

CITIZEN'S PARTICIPATION AS A MEAN TO CONTROL ACCELERATED URBAN SPRAWL¹

Participation Study of the Calpuleques (Popular Representatives in Xochimilco)

Urban sprawl in the Federal District (Mexico City)

This presentation consists of a case study, which illustrates the role of the Calpuleques (Popular Representatives) in Xochimilco, and their participation in controlling the accelerated urban sprawl within this Delegation (borough/district) of the Federal District (Distrito Federal).

The Federal District (DF) with a population of 8,720,916 people, along with fifty six additional municipalities from two other Federal Entities; the States of Mexico and Hidalgo, called the Mexico City Metropolitan Zone (ZMCM) is the largest urban metropolitan area in the country. This area has more than 19.2 million inhabitants. (INEGI 2005).

Because the demographic increase, that accelerated since the mid 20th century in Mexico City, the Federal Government decided in 1970 that the Federal District (D.F. Distrito Federal), before constituted by one central city, Mexico and 12 boroughs, was considered in its collectivity only as City of Mexico properly named and it stayed subdivided in sixteen boroughs: the previous twelve and four new ones (instead of the area of the central city). From then on, the City of Mexico and the DF is the same entity².



Fig.1 The Distrito Federal, its boroughs and the former City of Mexico

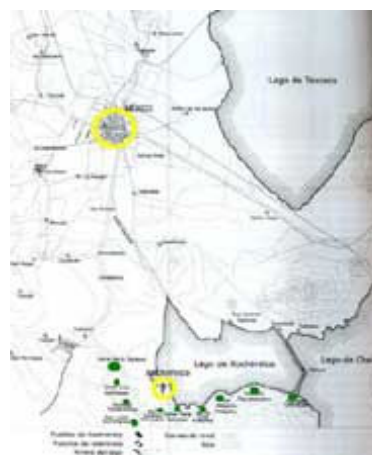


Fig.2 México City, Xochimilco and their 14 Towns in 1930 (Mapoteca Orozco y Berra)

Xochimilco, our area of study during the 1997-2000 political term, is located in the southern part of the DF., It is one of the 16 boroughs and the third largest in the DF, encompassing an area of 122,000 km² with a 1997 count population of 332,314 inhabitants and an 80 to 20 rural to urban ratio.(INEGI). Their urban areas are: one principal town, considered a City since the sixteenth century with fourteen original towns³, originally dating back to prior to the arrival of the Spanish. Most of them are located at the edge of the Lake of Xochimilco Figs 1 and 2. This region, with man made arable areas devoted to agriculture, commonly known as chinampas, or chinampera zone, are artificial areas of agricultural land built on the water, characteristic of this region, (initially an agricultural system built on the former lakes around the Mexican basin) it is considered an area of rich cultural heritage, consisting of pre-Hispanic ruins and remnants of the first settlers (Perez Cevallos. 2003), Complete with vast and unique traditions and customs; colonial chapels and temples built in the XVI century with an extraordinary artistic and architectural quality, sharing folk traditions, and the diverse and colorful lake area with its "chinampera" zone of extraordinary beauty. All of which includes the region declared by UNESCO in November 11th of 1987, World Cultural Heritage (Chavez, E, 1999), Fig.-3 and 4.



Fig. 3. From Xochimilco to Mexico City (1900's)



Fig. 4. Streets and water channels in the urban grid

Prior to 1970, Xochimilco City was not a part of Mexico City the Capital of our country, (now remains as part of the DF), and enjoyed the traditional characteristics of the Mexican colonial cities. (Perez Zevallos). This Delegation, containing a headquarters office or Down Town Xochimilco (now, cabecera delegacional) maintained until the first half of the last century, many of the characteristics associated with the Mexican high plane towns. It is important to realize that during the early years of the twentieth century, traveling from downtown Mexico City to Xochimilco could take at least half-day, see Fig 3.

When the population of the D.F. virtually saturated urban areas towards the North, East and West of the D.F, the growth trend began expanding towards the less densely populated areas of the South. Now these areas form part of a great metropolitan area larger than the DF. The rapid population growth in the region recorded in the twentieth century, hindered the harmonious development of Xochimilco. See Fig.-5.

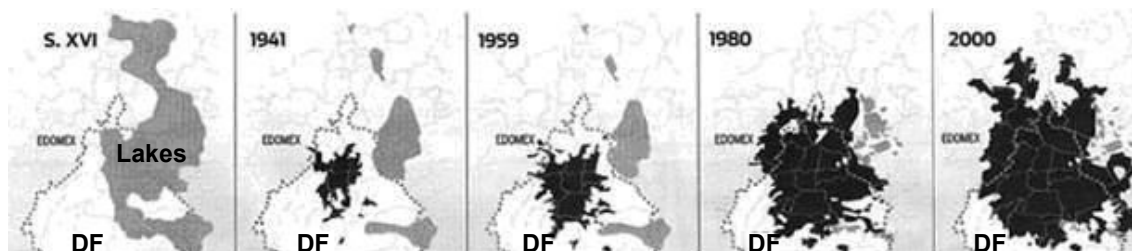


Fig. 5. Images showing the Federal District (DF), the former lakes and the Urban Growth in the basin of Mexico since the XVI Century to the year 2000.

This region consisting mostly in rich forests and agricultural areas is an important ecological reserve which provides for both, to recharge aquifers throughout the basin, which is part of the last of the lakes in chinampas, and an important area that includes our case study, the Delegation of Xochimilco. This area of the region supplied fruits, vegetables and other products to down town Mexico City as well as a large portion of the water consumed by residents of the capital. Furthermore, it is an important source of water supply to the aquifers in the basin (Cuenca), mistakenly called Valley of Mexico (Perez, Zevallos 2002). Because of these important qualities, Xochimilco was considered, until the year 2000, one of the richest in traditions and customs of the entire area. Ironically, it also retained the reputation for the most conflicting in the DF perhaps because it houses one of the most aggressive groups of this entire entity, which is a considerable reason for being our case of study. In addition, Xochimilco at the end of the century had one of the highest population growth rates in the entire D.F.

The urban sprawl in Xochimilco, our Case Study

Xochimilco in 1950 had only 70381 inhabitants but starting in 1970 demographic increases began being exhibited. The middle class population began to occupy housing

projects, which were purposely offered in the towns of the Borough, mainly in the areas near the access from the other central boroughs from Mexico City toward Xochimilco. At the same time the demographic pressure of the D.F. enabled illegal settlements around the fourteen towns of the Borough and it continued invading the other patrimonial zone already mentioned, the so called "chinampera" zone, with unique characteristics located on the border of lake Xochimilco and constituted by the islands built artificially, with intermediate canals form a rich agricultural entwining that dates one of the first settlers of the region before the 25th century. In 1990 Xochimilco reached the 332,300 inhabitants FIG.6

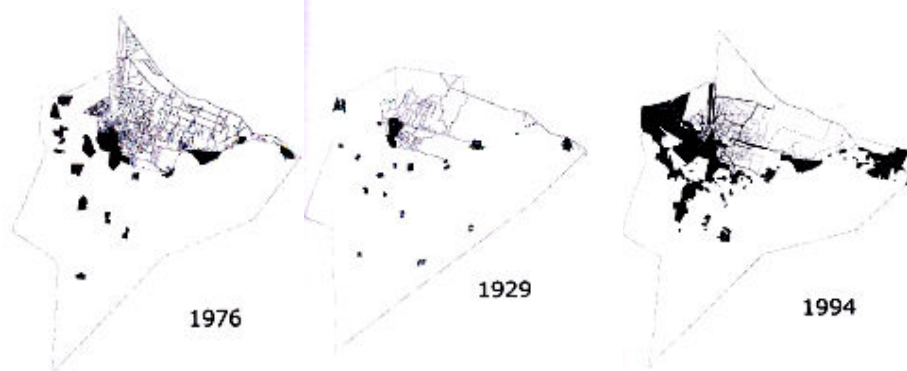


Fig.6. Population Growth Xochimilco. Dibujó A. Dionisio para Historia de Xochimilco en el siglo XX

Fortunately, at present the rate of population increase has been slowed by various policies, some of them are the reason of this paper and will be explained later. This rate has fallen slightly since being surpassed from 4.6% from 1950 to 1970, to 3.2% from 1990 to 2000 at 1.6% and from 2000 to 2005 at 1.0% Fig.7. Although this fact makes the new neighbors presently represent almost 50% of the population and natives from the original towns of the region the other half of it, many of whom

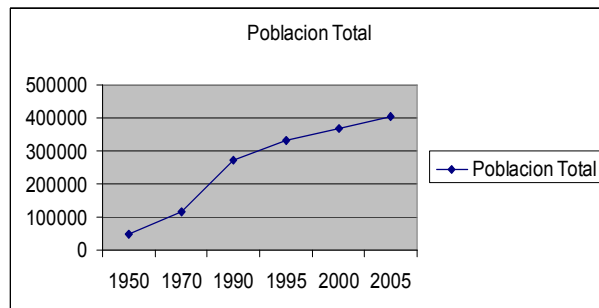


Fig.7. Population in Xochimilco.National Population Census INEGI

are presumed to be descendants of the first settlers, including those prior to the sixteenth century. They knowledge that when new immigrants arrived, those were unaware of the traditions, customs and ways of living of the natives in general, in many cases a culture of the city. When this happens in areas with deeply rooted traditions, as Xochimilco, unrest emerge and dissatisfaction among the natives, who feel invaded. This also relates to the aforementioned phenomenon of violence in that region, as well as the existence of problems that appear among opinion leaders of the community, -regardless of the particular trends or policies of governments the Delegation and the city itself-, and all residents: natives and new neighbors both in newly established residential areas or illegal settlements located in the narrow-minded zone and the chinampas or chinampera zone, consisting of parcels of cultivation built on one of the few remaining lakes in the (Cuenca) Basin of Mexico -- commonly known as the Valley of Mexico-- with exceptional landscapes and sites, has a high productivity of flowers and vegetables and waterways for the transportation of products and for tourist trips Fig.-3. However the wealth of its territory, its cultural and tourism potential and also a floating population of more than 60,000 people on weekdays, weekends and popular holidays (more than 420 per year). Xochimilco had been marginalized and neglected during the past 40 years by not being allocated resources economically speaking, and had neither received urban services similar to those in central boroughs in the capital of our country.



Fig. -8. Navigable channels



Fig.-9 Civic venues

Xochimilco political situation in 1997

The inhabitants of Xochimilco for these reasons began to be distinguished, from more than 40 years, as a rebellious population tired of being exploited or invaded by new neighbors without consideration for their traditions and neglect by their leaders.

In 1993, in order to eliminate inequality between Mexico City and the other Federal Entities of the country, the Constitution was modified to allow democratic elections for the Governor of the DF. Prior to 1993, the President of the Republic appointed the Governor⁴. In 1997 first democratic elections in the Federal District were held, the residents of the capital, voted for the opposition party, corresponding to the left-wing groups. For the first time the elected head of government could propose to the Federal District Legislative Assembly (ALDF), created a few years earlier, the Political Delegates that should take charge in collaborating with their government in the administration and management of the 16 political boroughs that as noted above, the Federal District is divided. Three years later in 2000 Political Delegates became also democratically elected Delegational Chiefs. It is also planned that in a few years more, they would become Mayors with all the characteristics in a new legislative structure.

It is important to note that in most cases, especially in Xochimilco, this political process was difficult. The DF was governed, as the other federal entities of the rest of the country, for over 70 years by a hegemonic political party population and as the rest of them was accustomed to being controlled by corrupt leaders who formed the client system of the central government in exchange for votes for the elections for president of the republic, receiving in return all kinds of favors. Some of these favors included allowing residential construction in environmentally sensitive areas such as those reserved for refurbishing the aquifers. Often the same leaders and future legislature candidates would be who would encourage the illegal growth in the region's urban areas. The population was virtually kidnapped by the powerful groups. Delegates in Xochimilco, with one exception, never completed its management and its inhabitants often violent, waived establish dealings with those.

This types of issues faced in this region and in the rest of the DF deal with taking into account all their jurisdictional demands, to reach agreements between population and government; and to establish an appropriate dialogue with all different kind of groups, to agree on the supply and demand of urban projects to respond to real needs of users and at the same time meet promoter's expected profitability.

Registered Changes in the socio-political situation in Xochimilco after December 1997

In the case of the Delegation of Xochimilco, urban planning problems related to accelerated growth processes and a multicultural urban pressure were face, so we had to consider its users as well as reaching agreements between the population and government, in order to establish a dialogue and provide different agreements. Projects based on the truth, with open and public dialogue, honest and with detailed explanations of the factors that

contribute to the process. These projects would be based on factors that allow all parts to define which goods and services would be beneficial to all the groups involved.

Since the change of government in 1997, the first delegates democratically approved by the ALDF (Legislative Assembly of the DF), with the local government authorities and professionals in urban planning in Xochimilco, as already mentioned before, realized that the attitude of the new government project should be in accordance with the feelings and aspirations of the people. For this reason, as in all urban areas of a country in the process of development like ours, their task was not to impose preconceived patterns of urban management, but to make a process of construction and management shared with the people of all socio-economic levels, calls at meetings of UN-Habitat II in Istanbul as "partners (connoisseurs)" considering the rest of the forces involved in the process of improving the urban environment. It should be mentioned that other changes were required as part of the democratic process in Mexico City, along with the attitude and ways to act on the part of the population, rulers and urban professionals, it was possible to achieve the proposals and projects described here.

Local democratic elections in the towns of Xochimilco

On December 21, 1998, barely a year after the beginning of the new government was decreed by the ALDF the new Law on Public Participation in the Federal District, which defined the institutions and instruments for the characteristics of the actors involved -it should be pointed out that this law has been revised and updated since, to fit this process-. One of the features since its inception was that the neighborhood representatives might be elected from amongst the local community without having to belong to any political party. It is important to consider that the most frequent mechanisms for citizen participation have multiplied in recent years, and since 1998, when this law and other legal rules were modified this participation has been tailored to the processes of forming and modifying urban spaces.

A proposal for viable alternatives in city planning is to subdivide neighborhoods or districts, so in this case the Delegation of Xochimilco was divided into a greater number of cells, according with its original structure of towns, and to gear policy and administrative decentralization and to encourage both government and citizens to work together to meet the best decisions to improve governance.

In the case of Xochimilco, popular representatives were elected from the socio-economic structure, which the region had since pre-Hispanic times. In the fourteen original towns and Down Town Xochimilco, the political-administrative structure was led by "Calpuleques" that before, collided with the delegates who had become authoritarian leaders with many years of illegal stay. Once decreed the modifications to the Law on Citizen Participation, the delegation promoted the neighborhoods elections, resulting in fifteen democratically elected popular representatives for the first time. These territorial coordinators "Calpuleques" were mainly native inhabitants with an awareness of culture conservation and widespread respect for their customs, traditions and practices; a circumstance which helped change and modify the city-making manners in the region and the control of urban sprawl (Fig.10).

Since the local democratic elections in the towns of Xochimilco, the population has in a good measure increased their conscience of how important it is to participate in the reorientation of the urban processes and to put a control to the ecological problems that increased so heavily in the region during the second half of the twentieth century.

To a large extent, the population, has since then been more aware of the importance of their participation in guiding the processes of urbanization and to halt ecological and urban deterioration, carried out rapidly since the second half of the twentieth century.

This present document intends to describe an experience where, faced with a situation of mistrust and disbelief towards the authorities, tried to seek dialogue as a mean of achieving changes in patterns of settlement and cancellation of coercive practices which the people of Xochimilco had in the late twentieth century.



Fig.10. The first territorial coordinators elected in Xochimilco

This case study covering the period 1997-2000 of Xochimilco shows the impact of controlling accelerated urban sprawl in this region, when promoting greater citizen's participation. This situation began when, for the first time the popular territorial representatives (Calpuleques) were democratically elected. These Calpuleques had cultural coincidences and similar regional identities with their jurisdictions, hence promoted a dialogue with which other, and in some cases, contributed to less violent conditions from those that existed before this experience. A mayor result of instituting citizen's participation was the control over the urban sprawl.

The main problems about urban sprawl

The problems presented in Xochimilco at the beginning of the period 1997-2000 were, as mentioned, very diverse, but the main five and that link with the incontrollable growth of the population and the invasion of the urban and rural areas of this rich territory were the following.

- 1). - The distrust of the population towards its urban authorities
- 2).- The illegal occupation of the urban and rural areas in all directions, some predominantly in an illegal way and others supposedly with authorization of the previous authorities but always without order nor foreseen plan and without being backed up by an approved Programme.
- 3).-The situation of conflict between the native settlers and new neighbors considered by the first as invaders, leading to social conflicts of all kinds.
- 4).-The existence of multiple corrupt leaders because of all the previous circumstances that maintain hostage the native population and newcomers. And for this reason:
- 5). - The fact of the existing of a lack of dialogue with the authorities because it was controlled by leaders, who maintain at bay of the decisions to the local population.

In the delegation there were many other conflicts resulting from the more than forty years of government neglect towards the population. Among these, is corruption, the effects of immoral relationships between central and local authorities, for example, favorably accepting illegal land agreements in exchange for a majority of votes. These favors included providing goods and services being made to appear as commitments when those were canonries that the authorities should give to their protégées in exchange for these will give stability and protection of violent behavior by groups controlled by those.

In this case there was illegal invasions and the gradual change in agricultural areas, many of these spaces were agricultural land in hills or in channels between the chinampas filled in both cases by gravel to move to become unproductive moors justifying its subsequent invasion or illegal sale and transformation in urban areas and roads that after illegal regulations make easy the disorderly growth and became housing projects or illegal settlements and subsequently changing its land use were gradually converted into more areas for urban occupation. Fig 11 The processes of urbanization through this procedure became common practice to the past authorities that not only were not familiar to them, but they consent it.

As previously mentioned, the Delegation of Xochimilco had the most contentious reputation of the City, hence the decision to try a process of dialogue between authorities and the people, took priority to seek good governance in the delegation, a practice that neither the people nor authorities had carried out earlier.



Fig.11. invading hills and croplands

In an attempt to engage a permanent dialogue with the most of the population, it was also necessary to give power to Calpuleques people's representatives.

This process began immediately by contacting these representatives and the ones of the three other major political parties as well as to initiate talks with regional leaders of all types and interests. In regard to political parties, the delegation of Xochimilco majority of the residents supported the Party of the Democratic Revolution (PRD), winner party in the 1997 elections.

The PRD as the ruling political Party

The PRD was a young party, since its inception 1989 it was organized by numerous groups or tribes (as self called the political currents composed of). This has complicated negotiations and agreements within the party, and has hampered the initial left wing trend to become in 1997 the second force majority in the legislature. In the activity it has returned to the 3rd place. The work done during the first three years of the democratic government in Mexico City, in general and especially in that delegation, troubled by the circumstances already mentioned, hindered the process through which search a dialogue of trust with the population. This dialogue, achieved through time, facilitated agreements to provide projects and services in general, and slowly allowed the Delegation responsible people, in that time Delegados, now called Jefes Delegacionales to, successively be elected every three years in 2000, 2003 and now in 2006. These new governors, have started their management in a more relaxed atmosphere, with a much better budget and with a provision of peaceful dialogue, which was not common with the former governments of Xochimilco before this process held during the study case (1997-2000).

The first democratic government's main objective was to support strategies to gradually establish a program aimed at instituting Governance. This was to be accomplished in a manner in accordance with the wishes of the authorities in charge. This dialogue was crucial in persuading local people that the objectives of the authorities were to reach agreements and permanent advances in democratic processes, to obtain benefit for most residents. Among the mechanism for achieving these goals, was the immediate establishment of programs that can easily reach the population; such as the rescue of local traditions, the impulse of local fair products like "corn and tortilla", "olives and amaranth", a very nutritious seed prepared with various sweets, "ice-cream", "mole" among many others, as well as supporting religious holidays which were not perceived as being supported by previous governments or at least not top priorities. Furthermore, establishing projects, which enable the public to realize that they were also doing work for the benefit of the population, such as, flood control and ecological protection of some much damaged areas in the region. It was precisely in this context that began to carry out projects with the inhabitants of barrios, towns or regions together with representative people with different agendas and with local groups and the Calpuleques and the live forces of these locations, and coordinated by the local government, the administrative and professionals responsible for the projects, often coming from universities, ONG, or public officials of the central levels, and with the support and advice of the people in charge from the Borough.

Projects towards an ecological recovery to help the control the urban sprawl

Most of the Programs described here, were already mentioned in the ISoCaRP Bilbao Congress when describing ecological programs⁵, so they will not be explained in detail here, detailed information can be obtained in the original papers of the Bilbao Congress. These programs are mentioned in this study so that these lands are recognized as important agricultural lands and to avoid their future use for residential housing development projects or be occupied by illegal invaders. In addition, these programs have allowed the legal owners and their representatives to keep a watchful eye thereby preventing any potential illegal uses. Most of these projects were programmed in 1998 after a diagnostic and a continued dialogue with the community, and obtaining consensus and finding new ways to ensure a better urban and regional environment. The basis of these projects was to ascertain that every proposed action had enough economic resources to guarantee its detonation and permanence and, to strengthen the popular conscience regarding ecological and social aspects. These practices were carried out mainly, in rural zones.



Fig.12. Bio-intensive Layers



Fig.13. Old age Women in Herbalist

The outsiders, with support of corrupt leaders and the former authorities, were important agents to the accelerated increase of urban illegal settlements mainly because of the uncontrolled invasions in agricultural lands. For these reason many different projects were established in the region. Fifteen hundred out of a total of 4500 original inhabitants benefited by one these projects. To achieve a communitarian process a model of participative work was used. Technical and social consultants were permanently assigned in these communities to teach and train the natives how to run these participative workshops with an ecological focus, Once a person or persons were adequately trained to run these models, they were then responsible to pass the knowledge they had acquired throughout their communities⁶, This culture has been maintained proudly by the different groups in the community during this last ten years.

A number of bio-intensive layers were made as well as many other programs, allowing the maintenance of the production for an entire year. Presently 90% of the inactive lands are now productive and are contributing to stop the urban sprawl and the practice of buying and selling for illegal settlements. Some of the practices used to create an ecological attitude and human dialogue and practices are changing the culture all around.

In Xochimilco many communitarian technicians with experience in the handling of drains promoted the rescue or the ancestral crop of *amaranth* to test the value of the thesis "el agua manda" ("the water rules") using infiltration pots. The owners of the surrounding lands decided to be incorporated in the project. Terraces were used to support the land with the aid of natural barriers made of ancient local plants like *magueys*, olives and *xoconoztle*, rescuing these traditional but lost crops and to control erosion and restore the equilibrium of soil nutrients.

As a result of these several practices, owners made extra money and thirty community technicians obtained the proper training to recover traditional practices. Hopefully this will ensure that once the project is done, the proper use of the soil will be maintained and

protected, the erosion controlled, and the correct handling of water and agro-ecology, normalized. It is important for the Basin of Mexico what these men and women who live up in the mountains can achieve, because their work in transforming the hillside into an ecological reserve and a producer of pure oxygen for the Basin is vital for the basin itself. In the same spirit many cisterns designed to collect rainwater were built up.

They also began to protect their forest by planting fruit trees and installing crop cisterns of pluvial waters. Currently the terraces for the commercialization of the different regional products have been enlarged. Many fruit trees and vegetables have been cultivated, and the traditional crop of corn, the main feature of this project, has been protected with living barriers.

Other four small communities were incorporated to these projects, their participants worked intensively in traditional community labors. The attitudes of defense and conservation that are typical of the inhabitants from the *pueblos* including Xochimilco were crucial to face the threatening growth of the urban conglomeration; in fact, many natural barriers (for example, a preservation line made of *prickly pears* and *pitas*) were made to hold invaders; a conscience to respect the cycles of nature was developed; the financial aid to support the project by the FAO is currently suspended but the actions continue with the community, and the population is forcing their authorities to support the efforts they are actually doing to maintain the agro-ecological practices, so it is expected that the population will know how to keep it alive.

Urban and Expansion control projects

Some urban projects, which focus on urban ordering and population density reduction, will be mentioned only as a reference, in an effort to encourage participation and dialogue with the general public, in order to control demographic growth, reduce population in urban areas, and control urban dispersion.

In 1998, the different organizations participating in these programs contributed with ideas and experiences participating in the projects and discussions, to elaborate, approve and carry out these Programs. Regarding the conceptual and executive parts of the projects, many specialists of the Undergraduate School of Urban and Regional Planning of the National Autonomous University of Mexico (UNAM) were invited through the Coordination of Entailment and Special Projects of the Faculty of Architecture-UNAM⁷. Xochimilco assigned the coordination of the project to members of the Sub direction of Tourism and the Sub delegation of Urban Works and Services (SOSU). The first delivery of resources to initiate the works was made by the city government company of Metropolitan's Services and the Delegation, and latter by the canoeists. The consensus of the different organizations gave agility to the execution of the processes, and an integral project of recovery and improvement was designed by specialists. Because of lack of space we will not mention other projects which also created conscience about ecological preservation in the urban areas⁸.

The first stage of this improvement was concluded during the last semester of the administration in 2000. All ulterior phases have been possible thanks to this mechanism of cooperation, participation and joined coordination.

One of the projects proposed by the delegation to continue the urban ordering and regularization of the *pueblos* was the Partial Program of Urban Development for one of the towns or Pueblos call "Santa Maria Nativitas" Fig 15. A number of communitarian meetings were held to explain the objectives and extent of the Program, the inhabitants and the Territorial Coordinator were consulted about their preoccupations to decide on diverse proposals which conformed all the aspects of it, with the help of the delegation planners, the Secretary of Housing and Urban Development (SEDUVI) at a central level and the consultants hired for these purposes.⁹

This Program was approved by the inhabitants and the ALDF and published in the Official Gazette of the DF on July 7th, 2000. Afterwards other four projects were finished using this procedure. This type of practices, as many other in the urban and rural areas, also helped to encourage a controlled program for human settlements.

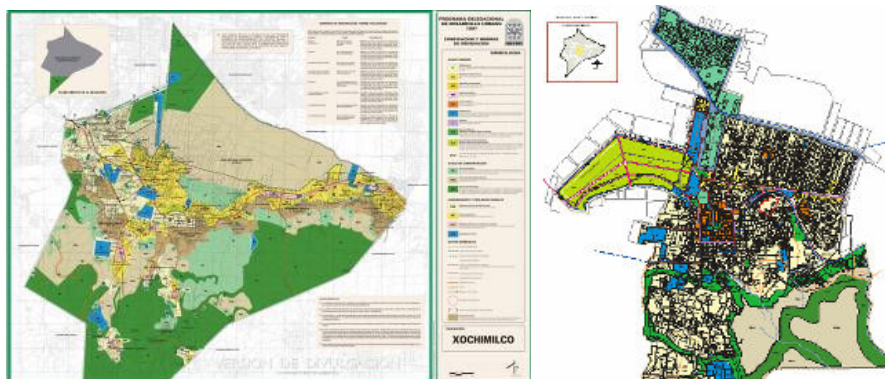


Fig.14. Xochimilco Program of Urban Development. Fig.15. Partial Program of Nativitas Development

Integral Urban & Rural projects after 2000 relating to urban sprawl and expansion control¹⁰

In an effort to maintain this type of control with urban invasions in the DF two projects continued in a regional level, and with the information learned, the Delegacional Program of Urban Development 2005 was decreed, Fig.14. As the present authorities informed, this program is the accumulated effort generated since the Democratic Party was elected in 1997 and their policies in urban planning at the regional level with the DF Government, the SEDUVI, as well as the tasks performed by the district governments of Xochimilco. Projects studied nine partial programs developed for 70% of the territory belonging to towns bordering between the lake and the mountains, and at a street block level it was possible to obtain a better diagnostic of the diverse problems within the district; one of which continues to be, the human settlement occupation on ecological reserved grounds. The latest revision of the Regional Urban Development Programs contains strategic solutions to resolve this problem. As far as the irregular human settlements is concerned, based on the information gathered, it was possible to establish norms to specifically regulate the 300 irregular settlements by dividing them in the following categories: 67 to study environmental and urban impacts, 83 for specific studies and the remaining 150 subject to control.

For the first 67 fell into specific zoning of rural-housing (Habitacional Rural) (HR) (Rural Residential, and Housing Rural of Low Density) (Baja Densidad) (HRB), 83 with Rural Agro industrial Production (PRA)/(HRB) (Industrial/farm Rural production) and the remaining 150 HRB/PRA, both would be conditioned to a ruling by a special regulatory commission and a Penalty fee for Perdida de Servicios Ambientales (PPSA) (penalty loss for environmental services) to be deposited in a trust fund determined transparent under the Urban Development Department, with a special account which allows to add alternative systems for the mitigation of environmental and urban impacts, and the recovery of conservation grounds and relocation of isolated nuclei impacting the grounds.

Specific Projects Dealing With Illegal Invasions 1997-2000

This continuing problem with the uncontrolled illegal invasion on urban areas of the Xochimilco Borough is, as is already been said one of the most serious in the region. Nevertheless, a list of agreements and dialogues between rulers and ruled has allowed the stop of invasions of land as far as possible and as discussed below, had been achieved with various measures to strengthen the overall control of invasions, that even though the latter have remained a problem for the delegation as we previously explain.

Many recommendations were made in the study, one that stands out regarding the invasion control issues, has been actually put into action. It was to establish consciousness campaigns and to form vigilance groups with the neighboring towns and public representative's support. Some of these land spaces had for over 20 years, been occupied by illegal settlements and therefore relocation of the people was nearly impossible. The policies should have been of dialogue and agreements to avoid future illegal settlements, so

that relocation could be viable. Nevertheless, agreements were reached to seek mechanisms to regulate and control future illegal invasions with the already illegally settled population. This mechanism began by having the already established illegal inhabitants' knowledge that somehow they would have to contribute to the legalization processes and admit to certain conditions. One of these conditions was the fee assessment as explained before, and which has been in place for the last six years, and currently the boroughs is imposing even more severe fines.

Other tasks performed by the public servants between 1997 and 2000, included 45 topographic surveys to obtain current information of the occupied areas and to ratify the existing boundaries of the ecological area limits, as contemplated in the program by the Delegation Urban Development Program for later approval by the population and decreed in to law by the ALDF. This task has been recently revised with a larger budget and better geographical information (GIS). It worth mentioning that the annual budget available when this case study was an average of 320 million Mexican pesos, and now the delegation has assigned an annual budget this year, of 1,030,000,000 Mexican pesos for public works only. As a result of the Projects Dealing with Illegal Invasions during 1997-2000 the conservation zones and areas considered of high risk for illegal settlements at the time of the study have been defined Fig.-16.

Additional programs for the integration of 107 additional vigilance committees were able to work protecting these ecological zones through 100 different actions. Through these actions and with the Calpuleques support many potential illegal encroachments have been avoided. In fact, census surveys took place with strict control of then 199 irregular settlements thru 7600 census counts of which only 5% did not get surveyed.



Fig. 16. Illegal Invasions

The survey results found 721 irregular constructions on illegal zones for which legal processes began and agreements with inhabitants were reached. Judicial actions were established for the recovery of common land and other federal properties. This process being improving by the subsequent district governments and with the support of the ALDF, new norms have been established so that more monetary assistance can be budgeted to this painful task.

The current District Government considers this illegal urban encroachment a priority and on December 8, 2006 it created an Especial Program to deal with Special Regularizations (PRAMRE) in conjunction with the already mentioned (PPSA). The current District authorities that bare this responsibility along with authorities at various levels of the DF government have recognized the importance of these programs and acknowledged their contribution towards the democratic process in the last ten years.

It is not the idea to describe here all government actions related to the control of the urban sprawl, but we have to point out of a change of attitude between the government and the governed. Our purpose was to make people feel that all the ideas and the projects belonged to them; so if they owned the ideas, the projects become part of their local culture, and can be protected. From there on, the work was done with a new policy, attending demands, seeking conviviality within the population, and a change of attitude to prevent the disorder in the establishment of new human settlements and the deterioration of the agricultural areas, in the chinampas and high zones, as well as of the social and urban behavior and the ecological environment.

Endnotes

¹ The author of this paper acted as Delegada Política of the Gobierno del Distrito Federal in Xochimilco (Mayor) from 1997 to 2000. The ideas and descriptions presented here refer mainly to certain actions of her government and of others that were prepared, or initiated in that time and have been going on since, by popular demand and support. She also guides her analysis on the basis of

the experience she has hitherto gathered as a researcher and teacher in various academic fields in the National Autonomous University of Mexico —Universidad Nacional Autónoma de México (UNAM) —, where she works as full time professor, level "C", since 1959.

²It is appropriate to make clear that it was from this political change onward that the data of population of Mexico City began to appear in the world wide comparative numbers.

³ These settlements were established in the 14th century within an urban center to which King Phillip II of Spain gave the title of Noble Ciudad on March 4, 1559. (Chavez, E 1999)

⁴ Since 1929 the DF was ruled by a representative of the President of the Republic called Chief of Government (Jefe de Gobierno del Departamento del Distrito Federal), who was appointed by the President itself, who also nominated all of the 16 Delegados (as Mayors) responsible of the political and administrative boroughs.

⁵ Chavez de Ortega Estefania, 2005, ISoCaRP 41st World Planning Congress Bilbao, Spain "The Changing Roles Of The City Planning Profession And Urban Administration Under The Foregoing Circumstances: The Case Of Xochimilco" (in the Agro-ecological Program in the mountain conservation zones)

⁶ FAO, Proyecto UTF/MEX/047 (2003), *Manejo de Micro cuencas en zonas del Área de Conservación de Xochimilco*, México (on DVD).

⁷ The project was elaborated by specialist of the UNAM and executed by the Xochimilco team. It was published in the 2001 Inform de projects specials (Report of special projects) by the Facultad de Arquitectura, UNAM

⁸ Such as the explanation of the introduction of permeable pavements, urban wells for water absorption and water treatment plants to be used in public parks, gardens and in the lake itself.

⁹ Chávez de Ortega, Estefanía (2003), "The Urban Processes of Participating Planning, The case of Xochimilco", en Ziccardi, Alicia (coord.), *Local space participating planning in the Five Programs Partials of Urban Development in the Federal District*, México, UNAM.

¹⁰ Information provided by the current Sub director of Urban Development of the borough of Xochimilco in relation to the actions which are presently taking place for the attention to the urban layout and the control of irregular establishments which already exist.

References

- Alva Ixtlixochitl, (1975) Obras Vol.!, p 411
- Bataillon C *et al.*, (1973), *Ciudad*, pp.41-42.
- Chávez de Ortega, Estefanía (1999), "Xochimilco, Patrimonio Cultural de la Humanidad", in Actas del V Coloquio Internacional de las Ciudades del Patrimonio Mundial, Santiago de Compostela.
- INEGI, (National Institute of Statistics, Geography and Informatics) (2005).
- Martinez Asad, (2000) *Gobierno en transición*, p. 670
- Martinez Asad, (2000), *Avatares*, p. 679
- Pérez Zevallos, Juan Manuel, (2002), "Xochimilco Ayer I" Mora Institute, and GDF.
- Pérez Zevallos, Juan Manuel, (2003), "Xochimilco Ayer II" Mora Institute and GDF.
- Terrones López, Maria Eugenia (coordinadora) (2004), *A la Orilla del Agua. Política, urbanización y medio ambiente, Historia de Xochimilco en el siglo XX*, México, Gobierno del DF-Delegación de Xochimilco/ Instituto Mora.
- Vetancourt, Agustín de, (1082) *Teatro Mexicano. Crónica de la Provincia del Santo Evangelio de México. Menologio Fanciscano*, México: Porrúa. (Biblioteca Porrúa, 45)
- Ziccardi, Alicia (coord.), *Local space participating planning in the Five Partials Programs of Urban Development in the Federal District*, México, UNAM, (2003) Chávez de Ortega, Estefanía, "The Urban Processes of Participating Planning, The case of Xochimilco"

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