoration of the ecological balance through the refill of the aquifer, control of the wind, decrease pollution (carbon capture) and noise, with which the urban image would be improved.
- Respect the identity of each community.
- Observe environmental criteria in the construction of the city, for instance: paving with permeable materials in secondary roads, increase green areas and median strips to favor the refill of the aquifer; orient the edifices in function of the geographic localization and climatic conditions that save energy of heating and airing; separate waste and pluvial water, construct systems of water collection, among other.
- Foment a new urban culture that emphasizes the ethical values based on respect for nature, yet mainly on mankind itself.
- Promote consensus on the image of the city.

Sustainability requires a new approach of environmental management where several instances take part, either public or private associations, in a self-financeable process with a territorial vision that strengthens the making of decisions.

5. Conclusions

The prevailing or traditional style of development has to be deeply transformed, a society that generates more than a kilogram and a half of solid waste a day per person and millions of tons of solid, liquid and gaseous pollutants or that requires sixty times more oil and a hundred times more electricity than in the 1920's decade to produce food, must change. The history of mankind demonstrates that in the face of the crises several societies have experienced, values and principles appear or are renewed, which have allowed the society to survive and evolve toward better conditions.

Participant integrative planning is an efficacious means to nimbly modify the contradictory tendencies or territorial organization and environmental deterioration determined by the economic growth pattern, political conditions, social differentiation, and to sum up, the dominating development model. Participant integrative planning propitiates active and decisive participation of the legislative organs, social and political organizations and citizens, under the approach of sustainability.

It must be emphasized that each city has its own set of problems and identity; and several aspirations and common principles might be found that help the city be a nice place to live in, with an image which the citizens might feel identified with, in a new urban environment, where the traditional and innovative are conjugated and in balance with its regional surrounding.

In this context, harmonic tourism becomes the fostering element of economic activities under a scheme of restoration, rehabilitation, conservation, protection and advantageous use of natural resources, as well as the rescue and valuing of the local culture for the benefit of the visitor and resident.

The city of Toluca and its metropolitan zone will continue growing in the immediate future, so it is indispensable to begin actions to make this growth follow a plan of development that allows it to offer its inhabitants a suitable place to live, with a better life level and overcome the problems the city and the region it belongs to currently face.

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